This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

- This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
- A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
- The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
- When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.
China's "Mass-Line" Music Development in the Digital Age:
A Study of the Online Music Ecosystem and the Diverse Values of
Users, Internet Platforms, and the State

Diming Tang

Doctor of Philosophy
Reid School of Music
The University of Edinburgh
2024
Abstract:

The digital revolution has significantly transformed the music sector over the past two decades, enhancing accessibility for the general public, music lovers, and musicians alike. China presents a compelling case, where its socialist mass-line heritage has incorporated market elements to develop unique characteristics. In China, significant capital investment and regulatory efforts have been poured into a licensed digital music sector, making it the fifth largest music market worldwide. Despite extremely low revenue generated by paid users in China, stakeholder engagement in music development and consumption continues to surge. This raises intriguing questions, such as what has been motivating users, artists, firms, and the state to actively engage and support this development despite the lack of profitability? What are the features of China's music ecosystem due to the country's distinctive economic, cultural, and political context?

This thesis takes an interdisciplinary approach by examining the multiplicity of values created through the development of digital music beyond firm-centric economic impact. The research explores the development process, values, and dynamic relationships of actors within China’s digital music sector to provide a comprehensive understanding of China’s distinctive mass-line music development in the digital era: The people-centered digital music value ecosystem emphasizes mass music participation of prosumers, the traffic-seeking and datafication activities of digital music platforms, as well as the economic visions and socialist ideology promoted by the state.

To contextualize the topic, the research investigates the historical trajectory and development of China's music sector, tracing its evolution from the emergence of the modern recording industry to the current era of platform-based mass music prosumption, while emphasizing on the interplay of cultural, economic, and political forces. The research further integrates its theoretical framework from key concepts in Value Chain, Value Co-creation, Cultural Value,
and Popular Music studies, while drawing insights from Ecosystem Studies and Actor-Network Theory in terms of the power structures of major players within China's digital music ecosystem, to address the complex nature of value and networked value co-creation of actors in China's digital music development.

Multiple in-depth case studies are employed to examine two distinctive cases of mass-line music development: Online Gufeng music, a youth music culture influenced by ancient Chinese music, and the music prosumption by elderly users on the mobile karaoke platform WeSing. After an intensive data collection on both secondary data and semi-structured interviews, the results uncover the unique development trajectory of China's digital music, shedding light on the active participation, interaction, and value co-creation among various actors and forces, including the mass participatory culture of users, the corporate commercialization process of firms, and the regulatory policies implemented by policymakers.

Drawing from the case findings and cross-case analysis, the thesis contributes empirically by examining the multiplicity of value creation among actors at individual, organizational, and governance levels. Building on Lepak et al (2007)'s multilevel perspective on value creation, it proposes the model of China's Digital Music Value Ecosystem, emphasizing the co-creation, negotiation, appropriation, and dissolution of value among actors, with technology playing a mediating role. The research enhances the theoretical understanding of value by conceptualizing its variable, relational, and contextual nature. Overall, the study provides valuable insights for policymakers, industry players, and researchers, enhancing understanding of the unique development process and underlying context, complexity of values, dynamics of actors, and how these factors shaped today's digital music sector in China.
Acknowledgement:

I would like to express my gratitude to all the people who has guiding me on this research journey. First, I would like to thank to my great supervision team Xiaobai, Matt, and Raymond in University of Edinburgh. I am grateful to my principal supervisor, Dr. Xiaobai Shen, for all the help in leading me to finish this thesis. The time and effort she put in throughout my entire PhD are absolutely remarkable and offered me immeasurable support, especially during the difficult times. I would also like to thank my second supervisor, Dr. Matt Brennan. Despite working in a different institute, he continues to meet with me regularly and provides top-notch feedback on my research. His love for academia truly inspired me. Lastly, I want to thank my third supervisor, Professor Raymond MacDonald, for his kind help throughout my PhD career, offering strong support whenever I am in need.

Apart from my PhD supervision team, I would like to extend my heartfelt thanks to all those who have provided me with academic advices and valuable insights in both the past and present, making this research possible: Dr. Yongjiang Shi at the University of Cambridge, who offered me great knowledge and insight to begin my doctorate pursuit; Professor Anthony De Ritis at Northeastern University, Boston, who provided me with an amazing opportunity to publish my first paper; Robert Lyons, professor of my master's program back at Northeastern, dear friend, and co-author of our 2016 paper on China's digital music ecosystem, which became the foundation of this research; Professor Fengyan Zhang at Communication University of China, who offered me co-authoring and internship opportunities; Professor Robin Williams at the University of Edinburgh, who taught me valuable knowledge in his course, shaping my understanding of technology and its relationship with the music sector; and lastly, a big thank you to all the participants in this research. Your engagement is the key to making all of this happen.

Over the years, I have met some great people in Edinburgh. The
experiences we shared have become a part of me. I offer my thanks to my dear friends in Holyrood: Chloe, Tracy, Celine, Fred, Shengwen, Dominic, Jade, Boyan, and many more, for the great memories we had. Also, special thanks to all my musical friends in Edinburgh who inspired me and reignited my passion: Archie, QiuQiu, Fabio, Jacob, Luke, Theo, Sam, Brandon, Ethan, Jamie, and all the Jazz Society cats - you are awesome. I would also want to thank my friends back in China: Changwei, Zhen, Xihao, Qiyang, Chao, Shihai, Xiongguan, and again, many more, for all the love you send across continents.

Most importantly, I want to express my gratitude to my family - my mom, dad, grandma, and grandpa. I couldn't have achieved anything like this without your unconditional and unwavering support throughout my entire life. I miss you all so much. I also want to thank my girlfriend, who has patiently accompanied me in Edinburgh all these years, supporting my studies and life in general. We've been through a lot, and now, it's finally time to return home.
Table of Content:

Chapter 1. Introduction ...................................................................................................................... 1

Chapter 2. Contextualization: The Development Trajectory of Digital Music in China .................... 14
  2.1. Introduction ................................................................................................................................. 14
  2.2. China’s Music Development Before Digitization (1900s-1990s) ........................................... 17
      2.2.1. Music Development in the Republic of China (1900s-1940s) ........................................... 17
      2.2.2. The Impact of Socialist Ideology on Music Development (1940s-1978) ......................... 22
      2.2.3. Popular Music Development after Economic Reform (1978- late 1990s). 28
  2.3. Early Digital Music Development and Mass Consumption and Participation (late 1990s-2010s) .................................................................................................................................................................................. 34
      2.3.1. The Emergence of Digital Music Sector in China ................................................................. 34
      2.3.2. “Mass Line” Music in the Digital Era ..................................................................................... 37
  2.4. China’s Digital Music Sector after Restructuration(2010s-) .................................................... 40
      2.4.1. Restructuring Digital Music Sector to a Legitimate Market ............................................... 40
      2.4.2. Mass Prosumption and Platformization ............................................................................. 41
      2.4.3. Market Expansion and Regulatory Control ........................................................................ 45
      2.4.4. Political Ideology and Digital Musical Culture ................................................................... 47
  2.5. Summary .................................................................................................................................. 50

Chapter 3. Literature Review: Value, Value Creation, and the Ecosystem Approach ..................... 53
  3.1. Introduction ................................................................................................................................. 53
  3.2. Value in Music ............................................................................................................................. 55
      3.2.1. Value of Music in Business Studies ..................................................................................... 56
      3.2.2. Value of Music in Popular Music Studies .......................................................................... 61
      3.2.3. Value of Music in Cultural Policy Studies ........................................................................ 65
  3.3. Value Co-Creation and Prosumption .......................................................................................... 71
      3.3.1. Service-Dominant Logic ....................................................................................................... 73
      3.3.2. Value Co-Creation ............................................................................................................... 75
      3.3.3. The Value Co-creation of Prosumer in the Digital Age ....................................................... 80
      3.3.4. Prosumer from a Sociological View .................................................................................... 84
  3.4. The Ecosystem Networked Approach ........................................................................................ 91
      3.4.1. Ecosystem Theories .............................................................................................................. 92
      3.4.2. Actor-Network Theory and Translation ............................................................................. 98
  3.5. Summary .................................................................................................................................. 103

Chapter 4. Methodology .................................................................................................................. 109
  4.1. Introduction ................................................................................................................................. 109
  4.2. Research Paradigms ................................................................................................................... 110
      4.2.1. Research Philosophy and Paradigms ................................................................................... 110
      4.2.2. Quantitative and Qualitative Research .............................................................................. 112
  4.3. Research Problem and Objectives ............................................................................................. 114
      4.3.1. Research Topic .................................................................................................................... 114
      4.3.2. Research Problem and Objectives ...................................................................................... 116
Chapter 1. Introduction

The development of online digital music has transformed the production, distribution, and consumption in the music sector for over two decades (Morris, 2015). Since the 2000s, the growth of online music services has heavily disrupted the traditional music industry supply chain (Graham et al., 2004). The significant cost reduction in music production and distribution has attracted consumers to access a large quantity of digital music at a minimum cost, anytime and anywhere (Morris, 2015; Aguiar & Martens, 2016). In 2022, people spent an average of 20.1 hours per week on music, using various methods such as subscription and ad-supported audio streaming, video streaming, short-form video, and social media (IFPI, 2022).

A more extreme case in this regard is China, which had a historic path of online piracy and a weak recording sector in the pre-digital age (Tang & Lyons, 2016; Shen et al., 2019). However, with its fast development directly boosted by the digital music sector, which generated $2 billion in digital music revenue, second only to the United States (Ip, 2021), China has now become the 5th largest recorded music economy (IFPI, 2022). Music digitization in China is on a massive scale, with the overall digital music user-base continuously increasing from 456 million in 2013 to 729 million in 2023 (CNNIC, 2013; CNNIC, 2023). Tencent Music Entertainment, one of the largest music service providers in China, alone has more than 592 million monthly active users (MAU, Tencent, 2023), surpassing Spotify, the largest music service in the West, which had 515 million worldwide users (Spotify, 2023).

Despite following the trend of music digitization in the West, the development of digital music in China has followed a distinctive trajectory (Shen et al., 2019). Unlike the West, China's pre-digital age did not have dominant players controlling the recording industry, allowing new entrants such as
internet intermediaries to enter the music market and develop innovative services and business models without constraints (Tang & Lyons, 2016; Shen et al., 2019). In China's digital music sector, the largest players are all internet intermediaries: Tencent, Alibaba, Baidu (collectively known as BAT), NetEase, and Bytedance. These intermediaries have actively and innovatively engaged in music-related services, introducing a wide range of innovative services and business models, such as Tencent's mobile Karaoke service WeSing (Shen et al., 2019) and Bytedance's short-form video platform TikTok. The rapid expansion of intermediaries in the digital music sector was fueled by a large amount of investment, creating a market worth 79 billion Yuan, compared to 11.7 billion in the live music sector (CUC, 2023).

However, measuring the mass consumption of digital music solely based on economic gains reveals that digital music is not a profitable business. Even in the West, the mass participation of firms and users in digital music has not directly translated into substantial income streams in the economy. According to data provided by the International Federation of the Phonographic Industry (IFPI), despite continuous year-to-year growth in digital music revenue contributed by streaming, the recording industry has not fully compensated for the revenue loss from the pre-digital era after adjusting for inflation, leading to a decline in global music revenue from $35.2 billion in 1999 to $25.9 billion in 2021 dollars (IFPI, 2022).

Furthermore, in contrast to the prevalent paid-subscription model by streaming platforms in Western countries such as Spotify and Apple Music, the most popular China's digital music services (e.g. NetEase, WeSing) offer a wide range of advertisement-supported free services that are more rely on user-generated content and social networking (similar to Bandcamp and YouTube in the West), leading to an environment of low paid-user penetration (Tang & Lyons, 2016). In fact, according to Tencent's report, only 15.8% of users pay for
its music streaming services, with a monthly average revenue per paying user (ARPPU) of RMB 9.2 (roughly 11 Pence, TME, 2023). For the mass of free users, Tencent spends RMB 4.1 per thousand streams, generating only RMB 1 in advertising revenue in return (Tencent, 2018). The lack of economic income in China's music sector does not align with the active participation of firms and users in digital music over the last decade. Thus, the key question of this research being: Is the contribution of music in the digital era extending beyond its direct monetary value, leading to significant economic input and increased public participation?

To assess the contribution of digital music, researchers argue that the economic value of digital music could be underestimated if only based on direct economic income, as digital goods are often offered to users without a price tag (Bean, 2016). Brynjolfsson and Oh. (2012) propose the time-based model, which assesses the value of users' time or "attention" spent on free digital services, often overlooked by traditional GDP-based measurements. In Dewan and Ramaprasad (2012)'s empirical study, they argue that online social media, such as music blogs, expose a far wider range of music to users than traditional media, contributing to long-tail music sales in large numbers of niche markets rather than just the most popular ones. Shen et al. (2019) point out that China's internet intermediaries integrate digital music and other cultural sectors and lateral markets to create cross-platform infrastructures that capture multiple value propositions. These approaches assess the additional economic values of digital services that have not been captured by traditional GDP-based measurements.

Moreover, the unique nature of the creative industries and cultural goods, which serve aesthetic and expressive purposes in addition to utilitarian purposes, results in a complex intertwining of economic capital and cultural capital (Townley & Gulledge, 2015). The traditional value assessment based on
the firm-centered view (Prahalad and Ramaswamy, 2004) could not capture the full value creation process in China's digital music development, where players at multiple levels from individuals to policymakers perform value activities that cannot be interpreted solely by economic incentives. The conventional valuation of music is shaped by the copyright-oriented system determined by the firms in the global recording industry, which overshadows the interplay of various actors apart from firms (e.g., users, artists) with different interests and their role in the music valuation process (Sun, 2018). Music digitization is, however, a dual-process involving both corporate-driven and consumer-driven elements (Jenkins, 2006).

China's "mass-line" music participatory culture in the digital age exemplifies the latter, encompassing activities such as piracy, unpaid consumption, amateur music production, and decentralized social networking and collaboration. These activities collectively represent a distinctive bottom-up force of mass users reshaping the value of digital music. Moving beyond the valuation of digital music solely within the economic domain that benefits only the digital economy and firms, its value in the cultural domain holds much greater significance to humanity, requiring proper studies and further investigation (Throsby, 2001). Hence, the goal of this research is to provide additional insight into assessing the value of digital music by understanding China's mass-line music development in the digital age, and how mass participation interacts with players in the digital music sector and the state to co-shape the value co-creation in China's digital music ecosystem.

However, it is crucial to emphasize that this research is not a comparative study between China and the West, nor does it seek to exceptionalize the "Eastern Model," as China's digital music sector is intricately connected to global digital music development. Its technological development, business models, and culture are mutually influenced by those of other nations.
Nonetheless, it is also worth acknowledging that the uniqueness of its historical paths, socialist context, and geo-political environment of state-centric governance (Van Dijck et al., 2018) have influenced the value creation of digital music at the societal level. These contexts are hard to ignore and could provide meaningful perspective into understanding the digital ecology in China.

In the Chinese socialist society, music and other forms of art are considered a model to represent the ideology of the nation and express the nation's spirits and pride (Li, 2014). China's authorities have all seen art and literature as an "ideology supply line" to serve politics (Li, 2014), from the nation's founding father Mao Zedong to the current leader Xi Jinping. In the 2014 Beijing Art Forum, Xi discussed his vision of art, arguing that "art should be able to withstand people's assessment [...] whereas economic gain must obey welfare gain, and market value has to obey social value (Xi, 2014). " Furthermore, in the age of a market-driven environment with new technologies, the government adopted the environment by establishing cultural policies to both foster the development of domestic music businesses through copyright enforcement, and anti-trust policies, while also advocate its socialist political, ideological, and moral values (Montgomery, 2009). On the other hand, China's platform ecosystem is also heavily regulated by policymakers, with technology corporations subject to government regulation and censorship (Van Dijck et al., 2018). As a result, the ideology promotion and state governance were still embedded in music in the digital age, but in a more complex and subtle way (Li, 2014). To promote ideology and build "Cultural Confidence," the direct engagement of Chinese government organizations on digital music development could also be seen in the development of online Gufeng(古风) music, such as the joint initiative of "Guochao" (Chinese Trend) by the party-run media People's Daily and Kugou Music, which hosts live-streams and offline events to promote ideologically compliant Chinese traditional pop music "Guofeng (国风) music" to young generations (Ge, 2019).
To fully grasp the broader "non-monetary values" summarized by the concept discussed here and beyond, which include a variety of values extending beyond direct monetary terms generated by firms, it is essential to also investigate the involvement of other significant actors apart from firms (such as users, artists, and policymakers) in the process of value creation. Value is created in a process of mutual co-shaping and co-evolution among actors, which these "non-monetary" values, including indirect economic value, symbolic value, cultural value, and political value, emerge within the "circuit of practice" (Magaudda, 2011), a process involving the co-evolution of actors in the network of the music community. These "non-monetary values" created by different actors in the value creation process of digital music have also contributed to socio-economic development, representing essential aspects of the digital music value proposition, apart from the traditional direct economic one. To assess these non-monetary values in a multi-leveled perspective (Lepak et al., 2007), research needs to examine the relationships and interactions of actors within each level of the digital music sector: the mass online music users and artists at the individual level, firms in China's digital music industry at the organizational level, and Chinese policymakers at the governance level.

Two case studies, focusing on the participatory culture of online Gufeng music and the elderly's prosumption of the mobile karaoke service WeSing, have been selected for this research to further illustrate and represent the multifaceted and multi-leveled value creation in China's mass-line digital music sector among the users, digital music platforms, and the state. Both cases delve into the dynamics of China's digital music landscape from the bottom-up level: The amateur, grassroots, and mass-line music made, consumed, and circulated by the prosumers who operate beyond the traditional elite and professional music system in the recording sector. They also analyze the nuanced interactions and value co-creation among individuals, firms, and
policymakers, underscoring the power dynamics and cultural, economic, and political contexts that co-shape this development. Through each individual case, the research reveals the broader picture of shifting paradigms and consequences of digitization toward value co-creation and negotiation in China's digital music sector. It emphasizes individuals' personal and public music development through digital prosumption, increasing commercialization and datafication of platforms tailored to user-generated content and socialization to capture economic value, and policymakers' appropriation of this mass-line participatory culture to serve the state's political and ideological needs.

The first case examines the emergence of an online youth culture during the early 2000s, characterized by the amateur creation of user-generated content and its later development in the commercialization and politicization process. The formation of its vibrant online community - the Gufeng circle - as transformed Gufeng music into a mature and professional genre, subsequently exploited by businesses and policymakers for commercial gain and ideological promotion. In contrast, the second case focuses on the already commercial platform, the mobile karaoke platform WeSing, which leverages user-generated content, gamification features, and social networking. Despite being marketed as an inclusive platform for entertainment and socialization, WeSing has unexpectedly attracted elderly users who have adapted to its mechanisms, fostering their engagement in online musical activities and forming their own participatory cultures. This popularity has prompted policymakers to implement elderly-oriented reforms and introduce a "care mode" to bridge the digital divide and protect vulnerable elderly communities.

Through lenses of the two case studies, the aim of the research is thus to assess the diverse values created in the era of music digitization, which are contributed by the interactions and negotiations of actors (e.g., users, firms,
policymakers) in China's digital music value ecosystem. Specifically, the study aims to achieve several research objectives: Analyzing the history and contextual background of China's digital music development; exploring the variety of non-monetary values in the socio-economic aspect of the digital music sector; examining the inter-relationships between actors in the ecosystem and understanding how values are created through these inter-relationships; and finally gaining theoretical understanding of the concept of value itself. The main goal is to develop a multi-level framework building on Lepak et al. (2007)'s three-dimensional model on value creation to comprehend the value of digital music development in China beyond its direct economic contribution, investigating the distinctive cross-level interactions and value (co-) creation of actors and underlying factors that shape it. Additionally, the study seeks to frame and conceptualize the diverse values created in this dynamic ecosystem.

The research questions of this particular study are then to explore:

RQ1: How have historical, ideological, and market factors shaped the evolution of China's mass-line music development in the digital age? What are the diverse values in China's digital music ecosystem, and how have interactions and negotiations between users, digital music platforms, and the state led to the co-creation of values amidst changing dynamics?

RQ2: Considering the diverse forms of value creation, how can we conceptualize and understand the intricate relationship between users, platforms and the state and dynamic value ecosystem in the digital era? How shall we contextualize and interpret China's distinctive characteristics in the era of digital music development?

To gain more understanding on the research objectives and answer the research questions, the following chapters are structured bellow:
Chapter 2 explores the context of China's digital music development, to understand the historical trajectory and development of China's digital music sector, shedding light on the various factors and forces that have shaped its distinctive path. It delves into various periods, including the birth of modern music sectors, the Maoist socialist era, the pre-digital economic reform era, the early development of the digital sector, and the post-restructuring phase. The chapter emphasizes the cultural, economic, and political influences that have impacted China's music ecosystem, as well as the complex relationships among key actors. It highlights the transformation brought about by music digitization, where technology companies entered an untapped market and provided unlicensed content, leading to opportunities and challenges for the mass Chinese artists and users. The chapter also discusses the state's Intellectual Property (IP) enforcement, the establishment of a legitimate digital music market, and the dominance of large technology companies in the sector. It explores the role of policymakers in regulating the market, promoting controlled competition, and aligning the development of digital music with national interests and ideologies.

Chapter 3 discusses the process of constructing an interdisciplinary theoretical framework. This involves an exploration of diverse theories concerning value creation within the digital music sector. Notably, it shed light on the convergence and divergence of viewpoints originating from both business studies and popular music studies. It investigates both monetary and non-monetary value, considering the complexity of music value captured by individuals, firms, political institutions, and society. The chapter also analyzes the shift from firm-centric exchange value to consumer-centric value-in-use, exploring the role of prosumers and their impact on production, distribution, circulation, and consumption. It addresses the paradoxical perspectives on the "empowerment" of consumers (prosumers) in the web 2.0 economy versus the potential "exploitation" in platform capitalism. The chapter emphasizes the need
for dialogue across these fields to understand the value of digital music comprehensively. It highlights the tension and ongoing struggle between corporate-driven and consumer-driven processes in value co-creation. Furthermore, the chapter examines the structural relationship between actors in the digital music value network, drawing on the ecosystem research in sociology and business management. It discusses the role of technology innovation in shaping the network and the power dynamics among actors. The chapter concludes by emphasizing the constant interaction, negotiation, and shifting of power among users, firms, and policymakers, resulting in a heterogeneous network of actors with aligned interests in China's digital music ecosystem.

Chapter 4 provides an overview of the methodology employed in the research, focusing on the findings and implications. It first discusses different research paradigms and their implications for selecting appropriate research methods and techniques, highlighting the strengths and limitations of quantitative and qualitative research strategies. The research problem and objectives are further defined, with two research questions are formulated to address the development process of China's digital music sector and the complexity of value co-creation. A qualitative and interpretive research approach is adopted, using multiple case studies on Gufeng music and WeSing to provide robust evidence and enable comparisons. The data collection process involves gathering secondary and primary data, while data analysis employs case study analysis and cross-case analysis. The findings reveal the multiplicity of potential values created and captured by multiple actors in China's digital music ecosystem. Overall, this chapter establishes a methodological foundation and presents a roadmap for addressing research objectives and discovering the value creation process in China's digital music sector.

Chapter 5 and 6 delves into two selected case studies that provide
empirical and theoretical insights into the value creation of China's digital music sector within a multi-level framework. The focus on Chapter 5 is on the development of Gufeng, a niche online music genre and youth culture that aims to revive and transform Chinese ancient musical traditions in a modernized and digitized setting. The chapter examines how various actors (fans, artists, firms, policymakers) and digitization technologies played crucial roles in the emergence and growth of Gufeng. It explores the participatory culture of the "Gufeng Circle," where young enthusiasts engage in the production, consumption, and circulation of Gufeng music influenced by Japanese Nijigen culture. The chapter further discusses the transformation of Gufeng into mainstream culture through the involvement of external forces such as firms and policymakers, leading to the "Guofeng" movement. By changing the word from "Gu" (古, ancient) to "Guo" (国, nation), it also represents the shifting power away from the bottom-up participatory culture as the genre becomes commercialized and politicized. However, the commercialization and state support have also raised concerns about the potential loss of authenticity and the core spirit of the genre among its original Gufeng fans.

Chapter 6 explores the second case study on the prosumption of elderly users on China's mobile karaoke platform, WeSing. Unlike the previous chapter focused on young music lovers shaping a niche music genre, this case explores how digitization, mobile technology, and platformization have reached the broadest user base, including the elderly "digital immigrants." The chapter aims to understand the elderly prosumption on WeSing, analyzing the technological evolution of mobile karaoke, the musical and social engagement of elderly users, and the cross-level interactions with the platform and policymakers. The case showcases how elderly users actively participate in digital music and technology, contributing to a meaningful life in the digital era. It highlights the unique participatory culture within the elderly community in terms of their engagement in online karaoke, various entertainment features, and platform-
based social interactions. The case study also discusses the roles of WeSing and policymakers in capturing commercial and societal values from this participatory culture. It explores WeSing's platformization and datafication strategy targeting elderly prosumers and examines how elderly users resist the over-commercialization of the platform. Additionally, it delves into policymakers' efforts in utilizing China's digital services to bridge the digital divide among the elderly community through "elderly-oriented reform." However, concerns arise about how to adequately support the active engagement and various needs of older users rather than merely fixing the digital divide with "prosthetic" models.

Chapter 7 presents a comprehensive examination of the value creation in China's digital music sector, building upon the previous case studies of Gufeng music and the prosumption of elderly users on WeSing, and provides valuable empirical and theoretical contributions to understanding China's evolving digital music landscape. The chapter analyzes the multiplicity of values created by various actors at individual, organizational, and governance levels within a three-level framework (Lepak et al., 2007). It explores values beyond direct monetary ones, ranging from empowerment, diversity and inclusivity, community and identity, free creative labor, commercial value of mass participation, economic value and industry prosperity, and political value and ideology promotion. The chapter proposes a model of "China's Digital Music Value Ecosystem," categorizing the value-based interactions and relationships between actors through the value co-creation analysis of value co-creation, value negotiation, value appropriation, and value dissolution. It further discusses the mediating role of technology in shaping the ecosystem's development, and emphasizes the value creation in the Chinese context, influenced by China's unique historical, cultural, economic and political environment. The theoretical implications of the findings highlight the variable, relational, and contextual nature of value in analyzing the complex and dynamic interactions among actors and the evolving meanings of value from a networked
and ecosystem point of view, beyond a single actor's perspective.

Chapter 8 offers a review of the research undertaken in the earlier chapters, discuss the implication of the findings, the limitation of this research, and suggestions for future research. It begins by revisiting the research objectives and research questions and discusses the extent to which this research has been achieved. Additionally, the implications of the findings for both theory and practice are discussed, shedding light on the broader significance of the research in the context of China's digital music development and beyond. The chapter also discusses several limitations encountered during the study, while offering insights into areas that could be further explored and refined in future research. Lastly, the chapter concludes with suggestions for possible future research opportunities, highlighting potentials for further investigation to deepen our understanding of the complex and dynamic interactions among actors within the digital music value ecosystem.
Chapter 2. Contextualization: The Development Trajectory of Digital Music in China

2.1. Introduction

Music development in China's digital music sector has been influenced by the country's historical path that differ from the West (Shen et al., 2019). To gain deeper insight into the development of China's digital music sector and the value creation among the actors, it is crucial to understand its unique historical trajectory that have shaped today's digital music development. With the aim of "soaking and poking" (George & Bennett, 2005), this chapter seeks to provide a rich and detailed background of the digital music ecosystem in China by tracing back from the emergence of the modern music sector all the way to the current digitized music ecosystem. By doing this, the chapter aims to support a deeper understanding of the distinctiveness of China's music sector, discover its convoluted process by examining how various forces and key incidents have shaped this development, and raise current issues of today's digital music sector to comprehend the contextual connections in which the two case studies took place (Chapter 5 & 6).

The chapter is conducted in chronological order and classifies China's modern music development into five periods, although each period may overlap with the others. The five periods include: The emergence and early development of the modern music sector in the Republic of China (ROC) from the 1900s to the 1940s, Socialist music development during the Maoist era from the 1940s to 1978, the pre-digital era after China's economic reform from 1978 to the late 1990s, the early development of the digital music sector from the late 1990s to 2010s, and the post-restructured legitimate digital music sector after 2010s. Key incidents of each period are highlighted to provide understanding of the cultural, economic, and political forces that have influenced the
development process of China's music ecosystem, as well as the complex relationships among key actors.

Spanning from the 1900s to the late 1990s, Section 2.2 lays the foundation for understanding the complexity of China's music development in the pre-digital era. The first part of the section shows the divided trajectory of Western-influenced music education and commercial music reforms, along with the left-wing music movement using music as a tool to awaken the masses during the turbulent time. After the establishment of the socialist regime in the 1940s, the following sub-section explores the paradox of the newly enshrined leftist music with grand narratives becoming a propaganda tool, and compare with the suppressed, more genuine cultural expressions such as Zhiqing songs. The last part of the section explores the post-Economic Reforms era, where a more liberal environment allowed for the re-emergence of popular music and commercialization through privately owned labels, while policymakers had to navigate the balance between economic growth and political influences.

Similar to the development in the West, music digitization marked a significant turning point in China's recorded music sector, although it took a distinctive path due to its unique environment. Section 2.3 explores the early development of China’s music sector after digitization, highlighting the rapid growth of domestic technology companies and the mass production and consumption of online music. During this era, technology companies entered the untapped digital music market, providing free music and innovative services to the massive user base in China, given the absence of dominant players in the domestic recording industry, the tight control of foreign competitors by the government, and the low Intellectual Property (IP) environment with loose copyright enforcement. However, as discussed in the second part of the section, the low IP digital era demonstrated a "democratization" effect on music consumption, allowing users to freely search, download, and share music files.
Independent and amateur artists benefited from the digital era, showcasing their work and connecting with the online music community, which led to the emergence of various new musical cultures such as the popular grassroots Network Music and niche online youth culture Gufeng, going beyond the traditional gatekeepers of the recorded music sector.

The final section (2.4) will discuss China’s digital music sector after the restructuring resulting from the state’s IP enforcement and the current situation of interactions and negotiations among key actors regarding ownership of the reformed digital music ecosystem. Following the government’s tightened copyright enforcement through the "Sword Net 2015" campaign, the legitimate digital music market has been established, experiencing rapid growth and eventually making China the 5th largest music market. Large technology companies such as Tencent and NetEase have taken control of the digital music sector, transforming users' online music engagement into a platform-based participatory culture. On one hand, they extract value from independent artists and users through user-generated content, while on the other hand, they provide interactive and social networking features that enhance music engagement for the mass users. Additionally, as the digital music market is dominated by these large platforms through exclusive licensing and mergers, the government and policymakers actively oversee the market, balancing market-driven expansion with regulatory measures to ensure fair competition, prevent monopolies, and promote sustainable growth. Discussed in the last subsection, policymakers have also embraced digital media and online culture, using innovative approaches to engage with younger online users and shape the development of digital music in alignment with national interests and ideologies.
2.2. China's Music Development Before Digitization (1900s-1990s)

2.2.1. Music Development in the Republic of China (1900s-1940s)

Modern Music Sector in China

China has a profound history in the music sector, with large performance venues such as "Goulanwasi" (勾栏瓦肆) established over a thousand years ago during the Song Dynasty, offering nightlife entertainment of plays and folk arts in city centers for thousands of citizens (Fan & Qin, 2020). However, China's modern music sector, especially the commercialized recording industry, was introduced under foreign colonial influences. After the loss of the Opium Wars in the late 19th Century (1840-1860), China initiated the "Hundred Days Reform" movement in 1898, leading to a transition in politics, economics, culture, and education, imitating Western ideas and systems. Like many other industries in China, the development of its music industries, including recording, music education, and music performance industries, as well as music recording technologies and consumer behaviors, was heavily influenced by the West (Li, 2011).

Western classical music was introduced to China by foreign-educated intellectuals and music educators, leading to the reform of Western-influenced music from education to the performance sector. Li Shutong (1880-1942), who specialized in Western music and painting during his studies in Japan, played a pioneering role in this regard. He introduced a new form of music called "School Songs" (学堂乐歌) that aimed to popularize the music among the general public in a modernized, yet accessible way. These school songs often utilized the Numbered Musical Notation system instead of the classical Staff notation, and Chinese lyrics were added to Western and Japanese tunes. This approach catered to students without a classical music background and cultural context, making school songs a new voice in Chinese music (Fung, 2007; Li,
In terms of professional music education, the Shanghai National Conservatory of Music was established in 1927 as the first institution to offer modern professional music education. It was based on the teaching methods of the Leipzig Conservatory of Music in Germany, where co-founder Xiao Youmei (1884-1940) had graduated.

Apart from music education, the commoditization of music in this era, including records and live performances, enabled the emergence and growth of the urban-based popular music sector in China (Jones, 2001). The commercialized music sector started to emerge at the beginning of the 20th century in major cities under Western influences, particularly in treaty ports such as Shanghai, Beijing, Tianjin, and Guangzhou, which were open to European and American settlers, with Shanghai being particularly significant (Jones, 2001). In 1908, the first record company in China was established under the French recording production house Pathe-Freres (later acquired by EMI), started by reproducing gramophone records of Peking Opera and folk music for the Chinese market, it later became the most technical advanced, highest-yielding, and influential record company in the East Asian region in the 1930s (Li, 2021). Additionally, two types of music performance emerged: one focused on Western classical music, such as the Shanghai Municipal Symphony Orchestra (1907), run by the Municipal Council of the International Settlement, which performed mainly Western classical music to keep up with the Western musical world (Luo, 2022); the other focused on Chinese folk music, such as the Datong Music Society (1918), a reformed traditional music troupe that adopted Western orchestration with restored and re-engineered traditional Chinese instruments and rearranged traditional tunes (Jones, 2001).
Figure 2.1. Vintage record cover of Pathe record, with illustrations featuring both traditional Chinese opera and Western music (Li, 2021)

One of the most notable figures playing a crucial role in the development of China's music sector during this period was composer and music promoter Li Jinhui (1891-1967). As an advocate of "Civilians music" (平民音乐), which he believes that music should penetrate into people's lives through simple and easily understandable means, Li introduced Western popular music to the Chinese audience, promoted the integration of China's traditional music with Western compositional techniques, and produced a large amount of Chinese popular music for the general public in urban areas (Ming, 2001). With the development of music and entertainment technologies such as the gramophone, radio broadcasting, sound film, and others, Li's popular music moved beyond traditional musical spaces like conservatories, music halls, and theaters, reaching a larger audience in cinemas, stores, and street corners (Jones, 2001).
Left-Wing Music Movements in the Republic Era

The development of music in China was not solely driven by Western-influenced music educators, intellectuals, and the commercialized recording industry. It was also heavily shaped by the political environment of the time, where music served as a tool for social change among activists and revolutionaries. The emergence of the "New Music Movement" (新文化运动) during the Republican era of China (1912-1949) was a direct response to the political and social turmoil caused by Western and Japanese colonialism, regional instability, and escalating Japanese aggression from the 1930s onwards.

The term "New Music Movement" was coined by Lv Ji, a left-wing songwriter and activist, in his article The Prospects of New Music in China (1936). Lv Ji emphasized that music should serve as a weapon to liberate the masses and as a medium to convey and reflect their lives, thoughts, and emotions (Liu, 2010). In a broader sense, the movement encompasses all forms of non-traditional Chinese music that are patriotic, democratic, anti-imperialist, anti-feudal, and promote social progress since the late 19th century (Yu, 2015). Originating from the "May 4th Movement," a nationwide anti-imperialist cultural and political movement in 1919, the development of the New Music Movement was not solely a musical or cultural phenomenon but was intricately intertwined with political and social progress.

During this movement, leftist intellectuals and musicians redefined the purpose of music as a means of social control and political mobilization (Jones, 2001). They criticized Western classical music for its perceived detachment from the general public and denounced politically passive popular music, such as Li Jinhui’s music, as "Yellow Music" (Obscene music) with decadent sounds (靡靡之音). In contrast, leftist music, known for its "Mass Songs" (群众歌曲), conveyed strong messages of anti-colonialism, social revolution, and national
unity. These songs became crucial components of cultural production during the revolutionary era of the People's Republic of China (Jones, 2001).

One of the most significant instances of mass-song in a political movement is the National Salvation Mass-Singing Movement (抗日救亡歌咏运动, 1931). Following Japan's invasion of Manchuria on September 18th, 1931, musicians, educators, and activists dedicated themselves to creating a new wave of musical resistance against Japanese imperialism and to protect the nation. The mass-singing movement emerged as the primary medium, drawing from patriotic "School Songs" and the New Music Movement. Large-scale social and musical gatherings, featuring mass rallies and group singing, played a vital role in boosting morale and fostering national unity (Yu, 2015).

During this movement, self-organized mass-singing groups sprouted in major Chinese cities, accompanying political demonstrations and rallies. In 1935, the People's Chorus, the first mass singing group, was established in Shanghai by priest Liu Liangmo. This was followed by the establishment of the National Salvation Amateur Chorus in the same year by left-wing activists Nie Er and Lv Ji, alongside numerous other singing groups organized in schools, government organizations, and communities throughout the country (Wang, 2008). These mass-singing groups shifted the consumption of music from cinemas and clubs to the streets and stadiums, hosting massive gatherings in the form of singing rallies, where people sang mass songs to promote resistance and ignite the spirit of reclaiming lost territory (Jones, 2001). According to Wang Yuhe's book, China Modern Music History, more than one hundred mass-singing groups were established across the nation during this period.

In comparison to school songs, which primarily influenced students and young people, and commercial popular music consumed by the middle and upper classes, the works of the New Music Movement, particularly the mass-
singing rallies, introduced music embedded with leftist ideology to the broadest grassroots masses for the first time. Left-wing songwriters and musicians actively engaged with the general public, visiting schools, factories, front lines, rural areas, and various segments of society to organize and teach salvation songs (Wang, 2008). This reflected a larger, deeper, and more widespread national salvation and resistance movement that persisted until the end of the war. In 1938, painter and songwriter Feng Zikai mentioned in his article About Resistance Songs that: "even in the Sanjia Village in the barren mountains, the voices of 'get up' and 'move forward' [lyrics from Nie Er's 'March of the Volunteers'] came from the mouths of village men and shepherd boys. Needless to say, the Hunan mother-in-law in Changsha and the Hubei coachman in Hankou can all sing 'the Chinese nation is in its most dangerous time'[...] Now it can be said that wherever there are people, there are resistance songs." (pp.120, Wang, 2008). This highlights the widespread reach and impact of the resistance songs, penetration various corners of society.

2.2.2. The Impact of Socialist Ideology on Music Development (1940s-1978)

Orthodox Mass-Line Revolutionary Music

Nie Er, the famous left-wing songwriter and composer, best known for his composition March of the Volunteers, the official anthem of the People's Republic of China, once wrote in his diary:

"How to create revolutionary music? That's the question I've been pondering all day, but I haven't come up with any concrete plans yet. Isn't so-called classical music just a pastime for the privileged class? I spend hours every day over my basic exercises. After a few years, even a decade, I become a violinist. So what? Can you ignite the spirits of the working masses by playing a Beethoven Sonata? Will that truly inspire them? No! It's a dead end. Wake up before it's too late!" (Feb 7, 1932).
Stemmed from the leftist music and various movements in the republic era such as New Music Movement and National Salvation Mass-Singing Movement, the revolutionary, masses-oriented music were being enshrined after the birth of People's Republic of China (PRC, 1949). Compared to the republic era (ROC, 1912-1949), which these leftist's compositions and their views on music were labeled as underground and rebellion, these "red" music with revolutionist and socialist ideology have become the new, and only principle ingrained in China's music development under Mao Zedong's leadership.

In 1942, China's Communist Party (CCP) leader Mao Zedong expressed his views on art and literature in his speech at the "Yan'an Forum on Literature and Art" (1942) in Yan'an (a small town in Shanxi province, served as the headquarters of the party between 1936 and 1949, a crucial period for the CCP's preparation to gain power). Mao argued that social class is embedded in literature and art, and therefore, literature and art must represent and unify the class and people they depict. The purpose of literature and art is to serve the people, specifically the lower-class majority of workers, peasants, and soldiers in the socialist context. Mao's view on literature and art is stemmed from his fundamental political theory on the "Mass-Line" (群众路线), which he summarized as "from the masses - to the masses." After Mao's speech in 1942, CCP adopted policies and strategies for music that aligned with the same ideology. Following the party's rise to power in 1949, these policies led to a significant reform of the music sector in mainland China.

After the 1949, the country implemented the planned economy system and established the state-owned China Record Corporation (CRC), merged by major private labels in the republic era such as Pathe-Freres, Victor, and Dah Chung Hwa (CRC, 2021). This transformed the commercial music business into a non-profit sector, which CRC served as the sole music recording entity in China (Li, 2011). In contrast to the commercial popular music sector under the
Republic of China's regime, which was served toward a small number of upper and middle-class audiences in major cities, music in the socialist regime became public property and seemed to be "democratized" for the entire Chinese population (Clark et al., 2016). Commercial development and profit became irrelevant in this new system, as music was considered a propaganda tool to promote socialist ideology and uplift the spirit of the masses (Shen et al., 2019).

The "Eight Model Plays" were modern adaptations with revolutionary stories during the Cultural Revolution (1966-1976) represented the most prominent examples of the CCP's ideology on music. As early as 1964, the reform began to emerge with the establishment of a Rectification Command Headquarters led by Mao against the "revisionism (to capitalism)" in the literary and art community (Xinhua, 2007). On May 21, 1967, the CCP's official newspaper People's Daily published a leading article titled *Finest Examples of Revolutionary Art*, which listed eight major plays performed during the 25th anniversary of Mao's 1942 Yan'an speech. These plays became models for future art productions in the Cultural Revolution era: five Peking operas "Taking Tiger Mountain by Strategy" (Zhiqu Weihushan, 1958), "Raid on the White Tiger Regiment" (Qixi Baihutuan, 1958), "The Harbor" (Haigang, 1964), "The Red Lantern" (Hongdengji, 1964), "Shajiabang" (1965); two ballets "Red Detachment of Women" (Hongse Niangzijun, 1964) and "The White-Haired Girl" (Baimaonv, 1964); and one symphony, "Shajiabang" (1967).
These plays were considered the "backbone" of Chinese revolutionary culture to uplifting people's spirits. They were widely listened to and sung by people across China and becoming an integral part of various cultural and political occasions (Clark et al., 2016). However, despite the goal of bringing music to serve the workers, peasants, and soldiers, the creation, production, and performance of mass music remained under the control of officials and professional elites in government institutions. The status of an art professional was highly prestigious and not easily achieved by those outside the professional system (Shen et al., 2019). Only a small number of well-trained producers, writers, artists, and musicians could be included in the system to create and perform these plays embedded with socialist ideology by working full-time in party, state, or regional performing art organizations such as the National Peking Opera Troupe, Central Orchestra, Beijing Peking Opera Troupe, Shanghai Peking Opera Troupe, Shanghai Symphony Orchestra, and so on.
More importantly, music in the Cultural Revolution era became a propaganda tool to fulfill the various political needs of the party, representing people as unified groups such as workers, farmers, soldiers, or students. However, the grand narratives and the lack of real-life experience among the creators often made the music detached from the reality of people's everyday lives.

Grass-Root Zhiqing Songs

In contrast to the "top-down" revolutionary music, the popularization of underground Zhiqing Songs (Educated Youth Songs) was an example of grassroots creation that truly resonated with people's thoughts and feelings among the Zhiqing (知青) community. During the Down to the Countryside Movement (late 1955-1978), a total of 14 million Zhiqing, mostly middle school and high school graduates from cities, were settled in the countryside to participate in farm work and construction and to receive re-education from lower and middle-class peasants (Beijing Daily, 1998).

During this movement, many Zhiqing Songs were written, and privately sung and circulated by the educated youth across the nation. Its emergence and existence are both a resistance to the false reflection of reality in the cultural authoritarianism of the Cultural Revolution, and critique of the reality through their own emotional experiences (Dai, 2002). In contrast to the sublime and solemn revolutionary music of the era, these songs often chanted about the beauty of hometowns, the feeling of parting from parents and friends, the hardships of life, the hope for the future, and sometimes expressed complex feelings and unspeakable thoughts such as melancholy, love, and self-mockery.

Although most Zhiqing Songs tended to be immature, soft and sentimental, contrasting with the grand narrative of revolution, politics, and ideals in mainstream music during the Cultural Revolution era, they reflected the
common real-life experiences and deep feelings of the Zhiqing generation. These songs quickly spread across the country, with handwritten charts and region-specific versions of the lyrics being added, making them some of the most famous Zhiqing Songs. In August 1969, Ren Yi, a Zhiqing settled in a village in Jiangsu province, wrote a song called "My Hometown" to commemorate his hometown Nanjing. The song became widely sung:

"Ah, Nanjing, my lovely hometown, when can I come back to you? The white clouds are floating in the bright blue sky. Beside the beautiful Yangtze River is my lovely ancient city of Nanjing. The Yangtze bridge is like a rainbow across the river, and the majestic Zhongshan mountain embodies my hometown.

Farewell to my mother, goodbye to my home. The golden student age has been written in the history of youth, and it's gone forever. Ah, how difficult and long the road will be. The footprints of life are stepped into the soil of this remote and foreign land.

To rise with the sun and return with the moon, to work heavily on repairing the earth. It's my glorious and sacred duty. Ah, embroider the earth in red with our hands, until it covers the universe. Looking forward to tomorrow, believe it, it will come. Ah, Nanjing, my lovely hometown, when can I come back to you?" (Song of Nanjing Zhiqing, 1969)

Despite the song's lamented melody and lyrics are not conforming to the government's rhetoric of Down to the Countryside Movement (Dai, 2002), it truly reflected the common life experiences and deep feelings of the Zhiqing generation. The song quickly spread across the country, with handwritten charts and alternative versions with region-specific lyrics being added, becoming one of the most famous Zhiqing Songs. In August 1969, the song was broadcast on Moscow Radio under the title "Song of a Chinese Zhiqing," but it soon faced
criticism and was banned by the authorities. Ren Yi was arrested and sentenced to ten years in prison in Nanjing until the end of the Cultural Revolution.

2.2.3. Popular Music Development after Economic Reform (1978- late 1990s)

The Rise of Popular Music

Initiated by Mao's successor, Deng Xiaoping, at the 3rd Plenary Session of the 11th Central Committee in 1978, the country officially ended the period of the Cultural Revolution and replaced it with the Opening-up Policy and Economic Reform. Although state and party control remained tight compared to the West, it became significantly looser than the previous period. The shifting political and economic context, such as the open-up policy, free-market economy, and globalization, created a relatively liberal environment that led to the resurgence of social and cultural diversity, enabling the process of depoliticization and commercialization of culture and music (Baranovitch, 2003).

In October 1979, the Fourth National Conference of Writers and Artists was held in Beijing. In his speech at the conference, former leader Deng Xiaoping stated that artists should not be interfered with indiscriminately on "what to write" and "how to write." This liberation of literary and artistic thought soon extended to the field of music, and music culture began to emphasize emotion and expressiveness (Lu, 2018). In 1980, Zhou Yang, former president of the China Federation of Literary and Art Circles (CFLAC), argued for the importance of "Lyrical Songs" (抒情歌曲, emotional and expressive ballad songs), which reflected this transition in musical culture. He stated, "In the hundred flowers booming of literature and art, it is impossible without the flower of lyrical songs. We have not done enough in this regard in the past [...] Some people worry that the development of lyrical songs will affect revolutionary songs. I don't think this worry is necessary [...] If there is no lyricism in literary
and artistic works, what artistic creation is it! Lyrical songs should occupy an important position in various song forms [...] In people's life, we can't just be serious and intense without relaxation and happiness, and we can't just have marching music without lyrical songs in music life."

At the same time, China National Radio and Songs magazine jointly hosted "15 Top Radio Hits" through mass voting, including top hit songs such as *Toast Song* (祝酒歌) and *Finding Older Brother with Tears* (妹妹找哥泪花流). The voting lasted one month from December 23, 1979, to January 23, 1980, and received over 250,000 letters (The Paper, 2020). On the day of the announcement of the ballot, the "Award-winning Concert of Top Radio Songs by Audience's Choice" was held at the Capital Indoor Stadium in Beijing, with all 12,000 seats sold out, marking the first time in the People's Republic of China that listeners had the right to vote for their favorite songs. Interestingly, these 15 songs were all lyrical songs, which stood out from the revolutionary mass songs of the past. The collective appearance of lyrical songs not only reflected the liberation of the field of song creation at the beginning of China's reform and opening up but also reflected the voice of the people, laying an important paradigm of music creation in the new era (Lu, 2018).

Rooted from the lyrical songs, the earliest form of popular musical culture in the post-economic reform era started to embodying the secular culture that accompanies the awakening of individualism and the legitimization of daily life (Tao, 2018). Music started to become the leisure and entertainment for the common people away from the government's control. Music from Hong Kong (e.g., Canto-pop) and Taiwan (e.g., Campus Folk), as well as Western popular music (e.g., Michael Jackson, Hip Hop music) were reintroduced to the audience in mainland China, and often through unofficial channels. For instance, despite being labeled as "decadent sound" and banned by the authorities in the early 1980s, Taiwanese artist Teresa Teng was able to reach the Chinese
public through illegal smuggling activities of pirated copies rather than legitimate official public media and became the most popular and most imitated star in mainland China throughout the 1980s (Baranovitch, 2003).

In the domestic music market, commercial record companies have been established, or restructured from Maoist era's non-profit cultural organizations, in key cities such as Guangzhou, Shanghai, and Beijing (e.g., China Record Corporation; Shanghai Audio Visual Company), which played a significant role in shaping China's music sector throughout the 1980-90s. Guangzhou New Times Audio Visual Company for example, pioneered the practice of signing popular singers, which led to the growth and development of Guangzhou's recorded music industry, often referred to as the "Guangzhou Period" (Li & Morrow, 2012).

A large number of locally produced popular music emerged and gradually, consciously began to break away from imitating the gentle and feminine style of Hong Kong and Taiwan's music. Instead, they started producing original music that truly reflected the cultural background and expressions of people in Mainland China. Compared to the collectivism of cultural production that was prominent in the Cultural Revolution era, songwriters and artists such as Li Guyi, Zhu Fengbo, and Jiang Dawei started producing music individually, integrating Chinese folk songs with Western popular music approaches that were not seen in the Cultural Revolution era, and gained great popularity. Also, the growth of the independent rock music scene, such as the "Northwest Wind" (西北风) represented by Cui Jian's Nothing to My Name (一无所有, 1986), a rock music style rooted in China's traditional Northwest folk musical culture, brought more interpersonal expression, autonomy of identity, and reflection of cultural criticism, resonate with and balances the aesthetic and psychological needs of the masses (Shi, 2023).
Following the global economic trend in the post-Cold War era in the 1990s, China shifted its main focus to economic development. From the early 1990s, there have been noticeable changes in China's popular culture, with a clear decrease in its public nature, and the gradual emergence of privatization, consumerism, commercialization, and globalization (Lu, 2018). The increasing free-market activity led to the dominance of Gangtai music (港台音乐, Canto-pop and Mando-pop from Hong Kong and Taiwan) in mainland China. Gangtai music, with its mega stars, more experienced and advanced songwriting and music production technology, as well as matured music commoditization and marketing strategies, surpassed domestic companies and dominated the recording sector in mainland China during this era (Baranovitch, 2003). In the domestic recorded music sector, smaller and privately owned labels such as Jingwen Record, Rye Music (predecessor of Taihe Rye), and Modern Sky began to emerge, contributing to the production and distribution of more independent music with lesser commercial success compared to Gangtai music (Li & Morrow, 2012).

In this era, the copyright regime inherited from the socialist past had little
popular support for protection (Shen et al., 2019). Piracy also did not cause major concerns in China, as most pirated music belonged to non-domestic music companies. Consequently, a large underground market for pirated cassettes and CDs emerged, along with the circulation of "Dakou" - illegal imported cut-off cassettes and CDs recycled from the West (de Kloet, 2012). Weak enforcement allowed these practices to persist since the 1980s. Additionally, the introduction of newer, simpler, and more affordable music-related technology facilitated mass consumption of popular music, giving regular audiences in China the freedom to choose what they wanted to listen to and challenging the centralized voice of state-controlled media during the Maoist era (Baranovitch, 2003). During the 1980s, cassettes became the de facto medium for music. Compared to older formats like vinyl records and record players, cassettes and tape machines were significantly cheaper, making them more accessible. It was also easy to copy and share music using blank cassettes and a dual cassette deck. This trend later transitioned to CD burners and pirate CDs in the 1990s. The prevalence of inexpensive, replicable cassettes and CDs transformed music consumption from a luxury entertainment to a casual activity that could be enjoyed in private spaces using household items, rather than being restricted to public spaces and mass gatherings (Baranovitch, 2003).

**Political Influence in Post-Economic Reform Era**

In the post-economic reform era (1978 onwards), attempts were made by the party and the government to control culture, but they had limited success (Baranovitch, 2003). Socialist ideology remained embedded in music at the state level, albeit in a more complex and subtle manner (Li, 2014). During this era, cultural policies faced a paradox, balancing the promotion of politically influenced music to uphold ideology and social stability with allowing popular music to thrive within the market economy.
The complex relationship and negotiation between political and economic forces (Baranovitch, 2003) resulted in two main categories of music in China: "Official Art" (官方艺术) or "High Art" (高雅艺术) which received funding, production, and support from the state, with a focus on ideological and political themes; and "Tongsu" (通俗) music, which is market-driven popular music devoid of political or ideological meanings. The former includes military-themed songs and officially endorsed traditional Chinese and folk music, often having low commercial value and performed by artists affiliated with official organizations such as national or local musician's associations or the military. The latter represents the mainstream popular music consumed in everyday life, encompassing Western and East Asian music, and later Mando-pop following the rise of domestic music production.

However, the division between "Official Art" and "Tongsu" music in China is continually challenged as official authorities strive to make their music as popular as possible (Baranovitch, 2003). For example, authorities have utilized the most-watched nationwide show, the "Spring Festival Gala" (春节联欢晚会), as an opportunity to promote their core ideology and policy changes. Since its first broadcast by state-run media Chinese Central Television (CCTV) in 1986, the variety show celebrates Chinese New Year annually and features music and dances with patriotic and spirit-lifting themes targeted at the masses, attracting over 700 million viewers each year (Li, 2014). The musical segment of the show showcases propaganda singers (e.g., Song Zuying, Peng Liyuan) performing songs that carry grand narratives such as political visions, family-nation identity, collectivism, and ethnic unity. Simultaneously, the program also features top mainstream celebrities (e.g., Jackie Chan; Faye Wong) and leverages their influence to attract mass audiences. The variety show represents a shift away from authoritarian cultural production in Maoist era and serves as a new method for the state to maintain its influence by blending popular culture and political ideologies.
2.3. Early Digital Music Development and Mass Consumption and Participation (late 1990s-2010s)

2.3.1. The Emergence of Digital Music Sector in China

From the late 1990s to the 21st century, China witnessed the rapid emergence of music digitization, which the development was driven by advancements in digital technologies like the internet, computing, and telecommunications, as well as the enthusiasm of Chinese consumers for new technologies (Li, 2013). The adoption of music digitization in China closely paralleled that of the West (Chen, 2010).

During this early stage, digital technology and distribution models from the West, such as peer-to-peer (P2P) networking, had a significant influence on China's music sector. The music sector in China as a whole was rapidly being transformed by digitization due to the weaker presence of domestic recording industry players compared to the West (Shen et al., 2019). New entrances, particularly IT companies and telecoms, entered the Chinese music market in the late 1990s and dominated the online distribution channels (Li, 2013). A variety of digital music companies were established, including "9sky" (1999), "Wangwa" (2000), "A8 Music Group" (2000), "Baidu MP3" (2002), "Kugou" (2003), "QQ Music" (2004), "Kuwo" (2005), "Top100" (2005), and others (Li, 2013; Shen et al., 2019). By 2005, digital music revenue had surpassed physical record sales, reaching 3.6 billion RMB (Chen, 2010). In 2006, digital music revenue accounted for 36% of the total music revenue, amounting to $26.8 million US dollars (Li, 2011).

Online music service providers surpassed the struggling physical market in China during the first decade of the 21st century (Li, 2011). However, copyright infringement remained a serious issue, with the proliferation of physical pirated tapes and CDs transitioning into pirated digital files, such as
illegal downloads and file sharing. Many music services, including those offered by prominent IT companies, provided users with free access to pirated content (Li, 2013). Platform-supported digital music piracy became the norm for music consumption during this era, with China having a digital sales penetration rate of 71% of total music sales and an astonishing piracy rate of 99% according to the IFPI Digital Music Report 2012 (IFPI, 2012).

The government, favoring innovative online music enterprises and their economic potential, delayed intervention and enforcement of piracy problems as they were not perceived as a threat to the entire recording industry (Shen et al., 2019). Legal cases involving Baidu, including IFPI v. Baidu (2005), Music Copyright Society of China v. Baidu (2008), and Universal, Sony BMG, and Warner v. Baidu (2008), exemplify the Chinese government's tolerance towards copyright infringements in online music services (Tang & Lyons, 2016). Baidu MP3, a music service under China's most successful search engine Baidu, offered users the ability to download pirated content. Instead of providing download links directly, the service employed a more subtle approach by providing "deep links" that redirected users to downloadable unlicensed files from third-party websites (Dong & Jayakar, 2013). Several organizations, both Chinese and foreign, including the International Federation of the Phonographic Industry (IFPI), the Music Copyright Society of China (MCSC), and the "Big Three" record labels (Universal, Sony BMG, and Warner), sued Baidu for copyright infringement. However, Baidu emerged largely unaffected from all three lawsuits or faced minimal penalties. The service continued to offer unlicensed music until Baidu made an official licensing deal with the three major labels in 2011 (Dong & Jayakar, 2013). This starkly contrasts with the case of Napster in the West. Napster, a social network company, allowed users to share unlicensed music files through a peer-to-peer (P2P) network. Shortly after its launch, Napster was sued by A&M Records and 17 other record labels for copyright infringement. Within a year, Napster lost the lawsuit entirely, leading
to its shutdown and eventual bankruptcy in 2002 (Carrier, 2012).

In this environment of systematic piracy, actors in the recording industry, including artists, copyright owners, labels, and licensed music services, faced challenges in generating significant incomes through traditional means such as physical CD sales or digital downloads, which were predominantly popular in the West. As a result, alternative sources of income such as ringback tones, live performances, merchandising, sponsorship deals, and advertising became crucial for the survival of the recording industry.

During this period, ringback tones emerged as a unique and dominant source of revenue in China's digital music sector. Telecom companies offered ringback tone services, allowing users to subscribe to a song that callers would hear when dialing the subscriber, with a typical monthly fee of around 2 RMB (23 Pence, Tang & Lyons, 2016). As legal online music businesses faced challenges in competing with free pirate sites, music companies and copyright holders collaborated with state-run telecoms to generate revenue legally. Online music companies like "A8 Music Group" were pioneers in the mobile music business, becoming the leading content provider for the three major telecoms in China, offering ringtones and ringback tone content from their signed artists (Li, 2012). The telecoms-controlled distribution channel of ringback tones prevented piracy, and their affordable subscription fees attracted a large user base even with lower income. Hence, it became the most successful value-added service in the recording music industry after the digitization of music, with a staggering 610 million mobile users subscribing to ringback tone services from China Mobile alone since 2003 (Teng, 2013).

Meanwhile, the loose control of the government's intellectual property (IP) policy in the digital era led to the prosperity and diversity of different music services (Shen et al., 2019). Smaller, more innovative players could coexist with larger music services owned by IT companies due to lower entry costs. The
number of music services skyrocketed during this period. The Ministry of Culture reported that the total number of music services increased from 212 to 1,034 between 2009 and 2014 (MOC, 2010, 2015). Since China's online music companies couldn't simply copy the business models of the West, such as digital downloading or subscription-based streaming, they had to develop alternative models such as ringback tones, live streaming, merchandising, and in-app advertising. As a result, China's digital music ecosystem became a "laboratory" for innovative business practices (Shen et al., 2019).

2.3.2. "Mass Line" Music in the Digital Era

Despite the effects of digitization and a weak copyright environment on major labels and established artists, the general public, including users and independent/amateur artists, seemed to embrace the situation. Users had the freedom to search and download songs from music services and software, as well as share music files with friends or upload them to online forums (BBS), and listening to them on portable MP3 players. The combination of high demand for popular music, easily accessible reproduction and consumption technologies, and a lack of legitimate distribution channels led to the emergence of an unlicensed distribution networks (Montgomery, 2009). The digitization of music eliminated the barrier of physical products, making it accessible to people of all demographics, and bringing the "democratization" effect on China's music consumption.

In addition to consumption, the digitization of music in China has also enabled widespread involvement of independent and amateur artists in content creation and production. With the advent of digital music technologies and services, the barriers to entry have significantly lowered, granting these artists the same opportunity to showcase their work compared to the signed artists, and new online spaces to connect with the online music community. Previously unattainable through the traditional music value chain, they now have the ability
to directly present their creations to the public, and their content can be spontaneously shared through various channels such as music sharing websites (e.g., 5Sing, fenbei.con) and peer-to-peer sharing on major internet forums and chat groups (e.g., Tianya, QQ).

One notable phenomenon that emerged during this period was "network music (网络歌曲, Shen et al. 2019)," represented by non-professional, online artists like Xue Cun and Yang Chengang. Network music, although not innovative in terms of musicality, introduced a novel format of grassroots popular music creation and distribution in the digital age, bypassing the need for record companies or publishers. The success of network music relied on the number of clicks from mass users, characterized by anti-elitism and grassroots participation. It resonated with Mao's "mass line," which reflecting the everyday lives and thoughts of ordinary people, while the content creation and production in the digital age no longer relied on government-appointed professionals, fostering a truly "from the masses and to the masses" approach. Despite the frequently recycled themes of love stories or corny jokes, as well as the varying quality of songwriting, performance, and production, network music in China has gained immense popularity in the digital age. It embodies the aesthetic preferences of ordinary Chinese individuals, stemming from grassroots origins. A notable example is the song Mouse Love Rice (2004) by amateur artist Yang Chengang. This song, with its relatable melody and lyrics, achieved a remarkable feat by breaking the Guinness World Record with 6 million downloads in just one month (Deng, 2018).
Figure 2.4. Cassette cover of Yang Chengang's album *Mouse Love Rice*, with advertising slogan including "Heavenly king of online creation," and "Sweeping the rankings of various major websites, consistently held the top spot for over 50 days" (Source: music.sohu.com)

The development of digital technology and new media in the music sector not only resulted in the expansion of mainstream and network music genres but also gave rise to new and diverse music styles. One such genre is Gufeng music, which combines pop music with traditional Chinese elements and will be extensively discussed in Chapter 5's case study. Gufeng music emerged in the early 2000s when user-friendly music production technologies like MIDI (Musical Instrument Digital Interface) and DAW (Digital Audio Workstation), along with online music sharing platforms such as 5sing.com and fenbei.com, made it feasible for a large number of regular users to digitally create, record, mix, and share music online (Su, 2016). Amateur music enthusiasts from
various backgrounds, including traditional music enthusiasts, players of traditional Chinese-themed video games, and followers of Traditional Chinese fashion "Hanfu," utilized these accessible tools to blend their cultural influences, interests, and musical tastes, resulting in the formation of a new genre and the gradual establishment of a distinctive online youth subculture.

2.4. China's Digital Music Sector after Restructuration (2010s-)

2.4.1. Restructuring Digital Music Sector to a Legitimate Market

Since the boom of China's digital music market, copyright holders from both the East and the West have criticized various music services for copyright infringements, and the Chinese government's failed enforcement. Chinese digital music services, including Baidu, faced legal action from Western industrial players for hosting unlicensed content (Dong & Jayakar, 2013). Under international pressure from entities such as the World Trade Organization (WTO), International Federation of the Phonographic Industry (IFPI), as well as the development of domestic music sector showed the business potential which need a more matured and legalized music market, the state started to tighten its copyright enforcement.

China's copyright enforcement was a gradual process, influenced by policymakers' reluctance to intervene in copyright enforcement in order to support the domestic market and protect it from foreign competition (Montgomery, 2009). Since 2005, the National Copyright Administration of China (NCAC) launched the "Sword Net" campaign, which lasted for a decade, to combat copyright infringement and piracy. Efforts were intensified in key areas such as online literature, music, video, and games. In August 2009, the Ministry of Culture issued a notice to strengthen the copyright management and protection of online music. A number of websites providing illegal content were shut down, and others were required to remove pirated content (Herlihy &
Zhang, 2016).

The Chinese government also encouraged self-regulation within the music industry by establishing an industry organization called the "Alliance of Digital Music Industry." Formed under the Ministry of Culture in 2011, the alliance included major players in the industry such as online music companies, websites, and telecoms (Tang & Lyons, 2016; Herlihy & Zhang, 2016). Through this alliance, industry players could negotiate pricing and profit-sharing mechanisms to reduce tensions and conflicts in the multi-sided business (Dong & Jayakar, 2013).

The most notable and influential copyright enforcement efforts did not occur until the NCAC’s "Sword Net 2015" campaign (Tang & Lyons, 2016). Initiated by NCAC, this campaign imposed a deadline for digital music services to remove all unauthorized content from their websites by July 2015. Ultimately, it led to the removal of 2.2 million unlicensed songs (Flanagan, 2015). The government's stricter copyright enforcement had a sudden impact on shifting China's digital music market away from piracy. Following the "Sword Net 2015" campaign, nearly all digital music services were required to obtain legal licenses, establishing China as a country with a legitimate music market.

The dynamics of the digital music sector underwent significant changes due to government copyright enforcement, resulting in a restructuring of the industry. Smaller music services encountered challenges after removing unlicensed content before the deadline, as they struggled to cover licensing fees and compete with major services that had greater financial resources and larger music catalogs (Shen et al., 2019). This has led to a more consolidated digital music sector, with large technology corporations such as Baidu, Alibaba, Tencent, and NetEase taking control since the 2015 campaign.

2.4.2. Mass Prosumption and Platformization
The new restructured digital music market, dominated by technology giants, has transformed online digital music engagement into a platform-based participatory culture for individuals, including songwriters, artists, and users. On one hand, music copyright in China has received greater protection through the government's recent strict enforcement, resulting a consolidated and legitimate digital music market. On the other hand, digital music platforms are also seeking to nurture upcoming artists under their platforms due to the rising costs of licensing (Tang & Lyons, 2016). In comparison to the network music era, independent artists now have the opportunity not only to share their original music on these platforms but also to sign publishing contracts and generate revenue. The platforms can support artists in various ways, including content distribution, promotion, and even funding. For example, social media Douban's D Force Record supported independent folk artist Huazhou by funding his album release and tour in exchange for the copyright to the recording. The album was released on Douban and sublicensed to other music services such as Xiami, where it received one million plays (Zhang, 2015). This allowed the company to recover their investment and retain the copyright for future licensing opportunities.

Since 2015, various music services have made efforts to promote independent artists in-house through initiatives such as Tencent Musician Open Platform, NetEase Musician, "Seek Light Project" (Xiami), and D Force Record (Douban). As a result, these music platforms, which were initially neutral tools in the early digital age, have now consolidated and become the new "gatekeepers" of China's digital music sector, aiming to exert control over music creation and production through the centralized platformization strategies (Qu et al., 2021).

Despite the exposure and expanded fan bases provided by digital music platforms, the income generated from digital media has not significantly
improved for most artists. Only top artists have experienced an increase in royalty fees, while the majority of artists still struggle to earn significant income from the legitimate music market (Zhang et al., 2018). A report focusing on Chinese musicians revealed income polarization among members of the Music Copyright Society of China (MCSC), the official collective rights management organization for songwriters and musicians. Among MCSC members, 80.77% of songwriters and musicians did not receive any royalties, 7.69% received royalties ranging from 10,000 to 100,000 RMB (1,180-11,800 pounds), and only a few musicians received over 100,000 RMB in royalties (Zhang et al., 2018).

In addition to artists, the platforms also aimed to engage regular users and encourage their active engagement in digital music, surpassing their traditional role as mere audiences. Music services went beyond their roles of providing digital downloading or streaming and incorporating a variety of social networking and entertainment features, allowing users to consume music in a more interactive manner and fostering a stronger sense of community within the music platforms. For example, Xiami introduced "Xiami loops," where users could form virtual social groups based on music preferences and create real-time song lists (Shen et al., 2019). NetEase Cloud Music is another example in leveraging social networking strategies. Despite having a smaller catalog compared to Tencent, NetEase carefully developed the comment section for each song, enabling users to post comments about the music or express their feelings while listening to a particular song. Through interactions in the comment section, users felt a sense of community (NetEase users refer to themselves as "Villagers"). By 2022, NetEase Music had amassed 189 million monthly active users, being China’s second largest digital music service provider (NetEase, 2023).

As a result, the role of mass users has transformed from consumers to "prosumers" (Toffler, 1980), combining the roles of producer and consumer.
User-Generated Content (UGC) has become increasingly important in the development of China's digital music sector (Luo, 2017). In particular, for digital music platforms in China, user participation in UGC not only provides free labor compared to licensed content but also enhances user interaction and engagement on the platform. This, in turn, allows these services to generate profits through various channels beyond paid subscriptions, such as advertising, virtual gifts, and merchandise sales. As a result, a distinctive relationship has emerged between the music platforms and users in China: On one hand, platforms are competing with each other to develop innovative services and features alongside their core businesses in order to attract user participation on the platform. On the other hand, mass users in China can continue using these services and features on the platforms for free, even in the new environment of regulatory IP protection and rising licensing fees.

Douyin (known as TikTok in the international market) is an example of this platform-prosumer codependence. It originated as a lip-syncing app and evolved into a UGC-based short-form (normally 15 seconds) mobile video platform that provides a convergence of content between music, music video, dancing, comedy, and other forms of entertainment. The service provides mechanisms and features for prosumers to create, reproduce, edit, and upload content. The content is then selected through advanced recommender systems based on AI algorithms to reach mass users based on their individual preferences and taste. The platform attracts 250 million daily active users (Douyin, 2019), and its more well-known global version, TikTok, has reached over 1 billion active users (Tiktok, 2021). With in-app purchases alone, Douyin's revenue reached $11.7 million in July, an increase of 290% from the revenue of $3 million in the same period last year (SensorTower, 2019).

WeSing, a case study in this research which will be discussed in Chapter 6, is another representative case of a music social and entertainment service
that relies purely on UGC. The mobile karaoke service, introduced in 2014, allows users to sing along with recorded music using their mobile devices within the platform, get rated by the system, and share their performances within the online community (Luo, 2017). To keep users engaged in the virtual community, the application is completely free and offers various novel functions and features, including virtual gifts and "gamification" features such as local charts and competitions, as well as editing and remixing functions to enhance the quality of users' works (Shen et al., 2019). Although WeSing is not considered a traditional music service based on streaming or downloading, its interactive and social features have attracted a large user base, including a surprisingly significant number of middle-aged and elderly prosumers, providing them with an accessible means to engage with music and create their digital identities. Consequently, the platform has amassed 460 million users and has become one of the most popular music-related apps in terms of monthly active users (Wu, 2017; Questmobile, 2019).

2.4.3. Market Expansion and Regulatory Control

Since the government began enforcing copyright protection in the digital music sector, China has experienced the emergence of a legitimate and rapidly growing online music market, driven by intermediaries and technology companies such as Baidu, Alibaba, Tencent, and NetEase, which leverage their economies of scale (Shen et al., 2019). With market consolidation and the adoption of mature business models including streaming, merchandise sales, and publishing, China's digital music market has consistently achieved double-digit growth each year. Consequently, it has risen from the 14th position in global music market rankings in 2015, following the government's copyright intervention, to become the world's 5th largest music market as of 2022 (IFPI, 2016; IFPI, 2023).

In this new environment, mergers between industry players have become
prevalent. In 2016, China Music Corporation, a music publishing entity, merged with two major music services, Kugou and Kuwo. The following year, Tencent acquired 60% of China Music Corporation's shares, leading to the creation of Tencent Music Entertainment (TME), which became the largest music service provider in China. TME currently owns popular digital music services including QQ Music, Kugou, Kuwo, and the karaoke app WeSing. The company went public through an IPO in December 2018 (Owsinski, 2018). Additionally, alongside horizontal mergers among music services, several vertical integrations also occurred during this period (Tang & Lyons, 2016). For instance, Baidu Music merged with the label and publishing house Taihe Music Group in 2015. This merger granted Baidu Music access to a larger in-house catalog, including the copyright to 700,000 songs, which accounted for approximately 50% of the music market (China Daily, 2015). This merger provided the music service with a larger in-house catalog at a lower cost, enabling them to compete more effectively in the new environment (Tang & Lyons, 2016).

Also, as music services had to remove unauthorized content and obtain legal licenses, music content and the rights to distribute or sublicense music became increasingly valuable, turning intellectual property (IP) into a valuable investment resource. Major music services began signing exclusive deals with copyright holders to gain competitive advantages, market share, and generate revenue from paid subscribers and sublicensing (Tang & Lyons, 2016). The largest service provider, Tencent, signed exclusive licensing deals with top content providers such as Warner, Sony, Universal, YG Entertainment, and Linfair Records. Similarly, other music service providers like Alibaba (Xiami Music), Baidu (Baidu Music), and NetEase (NetEase Cloud Music) also entered into exclusive licensing agreements with various labels and publishing houses (Shen et al., 2019), which industry expert Ed Peto described this phenomenon as "weaponizing music" (Tang & Lyons, 2016). However, industry players recognized that this strategy was unsustainable as the race for exclusive deals
 drove up content prices (Shen et al., 2019).

In this era of a market-driven environment with new technologies, policymakers have responded by adapting to the circumstances through the implementation of cultural policies aim to foster the development of domestic music businesses while also promoting socialist values (Montgomery, 2009). However, the growth and expansion of digital music platforms following the industry restructuration have caused concerns regarding market control and the exclusion of competition. As a result, regulatory measures have become necessary, which the Chinese government and policymakers took an active role in overseeing the online music market, exerting their political power to ensure fair competition, prevent monopolies, and promote sustainable growth.

The situation began to shift in 2017 when the state intervened to prevent the uncontrolled expansion of technology companies in the digital music sector. In a meeting with 20 major music companies in September 2017, the National Copyright Administration of China (NCAC) urged music companies to avoid exclusive deals and promote a cooperative online music market (Xinhua, 2017). As a result, online music services started sharing exclusive content through cross-licensing agreements. In 2018, Tencent Music Entertainment (TME) and NetEase reached a copyright cooperation agreement, cross-licensing more than 99% of all exclusive music content between each other (Bai, 2018). Furthermore, in 2021, the State Administration for Market Regulation issued an administrative penalty decision (SAMR, 2021), ruling that Tencent’s 2016 acquisition of equity in China Music Corporation violated the Anti-Monopoly law. The decision resulted in a fine and mandated that Tencent terminate exclusive agreements within 30 days, leading to Tencent withdrawing exclusive authorization rights to all upstream copyright owners.

2.4.4. Political Ideology and Digital Musical Culture
Following China's socialist history, the development of the digital music sector continues to be influenced by the political values and ideologies of the Communist Party. From the country's founding father Mao Zedong to current leader Xi Jinping, Chinese authorities have considered art and literature as tools to serve political needs, leading policymakers to exert control over the sector. Reflecting on Mao's 1942 speech at the Yan'an Literature and Art Forum, Xi outlined his own perspective on literature and art during the 2014 Beijing Literature and Art Forum. He emphasized five key points, which include recognizing the significance of Chinese culture and art for national rejuvenation, creating outstanding works that are relevant to the times, adopting a people-centered creative orientation, reserving the Chinese core-spirit in socialist literature and art, and strengthening the Party's leadership in the cultural sector (Xi, 2014).

However, the traditional methods of political indoctrination are struggling to resonate with the younger generation. Therefore, in order to adapt to the rapidly changing internet culture, the Chinese government has embraced a more innovative approach to propaganda (Chen et al., 2021). Unlike Mao, who sought to incorporate and have absolute ownership of the cultural sector, Xi Jinping recognizes the economic and cultural development resulting from the crucial role of the market and the wide-ranging demands of the general public. The party's goal is to adapt to the environment and guide the direction of the cultural sector's development. Specifically, regarding digital technology and new media, Xi Jinping argues that: "Internet technology and new media have transformed the forms of literature and art [...] To adapt to these developments, it is crucial to focus on the production of online literary and artistic works and strengthen positive guidance [...] We should expand our reach, establish broader connections, view them with fresh perspectives, and unite and attract them through new policies and methods, guiding them to become a vital force for the prosperity of socialist literature and art."
In recent years, Chinese policymakers and the government have become active agents, employing various strategies to direct and engage in music development that resonates with national ideologies (Fung, 2007). They have also focused on nurturing domestic cultural content to create "Soft Power" against foreign competitions (Hunter, 2009). For instance, the Communist Youth League (CYL), a CCP-controlled organization targeting younger generations, has actively supported the development of Gufeng music by organizing events such as seminars and rewards galas, which attract 20 million views on live stream platforms (Li, 2019). Additionally, the party-run media People's Daily has participated in this effort by launching a collaborative campaign called "Guochao" (Chinese Trend) with Kugou Music, hosting live-streams and offline events to support Gufeng music (Ge, 2019). In the digital age, nurturing and promoting domestic music content has become a strategy for the Chinese authorities to compete with cultural influences from other countries, such as the unequal flow of Korean and Japanese music into the Chinese market (Chua, 2012).

State organizations not only guide the development of digital music culture in a top-down manner but also transform their images to become participants in the culture itself, making state ideology promotion in the digital age more "playful" (Chen et al., 2021). Authorities have started adopting elements of grassroots internet culture and leveraging popular online culture to effectively promote their ideology and advance their agendas. For instance, CYL has actively engaged in social media by creating official accounts on all major platforms and reshaping their image to directly reach out to young people. On social media, they are referred to by the public as Tuan Tuan (团团), which is the nickname for the league's Chinese name Gongqing Tuan (共青团). The organization actively endorses the growth of Gufeng music by consistently sharing Gufeng songs on its official Weibo account and promoting the artists involved in this genre, since a large portion of Gufeng music has an underlying
ideology compatible with the official one, such as the promotion of traditional culture and national pride. According to Huang Yifei, the vice director of Guangdong Youth Big Data and New Media Center, and the operator of the Guangdong CYL official social media accounts: "Perhaps the previous modes of expression are no longer able to effectively convey our core values. Therefore, we should immerse ourselves in circles such as vlogs, Gufeng culture, and animation, not blindly following, but rather using the preferred methods of young people to resonate with the underlying value identification of these communities" (Chen & Guo, 2020). This approach represents the departure from traditional one-way propaganda and enabling the flexible and efficient two-way communication and fostering meaningful interactions with the younger online users.

2.5. Summary

In summary, this chapter explores the development trajectory of China's recorded music sector from the early 20th century to the present digital era, highlighting the diverse forces and challenges that have shaped this process. The chapter begins by examining China's music development in the pre-digital era. In the first period (1900-40s), Western economic and cultural influences had a significant impact, introducing localized Western music and establishing commercialized music systems. The political turbulence and foreign invasion during this period also witnessed left-wing music movements utilizing music as a tool for social change. From the second period (1940s to 1978), under Mao's socialist ideology, music underwent reforms that transformed the commercial music sector into an institutionalized non-profit sector, primarily serving as a propaganda tool for the masses. The Eight Model Plays, artistically representing the Cultural Revolution, had a profound impact and significantly influenced the musical culture, exerting a dominant influence compared to other grassroots expressions like the underground Zhiqing songs. The third period
(1978 to the late 1990s) witnessed the party's balancing act in music development between ideology and economy. Economic reforms led to a more liberal music environment, reintroducing popular music primarily from East Asia and the West. Commercial and more individualistic domestic music production, such as rock music, was able to emerge despite facing the challenges of systematic piracy due to the country's socialist past.

The following section then moves on to the early digital era of China's music development (late 1990s - 2010s). Due to the advancement of digital technologies and new media, the digital sector experienced rapid growth, synchronized with the West. The absence of established players in the recording industry also facilitated the entry of a large number of technology companies. However, copyright infringement was still a major issue during this period, tolerated by the government to protect these emerging technology enterprises. This led to the emergence of unique business models, such as ringback tones, in the digital music sector. Additionally, this environment "democratized" music consumption for individuals and provided a platform for independent artists to showcase their work. Network music, reflecting the lives of ordinary people, gained significant popularity through music sharing platforms, while diverse genres like Gufeng music, which blended popular music with traditional Chinese elements, also emerged. This period fostered a distinctive online musical culture and positioned China's digital music sector as a hub for innovative business practices.

The chapter concludes by discussing the restructuring of the digital sector in China's digital music industry after 2015 and the interaction and negotiation by major actors in the current ecosystem. Under pressure from international entities and recognizing the business potential of a mature music market, the government gradually tightened copyright enforcement. The "Sword Net 2015" campaign, the most influential one, led to the removal of nearly all unauthorized
content, resulting in the establishment of a legitimate market. In the current environment, major actors such as users, firms, and policymakers are actively seeking to assert their influence and ownership over the digital music sector through interaction and negotiation. Technology giants like Tencent and NetEase have transformed people's digital music engagement into a platform-based participatory culture, not only locking in independent artists through talent scouting projects but also engaging regular users as "prosumers" through social networking features and user-generated content. The platforms themselves expanded their business through acquiring exclusive licensing deals and consolidate themselves through mergers, while policymakers implemented counter regulatory measures to ensure fair competition and prevent monopolies. The state is also making efforts to guide the development of the sector in alignment with its values and ideologies by adapting to the new digital and media environment, reshaping their image, and influencing the younger generation through innovative strategies.

Overall, this chapter provides a comprehensive exploration of the distinctive development of China's music sector, spanning from the birth of the modern music sector to the current digital music ecosystem, while also examining the various forces that have influenced this development. It offers a rich and detailed contextual understanding of the historical, cultural, economic, and political contexts of China's digital music development, as well as the complex relationships, interactions, and value co-creation among the actors in this ecosystem.
Chapter 3. Literature Review: Value, Value Creation, and the Ecosystem Approach

3.1. Introduction

This chapter will focus on the theoretical background of this research, discussing the value of digital music, how it is created in the digital era, and for whom this value is created. To gain a better understanding of the development of digital music and its impact on the business world and people's everyday lives, two fields of literature will be reviewed: business studies of marketing and management, and popular music studies. These fields share similar ideas on how digital technology and social media affect the development of the cultural sector and the increasing role of consumer value creation in the web 2.0 era. However, they also bring in different (and sometimes conflicting) perspectives about the same phenomenon: Business-related research celebrates the empowerment of consumers ("prosumer") in the web 2.0 economy, resulting in new opportunities for firms to build collaborative relationships with consumers to co-create mutually beneficial value. On the other hand, literature in popular music studies theorizes the prosumer as unpaid labor and provides a more critical analysis of the potential exploitation in the new "platform capitalism." Despite studying overlapping phenomena (e.g., digitization, web 2.0, prosumer), research in these two fields frames the issues from separate viewpoints and theories. Thus, more dialogue across these two fields is needed to advance existing research.

To understand this divide, the first section focuses on exploring the core premises in these two fields of literature concerning the value of digital music. It first discusses the traditional view of value based on value chain theory and its implications for research on the digital music sector within the business discipline, which typically focuses solely on firm-centric, exchange-based value
and value creation. Then, the value of music in Popular Music Studies is being reexamined, extending beyond monetary exchanges and emphasizing its interactive roles in human flourishing and social cohesion, while acknowledging the complexities and challenges posed by digitization and corporate control. Additionally, a body of cultural policy literature concerning cultural value in the cultural industries are being studied, filling the gap by emphasizing non-monetary value and experience-based value creation beyond direct economic impact. Both monetary and non-monetary value represent the complexity of the value of music perceived by people, firms, political institutions, and society as a whole. Rather than favoring one component over the other, this research treats both as equally important. The key to finding these values depends on the actors (e.g., users, firms, policymakers) participating in digital music and their contexts.

The following section analyzes how value is created in the process of music digitization and Web 2.0, leading to a transformation of emphasis in business studies from firm-centric exchange value to consumer-centric value-in-use, as well as the firm-user relationship, interaction, and value co-creation. Active consumers (prosumers) play an increasingly significant role in this value co-creation paradigm, influencing the production, distribution, circulation, and consumption in the digital music sector. Scholars in the Service-Dominant logic extensively study this aspect to nurture positive relationships of mutual benefit between firms and consumers. However, in popular music studies, literature concerning prosumerism provides a more critical analysis of how modern-day platforms are utilizing and exploiting the contributions of unpaid prosumers (e.g., user-generated content and community-based social networking). The value created by prosumers is extracted, appropriated, and commodified into the platform's mechanisms in this "platform capitalism (Srnicek, 2017; Van Dijck et al., 2018)." By reviewing the literature and debates concerning the nature of prosumers in the two fields, this section argues that the relationship between
prosumers and platforms is not simply a matter of empowerment or exploitation. It involves a more complex tension and ongoing struggle between corporate-driven and consumer-driven processes, resulting in various ways of value co-creation, negotiation, and even conflict.

The last part of this chapter section aims to understand the value created for different actors by analyzing the structural relationship between actors in the digital music value network. Research concerning the ecology of the socio-economic network, such as sociology and business ecosystem studies, will be reviewed to offer a holistic approach to examining the complex and adaptive systems of competition, power relationships, and the external environment shaping the network. Drawing on selected aspects of Actor-network Theory (ANT), this section discusses the sociologist's view of the relationship and interaction between actors in the digital music network, with technology innovation as an additional force shaping the network alongside social and economic forces. In this research, the review of ANT literature will mainly focus on the power structure of actors in a network, particularly how an actor can establish power in the process of translation. The section argues that China's digital music ecosystem's development is based on constant interaction and negotiation between users (prosumers), firms, and policymakers, with each actor translating and interpreting the entire network to suit their interests and value propositions. This process results in a heterogeneous network of actors with aligned interests through constant negotiation and shifts in power.

3.2. Value in Music

This section aims to explore the value of digital music and how these values can be determined. First, it discusses the traditional view in the business discipline regarding value and value creation based on the value chain theory, along with its influence on research in the music sector, involving industry and business model development, and the dynamics of industrial players. However,
despite the theory's wide implications in the business domain, the core concept of value is often oversimplified into a single monetary value of margin produced only by the firm's internal value activities. This section argues that such a firm-centric, GDP-based measurement cannot fully represent the entire value creation in the digital music sector.

Then, it discusses music and its meaning in popular music studies, tracing back to early dialogues of critical theory on the mass production of contemporary popular music to a more nuanced interactionist perspective in understanding its societal value. This involves recognizing popular music's potential for personal expression and social impact within social contexts by emphasizing the active role of listeners in shaping music's meaning and its contribution to social cohesion and individual flourishing. However, the advent of digital technologies adds complexity, offering both opportunities for increased cultural participation and concerns about platform-based corporate control.

At last, it examines a body of literature concerning cultural value in the cultural policy studies to address the gap in understanding non-monetary value beyond the economic impact in a systematic way. This perspective offers a new approach by exploring and conceptualizing the multiplicity of non-monetary, individual, and society-centric value. The section also argues that rather than being an abstract feature, value is only realized by the actors experiencing it. Therefore, the emphasis shifts to the process of actors participating, experiencing, and valuing digital music, along with its effects and contributions to individuals and society throughout this process.

3.2.1. Value of Music in Business Studies

In 1985, Porter introduced the concept of the Value Chain in his book Competitive Advantage to analyze the activities performed by players in an industry and how they interact with values to create a competitive advantage
Over the past three decades, it has become a useful concept and tool for understanding and analyzing industries, providing a mechanism to describe the chain linkage between activities that exist in the industry with a structured frame on value and value creation. According to Porter (1985)'s definition, value is the amount buyers are willing to pay for a product or service provided by a firm, and competitive advantage arises from the surplus of buyers purchasing the values created by firms, along with the firms' cost of creating such values.

In Porter's view, value is created by the firm's internal value activities, which consist of distinct primary activities and support activities a firm performs in its value chain to gain competitive advantages (Porter, 1985). Primary activities involve activities from production to distribution, such as recording or marketing in the music industry, while support activities are the supportive activities outside the core business, such as technology development or human resources. Linkage is the term used to identify the relationship between one value activity and the cost of performance for another (Porter, 1985). Some linkages are obvious, while others are sometimes subtle. However, identifying linkages is a crucial process to understand the effects of value activities between segments.

Building on Porter's value chain theory, many music industry researchers have studied the value and value creation in the music sector since digitization based on the value chain model and Porter's definition of value. This research has primarily focused on the recording industry model, business model, revenue model in the digital age, and the dynamics of industry players (e.g., Dubosson-Torbay et al., 2004; Bockstedt et al., 2005; Tschmuck, 2006; Styvén, 2007; Zentner, 2008). For instance, Bockstedt et al. (2005) analyzed the conventional structure of the recorded music industry, assessed the shifting structure into the virtual value chain, and explored potential power and value
flows among players (e.g., artist, label, retailer, consumer) in the value chain. Dubosson-Torbay et al. (2004) used value chain theory to identify industrial players and the cost and margin in the recorded industry, discussing traditional online business models such as subscription, advertising, and on-demand distribution, and compared them with emerging business models on value creation, such as virtual gifting, promotion model on merchandise and endorsement, and data mining. They concluded that the future of the recording industry would be more flexible with various models with lower-profit margins. Del Águila-Obra et al. (2007) analyzed the value creation of new intermediaries and their roles in content packaging and distribution in the value chain, aggregating the supply and demand in the industry, organizing and evaluating online data and information, and building infrastructure for other industry players.

Similarly, scholars in China have primarily examined the development of China's digital music industry through the lens of value chain theory, including Xu (2006), Wang (2009), and Tong (2012). These studies identified the core value chain within China's digital music sector and analyzed the value linkages among firms within the digital music industry (Tang & Lyons, 2016). Xu (2006) categorized China's digital music into three divisions: Upstream, encompassing content providers such as artists and labels; Midstream, involving IP management companies, digital music service providers, and internet service providers; and Downstream, composed of the end users. Xu aligned her findings with Porter's Value Chain model (refer to Figure 3.1).
Building upon this, Wang (2009) refined the value chain into four levels: the First level, which includes content providers and other entities that control the copyright; the Second level comprises digital music service providers; the Third level involves device manufacturers; and the Fourth level consists of Internet service providers. Finally, the end user resides at the ultimate point of the value chain. Tong (2012) adopted Xu's categorization of China's digital music value chain but delved deeper into studying the relationship between key players in the digital music sector by examining the economic value flows among players within the value chain. She also considered additional factors influencing the value chain, such as social, economic, technological, and consumer behavior aspects. This analysis offers a broader view of China's digital music landscape (refer to Figure 3.2).

However, despite the wide usage of the theory, value chain-based studies...
often oversimplify value into a single quantifiable factor represented by the margin of value created and captured, deducting the cost of such value. This approach may not represent the full picture of the various benefits created in the value activity if they are not captured by this metric. Additionally, in the value chain theory, value is seen as only being created by the firm (and other firms in the supply chain) through its value-adding activities and eventually captured (or destroyed) by the consumer at the point of consumption. The theory does not address the value-in-use, which is the value created after the action of consumption and is often neglected (Vargo et al., 2008).

Most importantly, the value in focus is solely represented by the direct monetary aspect, resulting in a debate on the "de-value" of digital music based on the value gap caused by the decline in economic value (Marshall, 2019). This is deeply rooted in the commercialization of music and other cultural products, with governments and industrial actors prioritizing economic prosperity over the life-enhancing properties of art and culture. This has led to a mass music sector where value is predominantly measured by financial criteria, transitioning away from a personal, cultural, and human value (Baym, 2018). However, there is a need to view the value of music from another angle, considering the socio-cultural dimension that fully encompasses the comprehensive implications of digital music valuation (Sun, 2018). This requires examining the greater economic, cultural, and societal benefits for individuals, communities, and society as a whole, which extend beyond the scope of traditional value chain research. Even Porter himself later challenged the idea of only focusing on the value in such a narrow sense and seeing value as purely monetary and value creation as purely commercially-oriented (Porter & Kramer 2007, Grönroos, 2011). He expanded the research of value into the concept of shared value, which draws the focus onto social and economic progress instead of narrow and short-term economic productivity.
3.2.2. Value of Music in Popular Music Studies

In sociological perspectives, the idea that music possesses social value beyond monetary exchanges has been a fundamental aspect of popular music studies well before the digital age. One of the earliest debates emerged from critical theorists like T.W. Adorno, who criticized the mass production of modern popular music. Adorno argued that the commodification of popular music in the "culture industry" diminished its true value by promoting standardized and mass-produced music that offered a "pseudo-individualization", essentially stifling individual creativity and critical thought (Adorno, 1941). He also believed that popular music in its commodified form often reinforced dominant ideologies and maintained the status quo, thereby reducing its potential to challenge and critique social norms.

However, Simon Frith's critique of Adorno challenges this pessimistic view and the simplistic dichotomy between "serious" (authentic and uncommercial) and "popular" (commercial and vacuous) music, as well as the notion of passive consumption of listeners (Frith, 2007). In his 1987 essay, Frith highlights the value of mass-produced and consumed popular music, despite industrialization, allows for personal and public expression, citing the rise of hip-hop at the street level as an example of human-centered, impactful, and politically charged music. Frith also advocates for a more balanced and nuanced understanding of music as a product of ongoing negotiation among individuals within a music world, by emphasizes the active role of consumers in shaping music's cultural significance beyond mere market choices (Frith, 1987).

Since Frith, the interactionist perspective on music has emphasized understanding how music functions in various social contexts and how its meanings are formed and transformed through social interactions of actors. This perspective highlights the active role of the listener in shaping music's cultural significance and its consequences. It challenges the traditional view
held by theorists and musicologists that only experts can determine the 'real' meaning of music from an academic standpoint (Martin, 2006). Instead, it posits that music's value is constructed in the dynamic flow of social life through the interactions of listeners, performers, and other participants. Consequently, the focus shifts from the divide between music and actors to understanding how individuals interact with music and construct its meaning from a more grounded and empirical approach (DeNora, 2000).

The approaches in analyzing music and the meaning it possessed raises questions about whether music merely reflects social structures or actively participates in shaping them, which DeNora (2000) argues that music is portrayed not merely as a reflection of values but as an active force that incites movement and organizes social interactions. DeNora's work on music and everyday life offers insights into the intimate and mundane ways in which music intersects with quotidian experiences, influencing mood, behavior, and social interactions (DeNora, 2000). Thus, understanding music's role requires focusing on its actual uses and its capacities for enabling and constraining users.

Similarly, Small's concept of "musicking" emphasizes the communal and performative aspects of music-making, emphasizing its role in fostering social cohesion and collective identity (Small, 1998). It involves the process of interpreting and assigning meaning to music in a collaborative and interactive way, highlighting the dynamic and subjective nature of the musical experience within the broader socio-cultural context (Martin, 2006). Small interpreted this form of participation as "ritual," wherein "its meaning lies not in the created objects that are worn, exhibited, eaten, performed, or otherwise used, but in the acts of creating, wearing, exhibiting, eating, performing, and using (pp.107, Small, 1998)." By framing music as an active process involving performers, listeners, and various stakeholders, Small highlighted how music creates and
sustains social bonds and cultural meanings (Small, 1998). This interactionist view emphasizes that the act of making music is inherently social, involving a complex web of relationships and contexts that give music its meaning and value.

Hesmondhalgh's perspective on the value of music expands beyond traditional notions of contemplation and self-realization in high culture, emphasizing how music contributes to human flourishing in everyday emotional resonance, social interaction, and bodily invigoration (Hesmondhalgh, 2013). Hesmondhalgh argues that music offers avenues for emotional exploration and expression, fosters social connections, and engages individuals physically through activities like dancing, thereby contributing to personal well-being and community cohesion. Overall, he proposes a more holistic understanding of the value of music, one that encompasses mood, sensation, and social interaction, alongside intellectual engagement and self-reflection.

Since the digital age, early disruptions like digital downloading and file sharing challenged the recording industry's dominance, leading to adaptations such as subscription services like Apple Music and Spotify, fostering a participatory culture with social media sustaining musical careers, and creating a decentralized system that contrasts with the centralized control of the mid-20th century (Prior, 2018a). Due to the drastic changes, new waves of debates and critiques have emerged in the field of popular music studies regarding the value of digitization in music culture. These debates are represented by widely disseminated "digital optimism," which claims increased cultural participation and democratization through concepts like "Web 2.0," "prosumption," and "crowdfunding" (Hesmondhalgh, 2014).

However, despite the changes, it remains the new version of the same old problems: the uneven supply and demand of cultural products, the divide between professionals and amateurs with large number of aspiring artists
seeking opportunities, and the ongoing tension between individuals and corporate culture. It is challenging to argue that in the digital age, people’s cultural experiences and values are entirely optimal without challenges and trade-offs. Despite the hype, practical outcomes were often mixed, with realities such as corporate control and platform capitalization (e.g., Srnicek, 2017; Van Dijck et al., 2018) introducing new challenges to cultural production and consumption in the digital age. In fact, digital music, once a decentralized participatory culture, has now evolved into a commodified one, where the liberating effects of technology and values are also being appropriated and exploited at the corporate level, often through the extraction of free labor (more discussion in section 3.3.4). The relationship between artists and users has also evolved, with musicians now facing increasing relational labor (Baym, 2018) in maintaining relationships with their diverse and sometimes demanding audiences, navigating a steep learning curve without clear guidelines for effectively managing these relationships, all while facing uncertain payoffs.

Music in its digital form has the potential to shape experiences, fulfill needs, and foster connections; however, its ability to do so is contingent upon social, economic, and institutional conditions (Hesmondhalgh, 2014), with sensible governance and accountability mechanisms needed (Gorwa, 2019). The value of digital music cannot be overlooked as a significant progression in music development that fundamentally enhances every aspect, nor can it be underestimated due to the challenges posed by new conditions that may diminish its potential value. In essence, the integration of digital technologies into contemporary social, economic, and political contexts has reshaped cultural production and consumption, blurred traditional boundaries and allowed for new forms of creative expression and global circulation, it ultimately representing an "evolution" rather than a "revolution," where a multiplicity of values could be created by actors in the reconfigured environment during this process (Prior, 2018a).
Overall, popular music studies recognize that music's value transcends monetary exchanges, allows for personal and public expression and that consumers actively shape its cultural significance. The interactionist perspective further explores music's role in social contexts, emphasizing the active participation of listeners and the construction of music's meaning through social interactions. Scholars like Tia DeNora (2000) and Small (1998) highlight music's influence on everyday life, social cohesion, and identity formation. Hesmondhalgh (2013) expands on this by examining music's contributions to the human flourishing of emotional and social well-being. The digital age introduced new dynamics in music production and consumption, with both positive and negative implications. While digital technologies reshaped music access and participation, the challenges still remain such as corporate control and relational labor for artists. Thus, the value of digital music lies in its potential to shape individual's experiences and foster connections, whereas it is multifaceted and contingent which evolved on technological, socio-economic and institutional conditions and changes.

3.2.3. Value of Music in Cultural Policy Studies

As discussed in subsection 3.2.1, scholars in the value chain and music industries researchers have built on that theory are solely focused on the economic value in monetary terms. However, in subsection 3.2.2, research in popular music studies provides an interactionist perspective on the social value of music, seeing it as facilitating personal and public expression, fostering social cohesion, and being actively shaped by actors in various social contexts. From a cultural policy and governance perspective, researchers also reject the notion of valuing music solely in economic terms. arguing that using a single measurement to determine the value of arts and culture oversimplifies the matter (Crossick & Kaszynska, 2014), neglecting the greater value of cultural products beyond the direct economic impact - the non-monetary value that
benefits the well-being of individuals, communities, industries, and society as a whole. This subsection will discuss the valuation of music from the perspective of cultural policy studies.

In European countries, particularly the UK, a large body of literature focuses on the more complex and inclusive ideas concerning the value in music and other forms of arts, under the broad concept of "cultural value," which is widely used in the cultural sector for academic work relating to government’s cultural policies. Since the establishment of the Encouragement of Music and the Arts (CEMA, predecessor of the Art Council) in the 1940s, the state level has been directly involved with music and arts, providing government subsidies and services to foster the UK’s cultural sector (Behr et al., 2014). Despite the constantly shifting cultural policy, from Thatcher’s free-market policies leading to the rise of neoliberalism since the 1970s which intensified the perspective of prioritizing economic goals over cultural and artistic pursuits (Hesmondhalgh, 2014), to New Labor’s reorganization of socially instrumental value (Holden, 2006), the debates on the social and cultural value of music and art have continuously influenced cultural policies and cultivated the growth of the cultural sector till this day.

Many scholars argue that the definition of Cultural Value is "problematic" without a consensus on its meaning (O’Brien & Oakley, 2015) since it is difficult to assert, understand, and measure cultural value and its components (Behr et al., 2014). Despite that, several scholars are trying to conceptualize and break down cultural value into distinctive elements to gain a better understanding of this elusive term. Throsby (2001) separates the valuing of cultural goods into the economic domain and the cultural domain, and further categorizes cultural value into seven separate components: aesthetic value, spiritual value, social value, historical value, symbolic value, and authenticity value, to capture the complexity of the cultural value. Agreeing with Throsby’s distinction between
the economic and cultural values, Klamer (2004) views social value as separate from cultural value, which emphasizes values such as belonging, identity, social distinction, and trust in the context of interpersonal relationships derived from cultural goods, and cultural value being the value that transcends beyond social and economic value.

Moreover, in the philosophy of art point of view, one of the distinctive features of value in arts is the dichotomy of *intrinsic* value versus *instrumental* value. Levinson (2015) categorizes the value of music into artistic value, mostly intrinsic, and practical value, which is instrumental, including economic value, social value, entertainment value, and so on. Due to the nature of culture and creative goods, the aesthetic and expressiveness of arts possess symbolic value intrinsically, thus differing from common ordinary goods (Townley and Gulledge, 2015). Therefore, the intrinsic vs. instrumental value has become one of the key discourses in cultural and arts policy debates (e.g., Holden, 2004; Behr et al., 2014), regarding the relationship of the aesthetic value of cultural goods and its instrumental outcome. Generally speaking, intrinsic value (cultural value) is the value of art within art itself, art for its own sake without any secondary benefits, whereas beyond its intrinsic quality and the textual interpretation of art (Martin, 2006), instrumental value is the effect caused by art activities, such as economic gain, mental wellness, social interaction, national pride, and so on (Behr et al., 2014).

However, although intrinsic value and instrumental value are in their distinct form, art could not be valued independently in instrumental terms or intrinsic terms (Kieran, 2013). Thus dividing the cultural value between intrinsic and instrumental is unhelpful (Behr et al., 2014). Instead of focusing on the division of intrinsic vs. instrumental, O’Brien (2010) proposed the pragmatic approach, using the economic language and various methods such as contingent valuation, choice modeling, subjective well-being, and other
compatible valuation tools on assessing the cultural value. Holden (2006) conceptualized the cultural value into the "value triangle," bridging the intrinsic and instrumental value with the institutional value, to map with different interest groups, including the public, professionals, politicians, and policymakers, and to understand the dynamic relationship of the articulation of the value.

Value could only be observed in the phenomena rather than in the object (e.g., culture and arts) itself, which cannot be discovered without the process of human participation and interaction with the object (Adler, 1956). Hence, Behr et al. (2014) argue that rather than separating and examining intrinsic value itself and conceptualizing value as something purely abstract contained within cultural goods, research should analyze how actors ascribe value, to "de-emphasize the noun 'value' and focus on the act of valuing" (Behr et al. 2014). Therefore, more recent studies concerning cultural value are emphasizing the process of how specific actors value it in specific ways (Van der Hoeven & Hitters 2019), how music contributes to individuals' affective experiences and sociability (Hesmondhalgh, 2014), as well as the differences it makes to development of individuals and society beyond monetary measurement (Crossick & Kaszynska, 2014).

One of the most notable collections of work on cultural value in recent years is Arts and Humanities Research Council (AHRC)'s Cultural Value Project, published in 2016, as well as the project's recent work under The Center of Cultural Value at the University of Leeds. From 70 individual studies under the project, the report broadens the contribution of culture, beyond pure economic impact and the simplified delineations between commercial activity and public subsidy (Behr et al., 2016). Several components of cultural value were identified and examined in a unified approach, including individual reflection, civic engagement, communities, economy, well-being, and education (Crossick & Kaszynska, 2016).
In their two reports concerning the cultural value of live music conducted in Scotland, Behr, Brennan, and Martin (2014; 2016) closely examined the cultural value of live music, especially the non-monetary value derived from promoters, artists, and audience participation. After a case study at the Queen's Hall in Edinburgh across a wide range of genres from classical to folk, they found a set of shared cultural experiences by audiences across quite different genres, and the conventional definitions of “value” as market and instrumental are not suitable for describing live music since the monetary value could not fully represent the value of live music experience (such as the transcendence feeling) compared to other commodities, and value itself is not often conceived as good but as a process. Building from Frith (2013)'s classification of “enthusiasts,” "commercial," and "state-funded" promoters, they found out that the expression of the cultural value is not entirely influenced by the promoter, but more importantly, whether the joint behavior of musician's performance and audience's participation, such as physical and emotional responses, meets the expectations. Their later project (Behr et al., 2016) discovered the ecology of the live music sector from large-scale arenas to local independent venues and discovered the value of UK's live music, beyond the economic contribution, providing cultural resources of social value to the audience, and educational and training bodies.

Building on their studies, Van der Hoeven and Hitters (2019) put their focus on the broader perspective on the value of live music, particularly the social and cultural aspects, to move beyond the reductionist economic approach. Drawing from their analysis, several dimensions of social value, including social capital, public engagement, and identity, and cultural value, including musical creativity, cultural vibrancy, and talent development, were discussed with corresponding indicators for such value, the challenges, and potential policy intervention.

In terms of digital music, rather than merely a technological change in how
cultural goods is produced and consumed, digitization is a cultural process that significantly shifted our cultural experience and value (Crossick & Kaszynska, 2014). One of the key features of this process influencing cultural value is the great potential of individual participation and their role in the internet space, in which the distinction between audience and participant becomes challenged as people are becoming more involved in creating, producing, and circulating cultural products, especially in the digitized music sector. Music production software enabled the home-based studio, allowing amateur and independent producers (Qu et al., 2021) to create professional-grade content independently, bypassing the gatekeepers of the recording industry, and distribute through producer-oriented platforms (Hesmondhalgh et al., 2019) such as Soundcloud or Bandcamp, and directly deliver and interact with users. In Allington et al.’s reports (2014; 2015) concerning the online networks and cultural value creation of electronic music on Soundcloud, they found out how online platforms and social media enabled a new space for producers, musicians, users, and fans to interact, negotiate, and produce their own cultural value, through a range of activities including content production, DJing, sharing and self-promotion, and evaluation (Allington et al., 2014).

The multiplicity of values in digital creative goods - such as economic vs. social; intrinsic vs. instrumental; and artistic vs. practical - are created and captured by multiple actors across the sector. The complexity of value creation among actors such as artists, users, and the digital music platforms cannot be encoded within the traditional view of value creation in business studies. In general, cultural policy studies explore complex concepts of cultural value by offering various ways to examine the contribution of music beyond its economic and monetary impact and advocating for a broader understanding of the multifaceted contributions of music, including non-monetary benefits such as individual and societal well-being. Scholars like Throsby (2001) and Klamer (2004) have attempted to dissect cultural value into components such as
aesthetic, social, and historical values, while others debate the intrinsic versus instrumental value of arts (e.g., Holden, 2006; Levinson, 2015). Recent studies emphasize the importance of understanding cultural value through human participation and interaction, as seen in the AHRC's Cultural Value Project (2014) and research on live and digital music's social and cultural impacts (e.g. Behr et al., 2014; 2016; Allington et al., 2014). These studies expand the scope of research and provide a new perspective that emphasizes how people experience and value culture, rather than focusing solely on its abstract features within itself or instrumental implications.

To conclude this section, arguments from three research fields - business studies, popular music studies, and cultural policy studies - are reviewed to enhance understanding of the fundamental premises of music valuation in each discipline. This also serves to introduce the upcoming debate (Section 3.3.4) on the value of prosumer participation in the digital age, aiming to evaluate China's mass-line music participatory culture from a nuanced and balanced perspective. In the first part of the section, Porter's Value Chain theory is discussed to represent the notion of value from a monetary perspective, highlighting the need to incorporate socio-cultural dimensions for a holistic understanding. In contrast, popular music studies (Section 3.2.2) recognize the value of music by focusing on its role in identity formation, personal expression, and social interactions. Similarly, Section 3.2.3 on cultural policy studies delves into the concepts of cultural value, emphasizing public benefits beyond monetary ones, such as social well-being and cultural significance, and advocating for an understanding of cultural value through human participation and interaction. Each discipline offers unique insights into the economic, social, and cultural dimensions of music's value, collectively underscoring its multifaceted nature.

3.3. Value Co-Creation and Prosumption
Due to technological development and the new media in the web 2.0 era, consumers gain more control over the production, promotion, and usage of cultural goods enabled by digital technology and community. As a result, a new set of literature emerges that emphasizes this consumer-driven process of value creation, which is no longer limited to the traditional sense of value creation based on exchange value. This section will analyze how value is co-created in the process of music digitization and Web 2.0, focusing on the key shift from firm-centric to consumer-centric value creation and how this transformation shapes the development of the digital music economy and value creation. By reviewing literature in the business management and marketing fields concerning service-dominant logic, it will show that the traditional perception based on value-in-exchange is now being challenged by the new perspective of value creation, emphasizing the active value creation of consumers in value-in-use of instrumental and symbolic values, and their relationship, interaction, and value co-creation with firms. Subsequently, research concerning this new paradigm of value co-creation will be studied, especially how the active participation of consumers plays an ever-increasing role in the joint value creation with firms in the digital age and shapes the existing production, distribution, circulation, and consumption in the digital music sector.

Drawing on popular music studies, the last two parts of the section will conceptualize "prosumer," the merging role of consumers transformed into cultural producers in the web 2.0 era, and its effects on the music sector. This will involve analyzing the empowerment of individuals in the process of technology and media development, and how their prosumption could provide an alternative, networked digital economy where mass participation itself is the key value-added source for value co-creation. However, it will also discuss the debates on the power dynamics between prosumers and online platforms, highlighting the shifting digital music economy towards corporate control and
the potential exploitation of free labor. The last subsection emphasizes the sociological view on how the platforms’ content, technological, and business development, which focuses on the extraction of user-generated content, and datafication mechanisms by utilizing prosumer participation and creative production as free labor, could lead to a new form of platform capitalism in which the platforms become the new gatekeeper. In this scenario, the value created by prosumers is being extracted, appropriated, and commodified by the platforms. Addressing the debate concerning prosumers and exploitation in the digital economy, it shows tension and the ongoing struggle between the separate corporate-driven process and consumer-driven process in digitization. Both sides, the capitalists, and the prosumers want to control the flow of media for their own benefits, and the interaction results in either collaborative or compromising ways of value co-creation, or it can lead to appropriating and extracting other’s value creation, or even the value being destroyed by failed interactions.

3.3.1. Service-Dominant Logic

As discussed in section 3.2, Porter defines value as the amount buyers are willing to pay for a product provided by a firm, hence competitive advantage occurs when a firm is able to create value for its buyers that exceeds the firm’s cost of creating such value (Porter, 1985). According to his view, value is not only purely monetary, measured by total revenue, but also solely created within the firm. Similarly, in recording industry studies, the value chain focuses only on the firm’s end, involving processes such as talent scouting in A&R (Artist and Repertoire) management, music production, marketing, promotion, and distribution (Tschmuck, 2006). This traditional product-based, firm-centric, and linear view of value creation, in which value is only created within the firms (production), and consumers are only involved at the point of exchange (consumption), has been challenged since it neglects the active participation of
consumers and their interaction with firms in the value creation process (Prahalad & Ramaswamy, 2004; Parry et al., 2011), especially in the digital age where various interactive media forms and business models enable greater consumer participation in the development of products and services (Choi & Burnes, 2013).

To better understand the elusive term "value" and how it is created (Grönroos, 2011), Vargo and Lusch (2004) have divided the concept into two ways of thinking: the goods-dominant logic (G-D logic), and service-dominant logic (S-D logic). They argue that the traditional view of value and value creation, based on the G-D logic, only focuses on its value-in-exchange, where value is created by the firm in exchange for money. On the other hand, the alternative view of the S-D logic emphasizes value-in-use, where the value is co-created jointly by the producer and the consumer (Vargo & Lusch, 2004). In S-D logic, the product (e.g., a smartphone) acts as an input, and value can only occur when a customer uses it (e.g., communication, gaming, listening to music) and integrates it with other resources (e.g., mobile network, apps, Vargo et al., 2008). This view of the dynamic and collaborative creation of meaning and value during consumer engagement offers a more nuanced understanding of value creation in business studies, aligning with arguments already prevalent in popular music studies.

Also, similarly to popular music and cultural value studies, in S-D logic's assumption, value is not purely monetary and commercially oriented (Grönroos 2011; Winter, 2013). Instead, value creation is a process that allows users to feel "better off" in some aspects than before when using the service (Grönroos, 2011). Sometimes value can be measured monetarily (e.g., revenue or cost-saving), but it always has non-monetary and attitudinal components such as trust, comfort, and convenience that constitute consumers' overall perceptions (Grönroos, 2008). Particularly in the cultural industries, where the aesthetic and
expressiveness of culture and creative goods could carry symbolic value, they are distinct from common ordinary goods (Townley and Gulledge, 2015). Potts et al. (2008) argue that symbolic value can be seen, apart from exchange value and value in use of economic value since the value of cultural goods is often captured in its symbolic, emotional forms rather than its tangible form. Furthermore, this value is often intertwined with identity (Choi & Burnes, 2013), which through the cognitive and communicative process of symbolic music consumption, users can possess various personal meanings from the image of music and their self-concepts, both of which are socially situated (Larsen et al., 2013). By analyzing the motivation of consumer’s online participation, Choi & Burnes (2013) found out that through the participation of sharing content on online platforms such as YouTube, users could gain personalized symbolic emotional value and a sense of social identity, which itself also enhanced the perceived value and created new meaning from the identification with the online community.

3.3.2. Value Co-Creation

In this new service-dominant logic of the relationship between firms and users, where value is created with consumers instead of for consumers (Saarijärvi et al., 2017), the concept of value co-creation was proposed by Prahalad and Ramaswamy (2004) and adopted by other scholars in the S-D logic (e.g., Vargo et al., 2008, Grönroos, 2011). It recognizes and emphasizes the consumer’s creation of value and their interaction with firms. Value co-creation is defined as the "joint creation of value by the company and the consumer" (Prahalad & Ramaswamy, 2004). In this view, the interaction between the firm and the consumer becomes the locus of value co-creation and extraction, and the quality of the consumer’s experience is personalized, depending on the individual customer involved in co-creating value with the firm (see Figure 3.3).
Moreover, scholars in S-D logic have adopted a new actor-to-actor (A2A) perspective to provide a networked and systems-oriented approach to value creation, which broadens the dyadic relationship of producers and customers (Vargo & Lusch, 2011; Ford, 2011; Lusch & Vargo, 2012). Vargo & Lusch (2011) believe that resources are the key to value co-creation, as value is created from the beneficiary’s ability to integrate various resources. They identify two general categories: Operand resources, tangible resources that require action to create value, such as natural resources; and operant resources, a set of intangible resources that can be used to act, such as skills and knowledge (Vargo & Lusch, 2011). All actors are considered operant resources influencing and shaping each other, creating their own context and environment (Lusch & Vargo, 2012).

With the development of digital technologies and the Internet emphasizing
great speed, openness, interactivity, and individuality, an increasing consumer-centric culture of the internet emerged (Prahalad & Ramaswamy, 2004). Communities of "connected, informed, empowered, and active" consumers have the opportunity to play a more significant role in the value co-creation process in the digital era (Prahalad & Ramaswamy, 2004). In their study on video platform YouTube, Burgess and Green (2009) argue that as a social network platform, users' co-creation through creating content, critiquing each other’s content, and collaborating becomes the driving force of YouTube's attention economy. The platform must offer strong support for the new relationships created by this new economics of value co-creation with its users to maintain sustainable growth. Jalonen (2017) identified three key actors in the value co-creation in the sports sector through social media: sports entities, sports fans, and sponsoring companies. Each actor integrates important operant resources offered by the social media platforms and co-creates value with one another, including social identity and a sense of community between sports entities and fans, congruence and brand personality between sponsors and sports entities, and participatory culture and fan activation between sponsors and fans (Jalonen, 2017).

Value is always co-created (Vargo & Lusch, 2008), and value co-creation in the recording industry has been greatly shaped by the online participatory culture in the process of digitization (Choi & Burnes, 2013). In Chaney's (2012) study concerning music consumption in the digital age, he categorizes consumer's participation in value co-creation into four analytical categories: Generation of social interactions, including creating social connections via online music platforms and mutual aid on file-sharing; individual appropriation, such as manipulating digital music files (e.g., renaming, building playlists) or rematerializing them (e.g., burning CDs), and also consuming music nomadically via various software and hardware; support for the current supply, which includes promoting music through word-of-mouth in social networking
sites, co-producing music content with the artist (e.g., writing lyrics), and consumer empowerment, such as influencing music production and artist management by taking the role of producer in fan-funded labels or voting for upcoming artists to offer them career opportunities in the future. In Winter's (2013) research on DJs and online fans' community in Berlin, he found out that with the development of digital networked media such as YouTube or Soundcloud, and the active participation of users, the linear process of production, allocation, perception, and use of music had transformed into a non-linear and networked media culture, creating more diverse aspects of value creation activity. Choi and Burnes (2013) argue that the active participation (input of time, ideas, and support) of fans in virtual communities co-created both economic and symbolic value in partnership with artists and independent labels.

Rather than two parallel processes of production and usage, the interactive value co-creation of firms and users can also be seen in business development (Grönroos, 2011; Vargo & Lusch, 2004; Chaney, 2012), where a range of new services that utilize the active participation and value creation of users have become increasingly dominant in the digital economy, from content creation such as "Wikinomics" (Tapscott and Williams, 2007) to community interaction such as fan economy (Choi & Burnes, 2013; Zhang & Negus, 2020). Similarly, in the case of China's digital music sector, compared to the traditional models of digital download and streaming that offer professionally recorded music online to the audience, evidence has shown the most fast-developing and successful music and entertainment platforms in China purely rely on the contribution of regular users in creating User-generated Content (UGC) in the online community. WeSing, a mobile karaoke platform owned by Tencent Music Entertainment (TME), has become the third most popular music-related platform based on monthly active users (QuestMobile, 2019), exceeding all other top music streaming platforms in terms of active users and generating more revenue (RMB4.73 billion, 62.16%) compared to TME's core music
business on music subscription and advertisement (RMB 2.88 billion, 37.84%; TME, 2021). Even traditional music service providers, such as streaming service NetEase or QQ Music, also incorporate the strategy of co-creation with users, actively involved in establishing talent-scouting projects such as Tencent Musicians Plan (Tencent) or NetEase Musician (NetEase), to offer licensing contracts and cultivate talented unsigned or self-releasing music artists to self-upload and publish content, becoming a fundamental component of the services (Qu et al., 2021). The success of these new models marks the essential role of users in the digital music economy and the increasing value of user’s co-creation in China's digital age by actively participating in the creation, circulation, and distribution of professional and user-generated content, blurring the line between the content provider and consumer (Jenkins et al., 2013).

Value co-creation research offers a way to move away from the notion that value is solely created within firms and captured at the point of exchange, by recognizing the active participation of the consumer as an important operant resource producer and value co-creator jointly creating and capturing value with the firms. However, while the co-creation scholars moved away from the firm-centric view of value creation, they are not moving away from "firm-oriented" value creation. The co-creation literature seems to only focus on the collaborative partnership between the actors. Collaborative value co-creation might exist as positive examples in co-creation literatures, validating how consumers could work with firms to achieve mutual goals, whereas the more complex relationship of tension, negotiation, competition, and even conflict could also appear, and leading to other types of non-collaborative interactions. Also, although their emphasis is on the consumer value creation such as value-in-use and symbolic value, the ultimate goal for the firms adopting the S-D logic is still to transform or appropriate these values and seek exchange value in the market. The experience and value creation of consumers and the cultural phenomenon that could not translate to exchange value (both direct and indirect)
to the firm's interest is not at the center of co-creation research. Thus, the following sub-section will review the literature in popular music studies and media studies concerning the consumer's participatory culture in digital media, the role of prosumers in the development of the digital music economy, and their complex relationship and interaction with the firms.

3.3.3. The Value Co-creation of Prosumer in the Digital Age

Jenkins (2004) argues that digital convergence is not a simple technological shift with a fixed endpoint but a process that shifts the existing relationships between technologies, industries, markets, genres, and audiences. This process not only changes media practices (production, distribution, consumption) but also evolves media roles, such as those of producers and consumers. The convergence of these roles creates new means of production and distribution in the cultural industries (Winter, 2013). Consumers, through content creation, community formation, and social connections with others, are becoming active agents, participating in and shaping their own culture, as seen in phenomena like "Wikinomics" (Tapscott & Williams, 2007) and their engagement in the co-production process of media content with firms, as seen in the co-production of episodes, music, and radio broadcasts in the Star Trek series (Chaney, 2012; Kozinets, 2007). This phenomenon of participatory culture can be seen as a counterpart of corporate media convergence, in which consumers, audiences, and fans are empowered by convergence, seeking to take control of the media and interact directly with the content (Jenkins, 2006).

One of the most notable features in the digitized music sector is the increasing involvement of individuals outside the professional system in creating and sharing content. The rise of digital technologies has propelled consumer practices to the forefront of music production, fundamentally altering the nature of music-making (Théberge, 1997). While this development presents
opportunities for a wider range of individuals to engage in creative activities, it also challenges traditional distinctions between producers and consumers, fostering a new ideal of the self-sufficient "amateur" producer and blurring boundaries around cultural expertise (Prior, 2018b).

The integration of music production technologies such as sampling, drum machines, and digital audio workstations has empowered amateur and independent producers to establish home-based studios, enabling them to create professional-grade content independently and thereby shaping the creative process and establishing norms within popular music (Qu et al., 2021; Goodwin, 1988). In addition to production, the online circulation of digital music has the potential to bypass the gatekeepers of the recording industry, allowing distribution through producer-oriented platforms (Hesmondhalgh et al., 2019) such as Soundcloud or Bandcamp, and enabling direct interaction with users. Meanwhile, online platforms and social media provide a new space for producers, musicians, users, and fans to interact, negotiate, and create their own cultural values (Allington et al., 2015).

In this process, they no longer act solely as passive consumers; instead, they become "prosumers," a term coined by futurologist Alvin Tofler to define the merging role of producer and consumer in the information age (Toffler, 1980), actively participating in content creation and consumption (Waldron, 2013; Tombleson & Wolf, 2017). Supported by the tools and software in the new media, online users are able to be more engaged in active prosumption, controlling and shaping the flow of new media in online communities (Jenkins, 2004).

This transformation leads to the discussion of the empowerment of individuals (Chaney, 2012; Sun, 2019; Zhang & Negus, 2020) in the online space, where mass online users, artists, and audiences are becoming increasingly networked in an environment that has the ability to reconfigure the
culture in their own way through new media. Bruns (2007) argues that as the old model of production and distribution collapses in the media and creative industries, "generation C," a new generation of skilled and connected consumers capable of producing creative content in the collaborative network, is facing new opportunities to exercise their own control over content, career development, set market trends, and achieve digital "democratization." In his book *The Long Tail*, Anderson (2008) believes that the three forces in online and digitized media - democratizing tools of production, efficient and cost-cutting democratizing distribution, and increased connection of supply and demand - could potentially lead to a "long tail" market space with increasing multitude and diversity, where an infinite number of niche markets and producers can coexist with mainstream blockbuster productions that used to dominate the market in the traditional model.

In the views from value co-creation scholars, the transformation of the prosumer is also shifting their fundamental role in the modern-day economic system, which seemingly challenged the firm-dominated monopolistic system in the physical era of the recording industry, by offering an alternative, networked content development environment from the traditional production and distribution value chain. As a result, the creative engagement of prosumer has become an important source of innovation and added value for the digital economy (Füller 2010; Izvercian & Seran, 2013). Furthermore, researchers have studied the classification and motivations of the diversified prosumer community in the online participatory culture based on the value activities and value potential (Li & Bernoff, 2008; Izvercian & Seran, 2013; Burgess & Green, 2009; Füller 2010), such as Li and Bernoff (2008)'s "social technographics ladder" (see Figure 3.4), or Izvercian and Seran (2013)'s five levels of classification of prosumer types. These models show the different levels of involvement of internet users in the value creation process and how firms can relate to the new roles of the consumer.
Figure 3.4. Li and Bernoff's (2008)'s model of social technographics ladder

However, despite their recognition prosumer's vital roles in jointly participating in value co-creation with the firms, these models still analyze the value creation of prosumers from a firm-centric perspective that suits the firm's business interests. In their view, the firms are still in the leading role of value creation, supported by prosumer's value activities and the input of operant resources. Despite their increasing role in this value co-creation process, they remain consumers in the relationship with firms (Winter, 2014), as they are only valued by the firms according to their contribution to them. Such classification of prosumers is based on the level of "cooperativeness" to the firm's business strategies and models, seeking ways to frame prosumption as a corporate-
prosumer "partnership" (Comor, 2010), and encouraging users to act with the firm towards unified goals at the firm's standard, rather than recognizing prosumer participation as a separate activity with its own value propositions. In reality, users have different interests and ways of valuing culture that benefit their needs. This relationship is not always cooperative, sometimes their interests overlap, and sometimes they even conflict (Jenkins, 2006), as seen in examples of free open-sourced software or online piracy that mainly fits the user's interests. Thus, rather than focusing solely on firms achieving value co-creation with consumer contributions, it is necessary to examine how value is co-created through the interaction between both ends and how it is shaped by the interplay of diverse interests and power dynamics of each actor involved (Sun, 2018).

3.3.4. Prosumer from a Sociological View

In section 3.2, three perspectives concerning the value of music have been discussed: exchange-based monetary value in value chain theories, interactive-based social value in popular music studies, and experience-based cultural value from cultural policy studies. These perspectives offer multifaceted insights into the economic, social, and cultural dimensions of music, highlighting its diverse nature and underscoring the need for a nuanced evaluation. Relatedly, the view on prosumer participation in the digital age is rooted in these fundamental differences between business and sociology perspectives on value. As discussed in the previous subsection, prosumers in the business view are seen as active agents contributing to value co-creation with firms, emphasizing their role in contributing to the digital economy through creative engagement. However, popular music studies, while recognizing how individuals actively shape music's meaning in the digital age, are more skeptical about the democratizing effects of prosumerism, suggesting that the value of participation may be diminished at the top-down level, with platforms
appropriating this engagement. This sub-section will delve into the perspectives among popular music scholars regarding the concept of the prosumer and associated debates.

Moving away from business studies to a sociological perspective, digital technologies have not only challenged the separation between production and consumption but have also empowered aspiring amateur producers (Prior, 2018b). These technologies have facilitated a shift in the way music is created and distributed, expanding the scope of production beyond traditional boundaries. Music prosumption has moved beyond the traditional concept of "composition" that required professional expertise and facilities. Instead, it can now be achieved through the processes of "construction" and "repurposing" (Savage, 2013). By manipulating, editing, and layering audio from diverse sources (original recordings, samples, sound effects, or historic recordings), artists can collaboratively produce innovative and expressive works. This offers new avenues for creative expression and experimentation, leading to the emergence of new sonic possibilities and musical styles, while challenging traditional notions of authorship, authenticity, and originality.

This has caused a changing perception of value in digital music, highlighting the "democratization" of music production, the shift towards accessing music via streaming and UGC (User-generated Content) platforms, and the blurring of boundaries between original and derivative works through sampling and remix culture (Savage, 2013). However, the term music "democratization" has to be used with caution (Théberge, 1997), and it must be critically examined in terms of who benefits and under what socio-economic conditions, such as gender inequalities and uneven access to technology and digital literacy in music technology, education, and participation (Savage, 2013; Prior, 2018a). Digital music technologies have not eradicated inequalities but have potential implications for addressing gender disparities in music
 Nonetheless, examining the intersection between empowered prosumers and digital platforms reveals complex dynamics in digital online music production. From a more critical perspective in social science and popular music studies, the phenomenon of value co-creation with the "weaponized" consumer through new technologies starkly contrasts with the findings of business studies, emphasizing a more complex view of technological innovation and the tension between individual cultural practices and corporate control. While technological advancements can lead to the decentralization of music making and listening, major companies often use new instruments and devices to maintain control rather than foster creativity (Frith, 1987). Such critical discussions of prosumers and recording industry players date back to the pre-digital age, such as the record company's management of rap music—a counter-cultural art form that emerged by adopting technology and incorporating established musical elements such as scratching, sampling, and mixing—with portfolio management and data collection techniques to fit corporate strategy (Negus, 1999). While prosumers contribute to the production of value in the realm of digital music, seemingly "democratizing" it, the reality may be a reinforcement of commodification and centralization within the digital music industry. Musicians and prosumers have to navigate the constraints of platformized environments with low expressive autonomy (Qu et al., 2021), perpetuating cultural hegemony and ultimately serving the interests of corporate power.

This debate surrounding prosumerism and corporate exploitation highlights contradictions in the web 2.0 economy. With the rise of online platforms (e.g., YouTube, Facebook, Amazon) becoming digital conglomerates in various sectors and controlling new media, scholars are debating whether the concept of prosumerism is just another form of exploitation of free labor (e.g.,
Ritzer and Jurgenson, 2010; Hesmondhalgh, 2015; Ritzer, 2019). These platforms promise user empowerment and control, relying solely and thriving on user's activity and participation, while users' prosumption of content creation, reproduction, circulation, and other forms of input is extracted as free labor that directly commodified into the platform's profit (Andrejevic, 2009), with prosumers themselves not being compensated for these activities.

Especially within the digital music sector, many researchers are focusing on how the online platforms enter the music sector in the form of "Platform Capitalism" (Smicek, 2017; Van Dijck et al., 2018) by manipulating their "data power (Hill, 2021)", and its effect on the digitized music network and music labor (Hesmondhalgh, 2010, 2015; Negus, 2019; Qu et al., 2021). After the recording industry's digitization, music service providers (MSPs), or content platforms (Steinberg & Li, 2017), took the role in the recorded music sector as online intermediaries, replacing the traditional hardware-oriented industry models with new business models of online subscription and advertising (Sun, 2019), while focus on user-produced and official content distribution and thus shaping the online music culture (Zhang & Negus, 2020). These intermediaries have the ability to attract content and labor from users' digital engagement, extract value from the immense data gathered, tracked, and analyzed (Baym et al., 2021), and achieve their commercial goals from users' prosumption (Qu et al., 2021). Hence, despite the claims made about platforms on neutral and progressive, they share more similarities with traditional media than they acknowledge (Gillespie, 2010).

The transformation of platformization extends further into the realm of digital music production, and potentially redefine the role of musicians and reshape their creative process. While digital music platforms leverage new technologies to maintain control over the music-making process by utilizing mechanisms of datafication and commodification embedded within data
analytics infrastructures and practices (Van Dijck et al., 2018; Beer, 2019), music in digital form has become merely editorial and algorithmic "content" in this new economic model, where mechanisms such as playlists and recommendation system are inclined to value digital music based on internet traffic attractiveness and platform engagement rather than the product of artistic expression (Prey, 2021; Seaver, 2022). Thus, the role of online musicians has been redefined as "content providers" rather than creative producers, resulting in an abundance of content with little returns and constraints on cultural autonomy (Negus, 2018; Qu et al., 2021). Moreover, despite the optimism of digital democratization seen as an opportunity for individuals to achieve internal gratification and future career from their cultural and content production, this can result in self-exploitation within culture markets marked by an abundance of eager individuals and reward structures heavily favoring only a select few (Hesmondhalgh, 2014). The works undertaken is often "romanticized," but in reality the labor of dedicated prosumers is mostly unevenly rewarded with only a few successful cases (Duffy, 2017). In Duffy’s 2017 book “Not Getting Paid to Do What You Love,” she theorizes the term "aspirational labor" as independent, entrepreneurial enactment of cultural production, where laborers engage in unpaid content production to seek future payoff. She discovered a patterned identity of contradictions of aspirational labor, including the aesthetic logic of authenticity or realness versus the market logic of self-promotion and self-branding; the creativity and autonomy of self-expression versus profit-driven commercial pressures; and creating content as a hobby versus the potential professional status and career development (Duffy, 2017).

At the heart of this phenomenon lies the intricate interplay between the community-driven ideals and the commercial imperatives of these online platforms. Initially positioning themselves as hubs for creativity, user participation, and shared identities, they are nonetheless profit-driven, with commercial ambitions that leverage their popularity to attract advertisers and
implement monetization strategies to maximize profits (Snickars & Vonderau, 2009; Gillespie, 2010). This highlights the ongoing challenges faced by these platforms in balancing community engagement with profit motives and the tension between the platforms and their prosumers.

Although the business models of the platforms directly involve the utilization of unpaid work of "free labor" for profit, whether to say prosumers are being "exploited" or not in the Web 2.0 economy becomes far more ambiguous (Ritzer & Jurgenson, 2010). In the Marxist sense of exploitation, the term is often associated with some degrees of compulsion and suffering (Hesmondhalgh, 2015), while in the case of prosumption in Web 2.0, it seems like free labor is more about "voluntarily given" for free (Terranova, 2000), rather than being exploited without compensation. Terranova (2000) argues the duality of "free" labor: On one hand, the creative input of the labor is lacking monetary rewards, hence it is unpaid, while on the other hand, their participation also represents the willingness to give up the reward in exchange for entertainment, pleasure, or other symbolic value, hence it is not imposed and pleasurable. Prosumers are willing to make contributions for their own incentives and interests, such as satisfaction or personal gains (Hesmondhalgh, 2010), by exchanging their free labor with free tools, products, and services provided by the platforms.

Also, while often overlapping, value creation and value capture are two separate processes (Choi & Burnes, 2013). Rather than seeing prosumers as unpaid labor working for the firms, and their activity as commodities that could directly lead to profit, it is better to say prosumption is a form of raw material (Bolin, 2009), where the user-generated data, not the content itself (Hesmondhalgh, 2010), is being extracted, tooled, appropriated, and commodified by the firms in a separate process from prosumption itself.

Last but not least, the dynamics of technological changes within the
recording industry challenge traditional narratives of absolute corporate control and marketing strategy (Frith, 1987). It has become an ongoing tension and evolution between corporate entities and individuals during technological development process. On one hand, corporate control often adapts and absorbs technological disruption, undermining the democratizing potential of the technology. Prosumers, on the other hand, while individually insignificant, are collectively influential, offering alternatives to the dominant commercial industry through a decentralized network (Prior, 2018a). Despite being more than willing to do so, it is exaggerated to argue that capitalists have total control of prosumers and their activities, which oftentimes face the resistance of the prosumer community (Ritzer & Jurgenson, 2010), such as the opposing force of cyber-libertarianism in non-profit collaborative projects such as Wikipedia or free open-source software (Hesmondhalgh, 2015). Also, prosumers have their own ways of appropriating the value created by firms: Through hacking, file-sharing, copying, and reproducing copyrighted material, which has become increasingly easy to do in the networked collaborative digital media (Zwick, 2016). For the ambitious and aspirational prosumers, they see their labor as some sort of entrepreneurial "investment" to colonize the social media economy, hoping their work could pay off in the future, such as potential fame or career path (Duffy, 2017). Hence Zwick (2016) argues that if prosumers are truly being exploited, the opposite might also be true, with the firm's labor being "exploited" by the prosumer's activity as well.

The process of digital music development has not only shifted the music creation and consumption, as well as our perception of what constitutes the meaning of music itself and its role in people's everyday lives. However, these changes cannot solely be attributed to the decisions and control exerted at the firm level, which they also stem from the reactions and behaviors of musicians and prosumers (Frith, 1987). Digitization acts both as a corporate-driven process, in which firms seek to control media ownership by integrating content
across various media platforms, and as a consumer-driven process in which grassroots consumers are empowered by media technologies, trying to control the flow of media content as communities (Jenkins, 2004). Rather than viewing online user's prosumption in the digital age as a user-led revolution to achieve individual empowerment and online democracy of creativity or, in contrast, being exploited by corporate power for unpaid labor, it is clear that it is a crucial element of the digital economy, based on a "difficult and experimental" compromise between people's desire for creative production and the firm's emphasis on user's knowledge input as the main source of a value-adding element (Terranova, 2000). This indicates the constant struggle between two actors: the capitalists and the prosumers (Ritzer & Jurgenson, 2010), with both sides having their own values and interests, and co-creating value through various processes of interaction. This can occur through the collaborative generation of mutual value that benefits all or through compromising ways that generate unbalanced value, or through the appropriation and extraction of others' value creation for their own benefits, or even resulting in diminished or destroyed value due to failed negotiations.

3.4. The Ecosystem Networked Approach

Music brings values to the individuals and the society as a whole in multiple dimensions, fulfilling essential needs for bonding and unity among artists and audiences, economic values to the music economy and the society, yet its efficacy in this regard depends on the particular social, economic, and institutional condition (Hesmondhalgh, 2014). The aim of this section is to understand the structure of the digital music value network and the dynamic relationship of actors to address the question of "value for whom"? First, research concerning the ecology of the network in the fields of sociology and business management will be reviewed to offer a holistic approach to examining complex and adaptive systems. This includes exploring the dynamic nature of
competition among actors with various interests, their power structure, and the influences and disruptions of the external environment on shaping the network. Rather than focusing on a particular level of actors in value creation, a three-dimensional analysis of individual, organizational, and governance levels will be adopted to differentiate various sources of value creation and value capture in the ecosystem of individuals, organizations, and society. Additionally, by reviewing the literature on translation in Actor-network Theory (ANT), which concerning the power structure of actors in a network, especially how actors establish power in the translation process and others interpret their own translation within the network to achieve their values, the network could be constantly redefined and transformed from one state to another through this ongoing process. The section will argue that in China's digital music ecosystem, three key actors: the users, firms, and policymakers are playing a crucial role in its development, which each actor translates and interprets the entire network in their own way to suit their interests and value propositions, resulting in a heterogeneous network of actors with aligned interests through constant negotiation and shifting of power.

3.4.1. Ecosystem Theories

The term "ecosystem," rooted in biology, describes a community of species and surrounding resources and has been adopted as an analogy widely used in multiple disciplines to understand complex and adaptive systems (Peltoniemi & Vuori, 2008). Two key implications of the biological ecosystem for other disciplines are its structure, consisting of interacting living species and non-living resources, and the external environment, as well as its dynamic nature, constantly evolving due to natural disruptions and competition between species (Peltoniemi & Vuori, 2008).

In the social science area, the Social-ecological System was used as an approach to describe the complex relationship and interaction between
ecological systems and social systems (Berkes et al., 2002). Different discussions concerning social-ecological systems were developed into human ecology, cultural ecology, political ecology, and so on (Davidson-Hunt and Berkes, 2002). The core concept in social-ecological system theory is social resilience, which describes the ability of individuals and social groups to adapt to external social, political, or economic changes (Adger, 2000). When facing uncertainty or unpredictability of the external environment, two responses may be exercised: diversification, a strategy to diversify less costly and reversible alternatives to solve potential problems, appropriate when the ecological system remains stable, or intensification, where people take more commitment to a more costly and less reversible solution, which is useful when the ecosystem has dramatically and permanently shifted (Davidson-Hunt and Berkes, 2002).

At a more micro level of major corporations, startups, developers, and users, van Dijck et al. introduced the term of "platform ecosystem," which discussed the evolution of networked and centralized online platforms with immense power and corporate background situated at the forefront of online social interaction, such as Alphabet-Google, Facebook, Apple, Amazon, and Microsoft, collectively shaping an ecosystem characterized by apparent egalitarianism yet underlying hierarchical structures, corporate dominance posing as public service, ideological values embedded in seemingly neutral architecture, and global impact veiled by localized effects, with infrastructural platforms serving as the backbone upon which sectoral platforms rely, leading to a landscape where entry for competitors is restricted, and public and nonprofit platforms struggle to operate autonomously within a predominantly privatized online infrastructure (Van Dijck et al., 2018).

In the business and management field, Moore (1993) coined the term "business ecosystem," using the same analogy between the business network
and biological ecosystem, to compare network structure, inter-relationship between players, and strategy. Moore defined an ecosystem as "an economic community supported by a foundation of interacting organizations and individuals - the 'organisms' of the business world. This economic community produces goods and services of value to customers, who are themselves members of the ecosystem (pp.26, Moore, 1996, see Figure 3.5)." In this view, an economic community could be seen as a business ecosystem, which replaces the term "industry" (Moore, 1993). Furthermore, in Moore's view, the ecosystem not only encompasses the core value supply chain and extended enterprises but also other stakeholders such as policymakers, industrial associations, parent companies, and investors. In his theory, these organisms co-evolve their capabilities and roles and tend to align themselves with the directions set by the key players of the ecosystem (Moore, 1993).

Figure 3.5. The framework of a business ecosystem (Moore, 1996)

In general, business ecosystem theory is a concept of an economic community supported by interacting and co-evolving players (Moore, 1993),
which is also influenced by various social, governmental, technical, and economic forces in the external environment (Bockstedt et al., 2005). It is a useful model to provide a holistic view of the whole network, especially in analyzing the digital music sector in China, where policymakers are playing a significant role in the ecosystem. Apart from the corporate-user (prosumer) interaction in the sector, the development of China's digital music sector also shows a unique trajectory with historical, social, and institutional context (Shen et al., 2018), in which Chinese policymakers are actively involved in the ecosystem to create social values, promote socialist ideology, ensure fair competition, and achieve industrial prosperity through cultural policies and regulations (Shen et al., 2018; Flew et al., 2019). The unique state-corporate relationships (Flew et al., 2019; Qu et al., 2021) also mark the roles of policymakers and state-controlled organizations as active agencies in the digital music economy. While not thoroughly examined in the Western literature, it is crucial to acknowledge these factors as driving forces in the development of China's digital music sector.

Based on Moore's research on the business ecosystem, Iansiti and Levien (2004) identified the power structure of the ecosystem by categorizing the players in the business ecosystem: keystone, niche player, dominator, and hub landlord. In their model, the keystone player is the core of a business ecosystem and provides the platform for other players to participate to create value. The niche Player controls the niche segment with specialized capabilities and creates value from the ecosystem. The dominator directly controls and owns a large proportion of the ecosystem and manipulates the network by vertical or horizontal integration. Finally, the hub landlord seeks to extract more value, with little new value added to its network (Iansiti & Levien, 2004; Tang & Lyons, 2016).

Lepak et al. (2007) proposed a three-dimensional analysis to differentiate
various sources of value creation and value capture: Individual, Organizational, and Society. Actors at each level have their own interests, with a distinct target user of value, value creation process, and value capture process. The scholars introduced the term "value slippage," which means value created by one source could be captured by another source, thereby the use value is higher than the exchange value. According to Lepak et al. (2007), value slippage could move both up and down, and the value created by a firm could be captured by individuals or society. The three-dimensional analysis of the value creation and capture process could be an important tool to analyze the interaction of different levels of players in China's digital music sector and the multiplicity of values created therein.

Compared to the traditional approach, such as theories in the value chain and value co-creation, the ecosystem approach could offer a holistic view by considering additional actors outside of the traditional value chain, emphasizing the significance of non-industrial players (e.g., policymakers, parent companies, and shareholders), which is crucial for studying the interaction of players in China's digital music sector and the value creation process at each level of society (Lepak et al., 2007). The ecosystem approach also offers insight into how actors react and co-evolve under dramatic external environmental disruptions such as disruptive technology and policy changes.

However, like the traditional value chain theory, the business ecosystem is also firm-centered in assessing the relationship with players in the network. More attention is needed to reflect the active inputs of prosumers (e.g. users, artists) in the digital music development and their dynamics with the firms in terms of value co-creation, which plays a crucial role in the digital music market development compared to traditional businesses. Frith (1987) suggests that musical innovation often arises from independent entities outside major record companies, acting as incubators for new ideas later adopted by larger
corporations, yet the industry's competitive landscape fluctuates between periods of intense innovation and stagnation. Additionally, while concentrating solely on monetary values, the business ecosystem fails to answer research questions concerning the diverse nature (economic vs. social, intrinsic vs. instrumental, exchange vs. use) of value created in the digital music sector, especially the non-monetary values that created through the interactions of individuals, communities, firms, and society (Martin, 2006).

Also, while the three-dimensional analysis (Lepak et al., 2007) considers value creation at the societal and ecological level, such as the active roles of stakeholders, the marketplace, and the government, researchers did not fully discuss the mechanisms and processes of value creation and interaction between actors in the three-level model. Although they identified that value created by one actor can be captured by actors at another level, they view value slippage as a "ripple effect," ignoring the process in which the value capturer at another level actively shapes the value as well as the entire network through their engagement. More research needs to be conducted to discover how value is created and shaped through the ongoing tension and negotiation between actors with different interests (e.g., digital music users, music platforms, policymakers) within the ecosystem.

Thus, by refining on Lepak et al. (2007)’s three-dimensional model on value co-creation, a new ecosystem model needs to be built to equally examine the actors at multiple levels within the ecosystem to uncover the non-monetary value linkages between users at the individual level, digital music firms at the organizational level, and the political, technical, economic, and social influences at the ecosystem level. Rather than the definitions proposed by Moore (1993) or Iansiti & Levien (2004), the proposed definition of China’s "Digital Music Value Ecosystem" would be: A heterogeneous network consisting of human or non-human actors at the Individual, Organizational, and
Governance levels, interacting or influencing each other on digital music-related value activities, thereby creating multilateral value linkages within the ecosystem (will be discussed in Chapter 7).

3.4.2. Actor-Network Theory and Translation

Actor-Network Theory (ANT), which combines the technological and social aspects of a network, creates a socio-technological approach to studying technology-related subjects (Tatnall, 2005). ANT provides an approach to studying individual actors (human or non-human) as integral parts of the networks of life. Each actor plays a crucial role in maintaining or altering these existing networks with a particular set of relations between them and in an embedded context. Instead of separating the world into social and material entities, ANT seeks to understand the world as a network where all matters of things are entangled together in specific formations or ecosystems (Law, 1992). This theory is helpful for us to view digital technology-enhanced online music systems as a sociotechnical entity, which is evolving alongside the interactions and negotiations among all actors.

In ANT, both human actors (e.g., users) and non-human actors (e.g., technologies) are treated equally, brought together in stable, heterogeneous networks of aligned interests (Law, 1992). The networked concept of ANT could be used in analyzing the music sector in the digital context by considering the active role of technology in shaping the development of the network. Many examples can be seen in the digital music sector, where mutual influence between digital technologies and the social world takes place: On one hand, the introduction of technologies such as the MP3 format helps people consume compressed music files and share freely around the internet, leading to the tool for users to pirate unlicensed music, disrupting the recording industry (Morris, 2015). On the other hand, in response to the outrage culture of online piracy, labels and music service providers developed various Digital Rights
Management (DRM) technologies and implemented them on CDs and digital music files, trying to block unauthorized file-sharing. Instead of the conventional idea (e.g., business ecosystem theory) in which technology impacts the network as an external force, technology, in the ANT point of view, emerges from social interests and thus shapes the social interaction as an agency as well as the human-agent.

To enhance our understanding of the intricate dynamics within China's digital music value ecosystem, as well as the inter-relationships and processes of value co-creation among actors and the power structure within the network, this research proposes integrating selected aspects of Actor-Network Theory (ANT) from Science and Technology Studies (STS). However, it is imperative to acknowledge that the utilization of ANT in the context of this particular research is selective, focusing specifically on certain aspects such as Callon's notion of translation (1984) and the human-based actor network with technology playing a mediating role. This approach aims to understand the inter-relationships between key players and the power structure in China's digital music value ecosystem, while acknowledging the role of technology in shaping the network, rather than embracing its core ontological premises that treat human and nonhuman actors symmetrically.

Latour (1987) discusses the inter-relationship and balancing of power of actors in the network and the role of actors in establishing power. This could also be viewed as "agency," where an actor can practice its own roles by interacting with one another. Actors want to be the agency to establish favorable orders and may face resistance from other actors in the network. This is useful to assess China's music ecosystem in the digital age, as multiple actors in the Chinese music market try to gain power and agency in the network over the years through various means, such as users and pirate site's pirate activities, policymaker's governance, and firm's cross-platform integration and market
domination. Rather than only co-creating values and pursuing unified goals, these actors often have different (even conflicting) needs based on their own interests and purposes, and the balance between each actor needs to be carefully examined and studied.

Another key concept created by Callon and Latour (1981) is "translation," which describes the means by which one actor gives a role to others in order to control the network. Translation involves all the strategies through which an actor identifies other actors and arranges them in relation to each other (Callon et al., 1983). To understand the process of translation, Callon (1984) observed and identified the 4-step process of an actor's translation in a network: Problematization, which is the initial definition of the nature of the problem by actors in a given situation, resulting in the establishment of dependencies; interessement, which is a way of "locking" other actors into the roles suggested for them in the actor's solution to the problem against other alternatives; enrollment, which is the definition and interrelationship of the roles assigned to other actors in the previous step; and finally, mobilization, which ensures that the actor becomes the "spokesperson" of the collective entity that can properly represent all members of the network as a single agent (Callon, 1984).

A similar process could be seen in the strategic development of Apple's portable MP3 player, iPod, and online downloading service, iTunes (Shiga, 2007). The company started with the problematization of redefining the MP3 player as an extension of an online music store to boost the sale of online music industry instead of merely a device to play downloaded music files. Apple persuaded record labels to offer content service online, thus recouping their loss on illegal pirating, and promised users a simple interface to burn CDs, manage music files, and the ability to purchase and own music directly from iTunes. Through the device of interessement of its digital downloading model, the company tried to block out the competitors' subscription models such as
Pressplay and Rhapsody, persuading and offering a "better" solution of permanent online music ownership compared to the subscription model. According to Apple's then CEO Steve Jobs' comments on the music subscription model in 2003: "Your favorite song you're going to listen to a thousand times in your life. If it costs you $10 a month or over a $100 a year for a subscription fee to rent that song, that means for me to listen to my favorite song in 10 years, I paid over a $1,000 in subscription fees to listen to my favorite song ten years from now, and that just doesn't fly with customers. They don't want subscriptions." (Ricker, 2015). When his vision became true, and all the entities accepted their role in the newly established network in the enrolment stage, Apple had successfully expanded its role from the hardware and software producer to the digital music provider with in-house hardware. Setting the company as the spokesperson, Apple has successfully dominated the network as more actors came on board and aligned with the assigned roles, and eventually achieving mobilization in the network, with users comfortable with owning music turning to Apple's ownership model (ironically switching back again to today's subscription-based Apple Music), and labels stepping back to become merely the content provider of iTunes and losing control over aspects such as pricing power.

However, actor(s) could also create new meanings through the interactions of different actors in the existing network, thus a network is able to redefine and transform from one to another through the process of translation and interpretations. As Bruno Latour argued, actors could either accept the translation by the key player or, in another way, use their own translation to transform the network into something entirely different to achieve their own goals (Latour, 1987). P2P technology is a great example of this concept of translation. The technology was originally designed to let users transfer data from a decentralized network, to lower the workload of the central server of a website. The convenience of the technology was quickly implemented by music
services in China, such as eMule (or Napster in the West), allowing users to share content (often unauthorized) with peers. Despite the popularity and high demand for the service among users, eMule's translation of P2P technology becomes a tool for people to pirate unlicensed music, which threatened the content providers in China. On the other hand, P2P technology was also implemented by technology companies such as Tencent, which utilized P2P in its streaming service QQ music, to create better user experiences and protect the content at the same time (since the files do not directly download to the device). The company also implemented the same technology with functions such as file transferring and live stream video chat. In both cases, the same technology is being implemented by different actors in the process of translation, thus creating different social meanings and networks.

The concept of translation and actor-based network in Actor-network theory is particularly useful in terms of analyzing the digital music ecology in China, as the pattern can be seen, in which the power structure of multiple actors, instead of one single entity, is translating the entire network, resulting in a network of constant negotiation and shifting of power, thus reshaping the network. In the digital age of China's digital music sector, three of the most notable actors are the user, firm, and policymaker. Each of them has different pursuits of interests and interpretation, hence putting their own translation into the network. The interest of each actor is different: for the user, it is towards the value-in-use, such as the enjoyment through listening to music, achievement, or accomplishment through prosumption, which is often intrinsic and not instrumental and by monetary terms (Behr et al., 2014); for the firm, it is the value of exchange and potentials, such as profit-making, market expansion, etc., and it is often monetary and instrumental, represented by the value chain models (Porter, 1985); and for the policymaker, it is the greater social value, such as the cultural attraction, industry prosperity, socialist ideology, which contribute to the overall soft power of the nation (Nye, 1990), and it is often in
the mix between both instrumental and intrinsic. Due to the different incentives for capturing various values in the same network, they often interact with each other through their own translation, thus creating a homogenous network with constant interaction and tension built-in. For instance, in Flew et al. (2019)'s paper on the cultural hybridity of Rap music in China, showed how the genre is originally known for its rebellious nature but was transformed into China's context by iQiYi, the online video service provider, into the program *The Rap of China*. The development of the show reveals the tension and interaction between these main actors in contributing to the network, such as young people's enthusiasm over the edgy content and online fandom; the show producer's combination of the "Edge Ball" strategy (produce edgy content that is barely below the line of censorship) and positive social value promotion to both attract the mass market while avoiding the government's censorship; and the government's monitoring and reaction to rapper's scandals and illicit content with shifting censorship guidelines and policies.

3.5. Summary

As stated in the introduction, this chapter takes a blended approach (see Table 3.1) to review the literature in both business and sociology-related disciplines, offering discourses and debates concerning the value of music digitization. It provides theoretical insight to understand the questions of what is the value of digital music, how value is created, and value is created for whom. Business-related research was reviewed regarding how traditional business scholars in the value chain theory view value creation based solely on the exchange value at the firm level, and the new paradigm of Service-Dominant Logic that centers on the interaction and co-creation between firms and consumers. In terms of the dynamics of players in the music sector, business ecosystem theory was reviewed to provide insight into the structure of the digital music sector and the relationship of actors.
Sociology-related disciplines were also studied as counterparts to the theories and arguments of business-oriented literature in business management and marketing research. This involved looking into how the process of music digitization affects the social world apart from the business and economic impacts that business scholars mainly focus on. Cultural value literature expanded the scope of research by not limiting the contribution of digital music to purely monetary terms, providing insights on how we capture and analyze cultural value based on the experience of cultural participants rather than abstract concepts. Popular music studies discuss the meaning of music as a social force, shaping and being shaped by individual and collective identities, fostering social cohesion and personal expression. Additionally, they provide critical analysis of the phenomena of "platform capitalism" and "prosumer," which are enshrined nowadays in business research that emphasizes the culture of connectivity and "collaborative partnership" between firms and consumers in value co-creation. Finally, key concepts (e.g., agency, translation) in Actor-Network Theory were reviewed to support understanding of the power relationship and active agency of actors in the digital music network.

<table>
<thead>
<tr>
<th>Literature fields Reviewed</th>
<th>Definition and relevant concepts</th>
<th>Findings related to the research</th>
<th>Theoretical and practical application to the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Chain (e.g., Porter, 1985; music sector Bockstedt et al., 2005; Tschohmuck, 2006; Xu, 2006; Wang, 2009; Tong, 2012)</td>
<td>The value chain model offers a traditional view in the business field, which views value as the monetary exchange value, and value is created by the firm's internal value activities</td>
<td>The traditional view of value in business studies only focused on the direct exchange value while not reflecting the full picture of value creation, especially the consumer-created value</td>
<td>Key concepts and terminology concerning industrial models and value linkage</td>
</tr>
<tr>
<td>Popular Music</td>
<td>Music possesses social</td>
<td>The value of music</td>
<td>Key concepts and</td>
</tr>
</tbody>
</table>
### Studies on the Meaning of Music

(e.g., Frith, 1987; DeNora, 2000; Small, 1998; Hesmondhalgh, 2013; Baym, 2018; Prior, 2018a)

value, allowing for human flourishing through personal and public expression, emphasizing the active role of consumers and the importance of music in shaping social cohesion, identity, and well-being, while also critically acknowledging the impact of corporate power in appropriating this value.

transcends monetary exchanges, with social value created through the interactions of actors such as musicians, audiences, and firms. This value creation and appropriation process occurs within the evolving context of music digitalization dynamics, which both enhance and challenge music's potential.

argument concerning the value co-creation between prosumers and digital music platforms in the digital age

### Cultural Policy Research

(e.g., Throsby, 2001; Holden, 2006; Crossick & Kaszynska, 2014; 2016; Behr et al., 2014; 2016; Levinson, 2015)

Value is discovered through the experiences of the participants, which is not in abstract terms and beyond the economic impact.

The multiplicity of values in digital creative goods benefiting multiple actors expanded the scope of research concerning the contribution of digital music beyond its economic and monetary impact and emphasized how people experience and value culture instead of only focusing on the abstract features within itself, or its instrumental implications.

Case study #1&2, cross-case analysis: Examine the cultural value created in both case studies based on the experience of actors, especially at the individual level

### Value Co-Creation

(e.g., Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004; 2011; Vargo et al., 2008 Grönroos, 2008)

Value is co-created between the firm and consumer (and other actors) rather than created solely by the firms and perceived by the consumer.

The new co-dependent relationship and value co-creation between firm and user which the active participation of consumers is playing

Case study #1&2: Critical analysis of China's online music platform's business strategy (encouraging prosumption and user socialization)
<table>
<thead>
<tr>
<th>2008; 2011; Choi &amp; Burnes, 2013; Chaney 2012)</th>
<th>an ever-increasing role in the joint value creation with firms in the digital age and shaping the existing production, distribution, circulation, and consumption in the digital music sector.</th>
<th>to co-create value with online users, and user's perception and interaction with the platform's strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prosumer in popular music studies and media studies</strong> (e.g., Toffler, 1980; Jenkins, 2004; 2006; Burgess &amp; Green, 2009; Srnicek, 2017; Van Dijck et al., 2018; Hesmondhalgh, 2010; 2015)</td>
<td>The merging role between consumer and producer, intensified in the web 2.0 era, has transformative effects on the creation of new participatory cultures and industries, while also raising concerns about exploitation and corporate control within the web 2.0 economy, extending to the role of online platforms that shape digital music production and labor dynamics through the manipulation of user data and commodification strategies, potentially redefining musicians' roles and creative processes.</td>
<td>Digitization acts both as a corporate-driven process of media ownership and consumer value co-creation, extraction, and appropriation, and as a consumer-driven process of grass-root creation and consumer empowerment. This indicates the collaboration, negotiation, compromise, or conflict between firms and prosumers on creating and capturing value. Case study #1&amp;2: Critical analysis of the process of how prosumers in the case studies (Gufeng fans, elderly WeSing users) create content, form communities, and create participatory cultures</td>
</tr>
<tr>
<td><strong>Ecosystem Approach</strong> (e.g., Moore, 1993; 1996; Iansiti and Levien, 2004; Lepak et al., 2007; Adger, 2000; Berkes et al., 2002; Davidson-</td>
<td>An adaptive economic system supported by a community of interacting and co-evolving players with various social, governmental, technical, and economic forces in the external environment</td>
<td>The ecosystem approach offers a holistic view by taking additional consideration of the actors outside of the traditional value chain, emphasizing the significance of non-industrial players. Cross-case Analysis: The structure of the digital music ecosystem in China's context consists of three levels of value creation: Individual,</td>
</tr>
</tbody>
</table>
Hunt and Berkes, 2002) (e.g., policymakers, parent companies, and shareholders), and the external political, cultural, and technological environment affecting the ecosystem Organizational, and Governance. How the changing external environment affecting the development of the digital music sector

| Actor-Network Theory on Translation and Power structure (Callon and Latour, 1981; Callon et al., 1983; Callon, 1984; Latour, 1986; Law, 1992) | The heterogeneous networks of aligned interests of both human and non-human actors interacting and negotiating in the network | The development of China's digital music sector is strongly affected by the power structure between users, firms, and policymakers constantly negotiating and shifting power, thus reshaping the network. Due to the different incentives for capturing various values in the same network, they often interact with each other through their own translation, thus creating a homogenous network with constant interaction and tension built in. | Cross-case Analysis: The power relationship between users, firms, and policymakers, their own interest in the value, and how their negotiation and interaction in creating and capturing value shaped the development of China's digital music development |

Table 3.1. The fields of research being reviewed and their implications for later chapters

Value is in the eyes of the beholder, the literature concerning value created in the digital environment shows the complexity of the values of music in people’s everyday lives and also in social, commercial, and political institutions and society as a whole. The review of the literature has demonstrated that digitization has reshaped the development of the music sector and how value
is created in this new environment of interaction and negotiation. As people are more actively engaged in the production, consumption, and circulation in the networked, digital space, the underlying prosumerism not only represents the liberation of individual creativity and the growing participatory culture enabled by digital technologies and new media but also is being utilized at the corporate level in today's platform capitalism as valuable resources for value extraction and appropriation. Hence, this research is aimed to bring more understanding of how the interplay between user-driven and corporate-driven processes, as well as the role of the state in China's context, in negotiating and co-creating value in this tripartite relationship and co-shaping the development of China's digital music value ecosystem.
Chapter 4. Methodology

4.1. Introduction

This chapter explores and discusses the methodologies employed in this research on the development and value creation process of China's digital music sector, focusing on the case studies of Gufeng and WeSing. The chapter aims to provide a comprehensive understanding of the research methods utilized, as well as the underlying rationale and structural framework guiding the entire research process.

The chapter begins with a discussion on the background of research methodology (4.2), including research paradigms and their philosophical assumptions, as well as a comparison of research strategies to establish a methodological foundation. Section 4.3 then focuses on the research problems and objectives of this particular study, drawing from the research gaps identified in the literature review chapter. These research problems include the need to comprehend the multiplicity of value created in China's digital music sector beyond its economic contribution, explore the complex relationships, interactions, and value co-creation of actors in this value ecosystem, and discover the historical, cultural, and political contexts in China's digital music development. The research questions are formulated to address these research problems.

After establishing the methodological foundation and discussing the research topics, section 4.4 describes the research design and approaches. It provides the framework of the research design employed in this research, outlining the qualitative method from an interpretivism view. Specifically, the multiple case study method is introduced, with the selection of two distinctive cases within China's digital music value ecosystem: the development of online
Gufeng music and the elderly prosumption of the karaoke platform WeSing. The section also outlines key ethical issues related to this study and how ethical considerations will be applied.

The subsequent sections (4.5 and 4.6) elaborate on the data collection and data analysis processes. Data collection involves the use of both secondary data and primary data: Secondary data includes a comprehensive review of the literature and relevant sources to establish the background and context for China's digital music sector and the selected cases, and primary data is gathered through in-depth interviews and exploratory activities for the Gufeng and WeSing cases. Data analysis includes individual case study analysis and cross-case analysis, which thematic analysis is employed to identify codes, patterns, and themes in the data during the case analysis process, while the cross-case analysis aims to combine the findings from both cases and generate broader knowledge by comparing and contrasting individual cases.

4.2. Research Paradigms

4.2.1. Research Philosophy and Paradigms

To understand the definition of the word "research," Grinnell (1993) deconstructs it into two syllables: "re" and "search." The former is a prefix meaning "over again," and the latter is a verb that signifies careful or thorough examination, exploration, or seeking of something. When combined, research is described as a systematic, careful, and rigorous process of investigating a field of knowledge and establishing facts or principles (Grinnell, 1993). While there are various methods of collecting information and finding answers to questions, scientific research follows the scientific method and contributes to the body of science (Bhattacherjee, 2012). It operates within a framework of philosophies, selecting appropriate research procedures, methods, and techniques that are reliable, valid, unbiased, and objective in generating new
knowledge (Kumar, 2010).

The philosophical framework that guides the conduct of scientific research is referred to as a *research paradigm*, based on philosophies and assumptions about the world and the nature of knowledge (Collis & Hussey, 2014). Although these paradigms are often implicit, it is crucial to understand them as they form the philosophical basis of research, influencing the measurement, observation, and interpretation of phenomena by researchers (Bhattacherjee, 2012). While there is a continuum of philosophical assumptions between paradigms (Morgan & Smircich, 1980), two main paradigms for understanding the nature of reality and knowledge are positivism and interpretivism. Positivism, originating in the natural sciences, assumes that reality is objective and independent of us, and investigating it does not affect that reality (Creswell, 2013). Positivists believe that knowledge can only be attained through researchers' observation and measurement, focusing on deductive reasoning by building explanatory theories and predictions based on causal relationships among variables in a social phenomenon (Collis & Hussey, 2014).

While positivism emphasizes measurement and observable data to explain natural reality, it falls short in addressing the need to understand social reality in the human and social sciences (Crotty, 1998). Collis and Hussey (2014) identify key criticisms of positivism, including the separation of people from their social contexts, ignorance of people's own perceptions of their activities, constraining results and neglecting other possible findings, subjectivity of researchers' interests and values, and inadequacy in capturing complex social phenomena through a single measure.

In response to these criticisms, interpretivism (often combined with social constructivism) emerged, resting on the assumption that social reality is subjective and multiple, shaped by our perceptions (Collis & Hussey, 2014). For interpretivists, the best way to understand a social phenomenon is through the
study of the subjective interpretations of participants involved, reconciling differences and developing understanding using the researcher's own subjective perspective (Bhattacherjee, 2012). This is because individuals can develop varied and multiple subjective meanings from objects or phenomena. Instead of narrowing meanings through statistics or categorization, interpretivist researchers need to explore the complexity of views based on participants' experiences and ideas (Creswell, 2013). Moreover, due to the subjective nature of social reality, it is influenced by the act of investigation in the inductive process (Collis & Hussey, 2014). Meanings are not simply constructed by individuals; they are discovered through discussions with participants and derived from negotiations within individual's social and historical contexts through their interactions with others and influenced by social and cultural norms. Therefore, researchers need to focus on the process of interaction and understanding the specific contextual settings of individuals (Creswell, 2013).

4.2.2. Quantitative and Qualitative Research

Following the two main paradigms of positivism and interpretivism, researchers adopt two primary types of research based on their philosophical assumptions and worldviews (Collis & Hussey, 2014): positivism-oriented research using quantitative data and interpretivism-oriented research using qualitative data. Mixed methods research falls in the middle of the continuum between these two approaches, incorporating both qualitative and quantitative elements (Creswell, 2013).

While the qualitative-quantitative distinction is not entirely clear-cut, there are noticeable and meaningful differences between the two approaches (Given, 2008). According to Bryman and Bell (2019), quantitative research is a research strategy influenced by the natural sciences and positivism, emphasizing the collection and analysis of numerical data. It follows a deductive approach, testing theories and focusing on objective external reality. On the other hand,
qualitative research focuses on collecting and analyzing non-quantitative data, such as words, and emphasizes an inductive approach, generating theories from data. It is more concerned with how individuals interpret their social world and views social reality as created by individuals and constantly changing (Bryman & Bell, 2019).

Both research strategies have their distinctive nature and come with their own advantages and disadvantages. In the case of quantitative research, one of its strengths is its emphasis on reliability and validity through the use of numerical data and measurement (Given, 2008). Additionally, it offers a way to explain and predict phenomena by examining the causal relationships between variables (Bryman & Bell, 2019; Creswell, 2013). Another strength is the ability to produce generalization of theories, applying them to larger populations beyond the study being conducted (Given, 2008). Finally, quantitative research is expected to be objective and consistent, capable of replication and reproduction across different contexts (Bryman & Bell, 2019).

On the other hand, qualitative research offers advantages such as gaining access to the richness and complexity of human experience through the investigation of insiders' perceptions and perspectives, through their narratives, storytelling, behavior, and reactions (Given, 2008). It provides a deeper understanding of complex social phenomena that may be missed by quantitative methods. Qualitative research also allows for a more nuanced understanding of the embedded context in which social phenomena occur and the meanings and interpretations that people give to their experiences (Given, 2008; Bryman & Bell, 2019). Moreover, it offers flexibility in exploratory research, allowing the researcher to adjust the direction of the investigation throughout the interactive research process (Mack et al., 2005). Unlike quantitative research, which tends to have a predetermined momentum once data collection begins, qualitative data collection is not standardized and open-ended, enabling
questions and procedures to change and develop naturally (Saunders et al., 2016). Finally, qualitative research can be used to generate new theories and concepts emerging from the collected qualitative data, which is particularly useful for exploratory research on understudied topics (Creswell, 2013).

However, despite each type of research having its own advantages, they face criticism in several ways. Bryman and Bell (2019) list the main criticisms of quantitative research, including treating social institutions and people as if they were part of the natural world, assuming connections between measures and concepts rather than establishing them, limitations in capturing diverse interpretations, and creating a static view of social life independent of people's lives by focusing on relationships between variables without considering the process of interpretation or definition in human groups. On the other hand, as outlined by Bryman and Bell (2019), qualitative research is often seen as too subjective and impressionistic, relying on the researcher's unsystematic views and personal relationships with participants, and difficult to replicate due to the lack of standardized procedures. It is also hard to generalize findings due to the narrower scope of study and smaller sample size, and lacks transparency compared to quantitative procedures.

Different types of social research problems require specific approaches (Creswell, 2013). Therefore, the focus should not be on selecting the best research strategy, but on understanding the nature of these approaches and choosing the most suitable one tailored to the specific research being conducted. The next section will revisit the research problems and objectives of this study to gain insights for conducting an appropriate research design.

4.3. Research Problem and Objectives

4.3.1. Research Topic
The research topic was chosen based on a personal academic interest in the field of music industry studies, particularly gain more understanding on China's digital music development. The advent of music digitization has transformed the world's music industries, including music production, consumption, distribution, and circulation. Digitization has disrupted traditional business models and value chains, with technology companies and digital music services replacing traditional distribution channels. People now have increased accessibility to unlimited digital music consumption, and digitization and social media have allowed them to become "prosumers" (Toffler, 1980) in the digital age, participating in music in a networked way.

This phenomenon is particularly evident in the development of China's digital music sector. Despite the late development of the recording sector in the pre-digital age, digitization has presented an opportunity for China to develop a vibrant digital music sector, following its unique trajectory to become the world's fifth-largest music market (IFPI, 2023). The absence of dominant players in the pre-digital era, liberal governance of the digital music sector in the early stages of digitization, and lower user penetration rates for paid subscriptions and digital downloads due to the country's history of piracy have facilitated the emergence of innovative digital music services. These services provide free offerings to hundreds of millions of users, emphasizing user-generated content and social networking features. In this environment, many users are empowered to consume music for free, create content, and interact with like-minded individuals in online communities, fostering various participatory cultures. Digital music services, in turn, utilize the free labor of user prosumption to co-create value that eventually benefits these platforms. At the state level, policymakers are also actively engaging in this development, balancing economic development and social stability, while retaining ideological influence through enforcement and cultural policies.
4.3.2. Research Problem and Objectives

The first and most crucial stage of the research process is the formulation of a research problem. A well-defined research problem serves as the foundation for a research study, determining the quality and relevance of the research project (Kumar, 2010). The development of digital music in China raises the research problem of how to address the value of digital music beyond its direct GDP-based contribution to individuals, organizations, and society as a whole. Based on the literature review chapter, the traditional value-chain assessment based on exchange value, the firm-oriented view of value co-creation research, and the society-based view on cultural value studies could not 1) capture the value creation process in China's digital music development across multiple levels of the ecosystem, 2) consider the complex relationships and value-based interactions among actors at these levels, and 3) explain how various contexts shape the development of China's digital music sector.

The value creation of actors at the individual, organizational, and governance levels involves different value activities that cannot be solely interpreted in terms of a single measure (e.g., monetary value, cultural value, political value), and their value-based relationships and interactions also need to be addressed within China's context. Therefore, the research questions aim to explore:

RQ1: How have historical, ideological, and market factors shaped the evolution of China's mass-line music development in the digital age? What are the diverse values in China's digital music ecosystem, and how have interactions and negotiations between users, digital music platforms, and the state led to the co-creation of values amidst changing dynamics?

RQ2: Considering the diverse forms of value creation, how can we conceptualize and understand the intricate relationship between users,
platforms and the state and dynamic value ecosystem in the digital era? How shall we contextualize and interpret China's distinctive characteristics in the era of digital music development?

The objective of the main research question is to uncover the process of digital music development and how the value of digital music is created and perceived by key actors (e.g., online users, artists, digital music platforms, policymakers) in China's digital music ecosystem, considering multiple levels and a networked perspective beyond a single value measurement. To achieve a deeper understanding of the research questions, four main steps need to be taken: 1) exploring the development process of China's digital music sector within its distinct context, 2) identifying the different value(s) created by actors at each level in China's digital music sector, 3) analyzing the relationships and interactions between actors that constitute value co-creation, and 4) gaining theoretical insights into the nature of value by conceptualizing it.

4.4. Research Design and Approach

4.4.1. Research Methodology

Research design is both a systematic and creative process aimed at developing strategies for conducting research that produces valid and accurate findings (Vogt & Johnson, 2011). At the initial stage of the research design process, it is crucial to discuss the nature of the chosen methodology, which is determined by the philosophical foundations of research and whether it aligns with a primarily quantitative positivist or qualitative interpretivist orientation (Collis & Hussey, 2014). In the previous section, we explored the two main research paradigms, quantitative and qualitative research, along with their distinctive features, advantages, and critiques. For this study on the value co-created by users, digital music services, and policymakers in the digital music sector, a qualitative and interpretive view is deemed appropriate. This approach
can provide rich qualitative data that captures the insiders' perspectives and explores the specific phenomena in its underlying context, rather than reducing the complex issue of value and value creation to numerical data based on a positivist perspective, such as monetary or exchange values.

Bryman and Bell (2019) argue that quantitative and qualitative research are distinct approaches that highlight significant differences in the role of theory, as well as epistemological and ontological foundations. The role of theory involves the relationship between theory and research. Quantitative research emphasizes a deductive approach, testing theories through research, whereas qualitative researchers often employ an inductive approach that focuses on theory generation. Ontological issues relate to questions about the nature of reality (Mason, 2002). Positivists believe that the social world exists independently of individuals, while interpretivists argue that social reality is subjective and socially constructed through people's actions (Collis & Hussey, 2014; Bryman & Bell, 2019). Epistemological issues pertain to what is considered valid knowledge in the social world (Mason, 2002). Positivists contend that valid knowledge can only be derived from observable and measurable phenomena, with the researcher being independent from the study. In contrast, interpretivists believe that knowledge is a form of subjective evidence derived from participants, and they seek to minimize the separation between the researcher and the subject of study by engaging and interacting with the phenomena (Collis & Hussey, 2014).

For this particular research on the multi-level value creation in China's digital music sector, an interpretivist perspective will be followed. Ontologically, it acknowledges that social reality is subjective and socially constructed, and the value of digital music exists through being "valued" by actor's perceptions rather than as a concept independent of people's actions. Therefore, it is essential to explore their own experiences and perspectives of digital music and
understand the nature of value through their participation. Epistemologically, this research will take an interactive role in investigating these perspectives to generate knowledge. This will involve conducting interviews with various actors in the digital music sector to gather their diverse perspectives and views. The research will then analyze these perspectives in a cross-level and interpretive manner, uncovering knowledge and meanings within rich contexts that go beyond the knowledge generated solely from numerical and quantitative data.

Regarding the role of theory, an inductive approach will be adopted for this research. The goal is to explore and investigate the multileveled perspective of value across different actors, rather than testing existing theories on value. Due to the subjective nature of social reality, the act of investigation itself influences the inductive process (Collis & Hussey, 2014). Meanings are not simply constructed by individuals and discovered solely through discussions with participants. They are also derived from the negotiation of actors' social and historical contexts through their interactions with others and are influenced by social and cultural norms. Therefore, the research needs to focus on the process of interaction and understanding the specific contextual settings of individuals (Creswell, 2013).

In conclusion, in terms of paradigms and methodology, an interpretivist view with a qualitative research approach and an inductive approach will be adopted throughout the research to gain a better understanding of the value creation process in China's digital music development. Qualitative research is chosen over the quantitative approach for three reasons: First, it is important to investigate the perspectives of different actors in the ecosystem, such as users, artists, digital music platforms, and policymakers, in order to offer detailed explanations of their experiences, relationships, and interactions in the value creation process. Second, by actively engaging with and interpreting the actors' views through in-depth interviews and analysis, the research can uncover
meaningful insights within rich contextual settings, going beyond the knowledge derived solely from numerical and quantitative data. Third, due to the exploratory nature of the research topic, an inductive approach is necessary, allowing flexibility for new perspectives and theories to emerge after data collection has been conducted. Lastly, China's digital music development has a unique trajectory influenced by its historical, cultural, social, and political context, which also needs to be taken into account in the inductive approach to illustrate how the context shapes the digital music development and the value co-creation and negotiation among actors.

4.4.2. Criteria of Qualitative Research Methods

Research methods refer to the techniques used for collecting data, and they are closely linked to research designs, which provide a framework for implementing the methods and analyzing the data (Bryman & Bell, 2019). When evaluating the quality of research methods, two main criteria are often considered: validity and reliability. Validity is a fundamental criterion that focuses on the accuracy and integrity of the conclusions drawn from the study. It includes external validity, which addresses the generalizability of the findings beyond the specific context of the study (Bryman & Bell, 2019). On the other hand, reliability pertains to the consistency and repeatability of the study's results when using the same methods and procedures (Kumar, 2010; Collis & Hussey, 2014).

However, in qualitative research methods, the approach to data collection differs significantly from quantitative research. Therefore, there is an ongoing debate about whether these criteria are applicable to qualitative methods (Kumar, 2010; Bryman & Bell, 2019), and the concept of these criteria is also interpreted differently. Some scholars (e.g., Kirk & Miller, 1986; Mason, 2002) have attempted to apply the concepts of reliability and validity to qualitative research with modifications and interpretations. In contrast, other qualitative
researchers often propose alternative criteria for evaluating their studies that are distinct from those used in quantitative research.

Notably, Lincoln and Guba (1985) suggest the term "trustworthiness" as a criterion for assessing the quality of qualitative research. Each component of trustworthiness corresponds to previous criteria used in quantitative research. According to these researchers, credibility (vs. internal validity) in qualitative research involves establishing that the research findings are credible and believable from the perspective of the participants. Transferability (vs. external validity) refers to the extent to which the findings of qualitative research can be applied or transferred to different contexts or settings. Dependability (vs. reliability) concerns whether consistent results would be obtained if the same phenomenon were observed multiple times. Finally, confirmability (vs. objectivity) refers to the extent to which the results of qualitative research can be confirmed or supported by data.

In terms of credibility and validity, this research aims to reach agreement with the respondents (Trochim and Donnelly, 2007). The participants themselves are considered the best judges of whether the research accurately reflects their opinions and feelings. To achieve this, the research will use in-depth interviews that allow respondents to fully express their perceptions, experiences, and beliefs. The results will be presented in a descriptive manner with exact quotes to preserve their meanings within their contexts.

Secondly, due to the nature of qualitative research, which focuses on intensive studies of smaller groups, the goal is not to achieve generalizability (external validity). Instead, this research aims to uncover the uniqueness of the phenomena by providing rich, detailed descriptions, narratives, and contextual information through a case study approach, as explained in detail in section 4.4.3. This approach can produce "thick descriptions" (Geertz, 2008) that offer insights and resources enabling others to assess the potential transferability to
Thirdly, establishing dependability/reliability can be challenging in qualitative research due to the emphasis on flexibility and freedom. Lincoln and Guba (1985) suggested the "auditing" approach, where peers act as auditors overseeing the entire research process. However, due to practical difficulties with auditing extremely large datasets, this approach has not become a popular validation criterion (Bryman & Bell, 2019). Instead, dependability can be achieved by maintaining a detailed record of the research process to allow others to replicate it (Kumar, 2010), as will be demonstrated in later sections.

Lastly, this research is designed using triangulation strategies to achieve confirmability/objectivity (Patton, 2002; Yin, 2003). By drawing from cross-disciplinary views and debates on value in the digital music sector, including exchange value in business and management studies, value-in-use and value co-creation in marketing, and cultural value in popular music studies and sociology, theory triangulation can be achieved by examining the data from different theoretical perspectives and positions. Additionally, data triangulation will involve collecting and analyzing multiple sources of evidence, including primary data from interviews and secondary materials such as conference reports, government reports, news articles, and statistics. The goal is to provide a balanced theoretical foundation and dataset, ensuring the conformability of the research and avoiding personal values and theoretical biases that could influence the research findings.

4.4.3. Multiple Case Studies

To address the "how" questions raised in the research questions, multiple case studies will be conducted to align with the exploratory nature of the research (Yin, 2003). According to Yin (2003), a case study is an empirical investigation of a contemporary phenomenon conducted within its real-world
context, particularly when the boundaries between the phenomenon and context are not clearly defined. The purpose of conducting case study research is to gain an understanding of a real-world case and acknowledge its uniqueness, significance, and complexity (Bryman & Bell, 2019).

Lee, Collier, and Cullen (2007) suggest that particularization, rather than generalization, constitutes the main strength of case studies. In comparison to other research strategies that focus on data generalization to the wider population (e.g., surveys, cross-sectional design), case study researchers prioritize the uniqueness of the case and develop a deep understanding of its complexity to contribute to the analytical generalization of theories and arguments through intensive analysis and theoretical reasoning based on the case data (Yin, 2003; Bryman & Bell, 2019).

Moreover, multiple-case studies have become increasingly popular among researchers as an extension of single case research designs (Yin, 2003; Bryman & Bell, 2019). While single-case studies can provide useful insights, multiple-case designs are considered stronger than single-case study designs. Even a two-case study design is preferable to a single-case study as it can provide more robust evidence and increase the reliability of the findings (Yin, 2003). Due to the comparative nature of multiple cases, researchers are also able to compare and contrast the findings from each case, identifying both unique and common elements across cases, encouraging theoretical reflection and deeper understanding through cross-case analysis (Bryman & Bell, 2019).

It is important to select and identify the appropriate "unit of analysis" (case) that has the highest potential to shed light on the research questions and objectives (Yin, 2003). According to Yin (2003), the unit of analysis involves defining the case based on individuals, small groups, communities, decisions, programs, specific events, and bounding the case to distinguish the main topic of the study from the context of the study.
In order to explore the various values beyond direct monetary ones that have been created and captured in China's digital music value ecosystem, and discover how these values of digital music are created and perceived by different actors in China from a multi-leveled perspective, two cases have been selected as units of analysis: 1) the development of online Gufeng music, and 2) elderly prosumption of the karaoke platform WeSing. Regarding the bounding of the cases, the main focus of the two cases is on the key actors and their value creation and co-creation involved in the multi-leveled ecosystem at the individual level (e.g., online users, artists), organizational level (e.g., firms), and governance level (e.g., policymakers).

More specifically, the first case is selected to understand how amateur Gufeng artists and online users can utilize digital technology and social media to create a unique Gufeng musical culture that blends traditional Chinese music culture with online Japanese Nijigen culture. It aims to explore how this grassroots genre becomes professionalized and commercialized beyond the original Gufeng community. The case will examine how its commercial value, derived from fan economy and cross-sector collaboration with gaming companies, is captured by digital music platforms such as 5Sing and NetEase Cloud Music during its development. Additionally, it will investigate how the online genre and youth culture are further rebranded through the direct involvement and endorsement of the state into an "orthodox" musical genre representing domestic cultural confidence, nationalism, and socialist ideology.

The second case aims to explore how "digital immigrants" of elderly users incorporate the Karaoke application WeSing into their everyday lives, learning, producing, and sharing musical content on the platform despite having little to no musical experiences. The case will examine how WeSing and its parent company Tencent capitalize on the co-creation between users and the platform to capture various values from user-generated content, datafication, and user
interaction on the platform. Furthermore, it will investigate the role of the state in bridging the "digital divide" among the elderly and other marginalized groups by implementing policies, regulations, and initiatives that exert power over the digital service sector, such as the "elderly-oriented and accessibility reform" in the case of WeSing.

4.4.4. Research Ethics

Before conducting the fieldwork for the two case studies, special attention will be given to research ethics to ensure that the research is conducted ethically and without potential risks and biases. Research ethics involves the moral values or principles that establish a code of conduct for proper research conduct and accurate reporting of research findings (Collis & Hussey, 2014). Bryman and Bell (2019) have compiled a list of key principles to guide researchers in conducting research ethically, including avoiding harm to participants, respecting their dignity, obtaining informed consent, protecting privacy and confidentiality, avoiding deception, declaring affiliations and conflicts of interest, maintaining transparency, ensuring mutual benefit, and avoiding misleading or false reporting of findings.

Established guidelines for research ethics serve the purpose of ensuring that researchers actively consider the needs and concerns of the individuals they study, facilitate proper supervision of research practices, and foster a sense of trust between researchers and participants (Mack et al., 2005). This research adheres to the ethical guidance of the Edinburgh College of Art and has undergone the ethical approval process. Prior to the fieldwork, the Research Self Audit Checklist for Ethical Purposes, regarding the research proposal, has been completed and submitted, and no reasonably foreseeable ethical risks (e.g., risks to confidentiality, potential harm to participants or researchers, involvement of vulnerable individuals, conflicts of interest) have been identified.
During the research process, three areas related to research ethics are highlighted: voluntary participation, anonymity and confidentiality, and data handling. First, regarding consent, interviews are conducted only after providing participants with an information sheet and obtaining their consent. The information sheet includes the purpose of the research, information on how the data will be collected and used, and the rights of participants, including their right to withdraw from the research, rights to anonymity and confidentiality, rights to not be audio-recorded, and the right to access and delete the collected data. When contacting interviewees, one of them expressed unwillingness to be audio recorded, so the interview was conducted with note-taking only.

Confidentiality of participants is a major ethical concern that needs to be handled appropriately. Since the study focuses on value creation in China’s digital music sector using the two cases, specific identities and personal information of the interviewees are not relevant to the research. To protect and maintain confidentiality of the interviewees and avoid any unforeseen risks, this research is conducted with full anonymity of participants, as stated in the information sheet provided to the respondents. This anonymity is relevant to whether the interviewees consented to the interviews. During the fieldwork, several respondents emphasized their anonymity prior to the interview for practical reasons, such as concerns about publicity for an artist or a former corporate employee's unwillingness to be held liable for potential risks.

Qualitative data may carry a higher risk of exposing individuals, even with anonymity (Given, 2008). Due to general ethical considerations to protect respondent identities and at the request of the interviewees, this research takes extra care to ensure data anonymity. During the transcription stage, respondents' names have been replaced with a list of identification codes, such as GR# for Gufeng case respondents and WR# for WeSing case respondents, for later use. Additionally, other potentially sensitive and identifying information,
such as song names mentioned that may reveal the identity of the interviewed artists or branch names that the employee respondents used to work in, has also been fully replaced.

Finally, data handling and management are crucial ethical concerns. This research follows the *University of Edinburgh's Data Protection Procedures*, which include obtaining consent from the principal supervisor and interviewees regarding the collection and storage of specific data, explaining to participants how their data will be recorded and used and their rights to request updates or deletion of collected data through the information sheet, implementing security measures for data protection, not disclosing collected data to anyone other than the individuals concerned, and disposing of personal data once it is no longer needed for the research.

4.5. Data Collection

4.5.1. Secondary Data

The data collection for this research involves two main parts: 1) Secondary resources of recent literature concerning the development of China's digital music sector in general, with a specific focus on the two selected cases of Gufeng and WeSing, and 2) Primary resources from in-depth interviews with relevant actors in these two cases and direct observations from exploratory activities.

The first step of data collection is to gather knowledge by reviewing secondary data to become familiar with the history and context of China's digital music sector. This involves collecting readily available information and data through relevant literature, a method referred to as "soaking and poking" by George and Bennett (2005). This method provides a rich and detailed contextual background of China's digital music development, presented in a
chronological narrative in Chapter 2. This background aids both the researcher and future readers in understanding the distinctive development of China's music sector and comprehending the contextual aspects in which the two cases took place.

Moreover, secondary data concerning the development of Gufeng music and the online karaoke service WeSing are also being collected and reviewed to become familiar with the context and navigate key issues of the two cases. Since Gufeng and WeSing are still emerging communities, academic papers focusing on these topics are relatively scarce. Therefore, other sources such as conference reports, working papers, news articles, blogs, and data are also being collected and reviewed.

Regarding the Gufeng case, the secondary data has shown the core characteristics of the genre and culture, how the genre emerged, its relationship with Japanese Nijigen culture, its commercialization process, and recent development to become a state-endorsed music genre. In the WeSing case, the secondary data shows China's domestication and development of karaoke to serve leisure and social functions, multiple attempts to develop karaoke software and online services before WeSing, the popularity and key advantages of the mobile-based karaoke platform WeSing, how the platform became popular among elderly users, and the government's initiatives to close the digital gap by exerting its power on digital music services. Overall, the secondary resources of the two cases provide detailed background information while highlighting the uniqueness and nuances of each case study, which can later be supported by primary data through interviews and observations.

Due to the practical difficulties of gaining access to interview respondents at the governance level (e.g., government officials and employees), secondary resources such as government reports and publicly available notices will be the optimal choice for analyzing the value creation at this level. This data will also
be supported by primary data from interviews conducted with actors at the individual and organizational levels. Questions regarding the interaction with governance level actors will be covered in the interviews.

4.5.2. Primary Data

After the secondary data collection, the second step is to conduct in-depth interviews designed for the interviewees to understand the different perspectives of actors at each level of the ecosystem and to extract findings related to the research topic through these discourses. Semi-structured interviews and open-ended questions are adopted in this research to maintain flexibility suitable for the exploratory nature of the study, allowing for adjustments in interview questions accordingly. This approach offers the opportunity for interviewees to frame the questions and respond based on their own terms and perspectives, leading to more dynamic responses and the emergence of new issues (Bryman & Bell, 2019).

To capture a balanced view of multiple actors while maintaining relevance to the research objectives of understanding the interaction and co-creation of different actors in the ecosystem, the interview guide is designed with the same basic structure and narratives, with variations tailored for each actor across the ecosystem in both cases based on their background (see Appendix 1 for an example interview guide), including Gufeng fans, artists, WeSing users in the individual level, as well as music producers and Digital music services employees in the organization level. The interview guide’s design also facilitates the cross-case analysis process by organizing the data in a consistent format.

In terms of the design of the interview guide, each interview consists of four main parts. The first part of the interview questions consists of more general inquiries to initiate the interview process and familiarize the interviewees with
their background. For example, interviewees are asked to define Gufeng or WeSing in their own terms and share their personal experiences of how they were introduced to Gufeng or started using WeSing, along with their general perceptions of the app. The second part aims to uncover more detailed information about online users' behaviors in the digital age and their prosumption from the perspectives of the users themselves, artists, and firms. Questions in this section include how users produce, promote, and distribute Gufeng music, how they acquire information about Gufeng, the scenario of interviewees' everyday usage of WeSing, and the most commonly used functions of the app. The third part focuses on understanding users' community-based interactions in the two cases. Questions are asked about the main communities of Gufeng, how respondents participate in these online communities, and how users interact on WeSing. At last, the fourth part aims to explore the cross-level interactions and value co-creation of actors across the ecosystem in relation to the two cases. This part delves into how respondents perceive their interactions with other actors in the ecosystem. The questions are informed by the secondary data collected on the main issues involved in the two cases, such as the commercialization and government's endorsement of Gufeng music or WeSing's value to the elderly community and society, as well as the government's relationship and interactions with digital music companies.

After the initial design of the interview guide and other preparatory work, such as obtaining ethical approval and finding initial contacts for recruitment, the fieldwork in China was carried out from January 2020 to August 2020, which included recruitment, interviews, and initial transcription for both cases.

In addition, exploratory activities (Shen et al., 2019) were conducted during the fieldwork to achieve direct field observations of the two cases. These activities involved registering, observing, uploading content, and direct messaging on platforms and applications such as WeSing and NetEase, as well
as related social networking platforms like WeChat and Weibo. This allowed the researcher to experience the "insider" perspective as a prosumer on these platforms and gain direct access to data (e.g., musical content, figures, texts) displayed in the online Gufeng and WeSing communities that would otherwise be inaccessible elsewhere (Yin, 2003).

In the recruitment stage, initial respondents who participated in the interviews were carefully selected individuals representing actors at the two levels of the ecosystem (excluding policymakers at the governance level). This included users and artists at the individual level, and producers and employees representing labels and digital music companies at the organizational level. These respondents have rich experiences in the two cases and are knowledgeable in their fields. They also have diverse backgrounds in terms of location, age, and educational background, which helps to avoid potential bias when using the snowballing technique to build up the sample size (Biernacki & Waldorf, 1981).

In the Gufeng case, the respondents were mainly selected through personal contacts and their recommendations for later interviewees. It was surprising that Gufeng fans were not only keen to take part in the interviews but also eager to recommend their friends to participate in the research. One respondent even voluntarily started a WeChat group for this fieldwork and added her friends to the chat. According to one respondent during the interview, "It's just a way to expand the influence of Gufeng. My friends said to me, 'You must participate in this, it's a way to strengthen our Gufeng circle!'" (GR05). Due to the genre's popularity, recruiting artists and actors at the firm level posed challenges. However, through a personal contact of a close friend, one established Gufeng artist was recruited for the research and provided valuable insights in the interview. Initially, there were some hesitations from the artists to participate in the interview and recommend other artists due to concerns about
publicity risks and the lack of funding for the research. However, after being assured of confidentiality measures and no audio recording being taken, the artist openly shared their experiences during the interview and recommended another artist, which led to the recruitment of a Gufeng music producer. Additionally, with the help of another personal contact, a respondent who was a manager and producer of a well-known Gufeng artist agreed to take part in the interview, although they were not willing to disclose any details that could reveal the artist's identity in the final research.

In the case of WeSing, the initial recruitment faced challenges in finding elderly users. During the exploratory activities on WeSing, a large elderly user base was identified through the public chart of older songs, age-specific virtual singing rooms, and the comment section of elderly users. However, despite sending private messages to over 50 active users, there was no response. This could be because elderly users are more willing to socialize with real-life friends and relatives than strangers due to the fear of online scams. According to an elderly user, "We're afraid of talking to strangers. Moreover, they ask all sorts of questions. As elderly people, shouldn't we be cautious about falling for scams? So, basically, we don't engage in conversations with them." (WR12). During this period, five younger WeSing users were recruited and interviewed first to provide initial insights into general WeSing prosumption and to offer comparisons and contrasts with the elderly users. Finally, after searching for personal relatives who were regular users of WeSing, three optimal interviewees were recruited for the research, and they also recommended four of their friends and relatives. One of the relatives provided an opportunity to reach out to two of her old "Comrades," who were co-workers during the "Down to the Countryside Movement" in the Cultural Revolution era. This demonstrated how WeSing works as a platform for maintaining long-distance social bonding and lifelong friendships, even though they have returned to their home cities after the movement.
Regarding the recruitment of interviewees at the organizational level, it was discovered that Tencent employees, based on corporate policy, were not allowed to participate in unauthorized interviews. One Tencent employee agreed to the interview but needed to report the interview details to the public relations sector for evaluation. However, no response was received from the public relations sector, and therefore, the interview could not be conducted with this respondent. Fortunately, one former Tencent employee in the entertainment sector agreed to participate in the interview, bypassing Tencent's policy, and provided valuable data on Tencent and WeSing's strategies and visions at the organizational level.

During the fieldwork, several other issues emerged due to the COVID-19 outbreak in China since January 2020. Firstly, conducting face-to-face interviews was not possible in this circumstance, as citizens were advised to practice social distancing. Secondly, the risks associated with travel and the cancellation of public conferences and events made it difficult to plan research trips outside Beijing to meet a wider group of relevant potential respondents.

To address these practical issues, the research adopted phone interviews via Skype and WeChat instead of face-to-face interviews, in order to avoid potential risks to the respondents. In practice, phone interviews turned out to be an optimal choice with several advantages compared to personal interviews. They were cost and time-efficient for both parties, enabling the entire fieldwork to be conducted in a shorter period of time without the need for travel. Additionally, the quality of interviews could be enhanced as memories of past interviews were fresh. Moreover, phone interviews allowed the research to reach a more diverse sample, which is often challenging with traditional personal interviews. In both cases, interviewees were geographically dispersed, even internationally, which offered interview data from a more balanced population without location bias. Lastly, according to Bryman and Bell (2019),
the absence of visual cues and physical presence in phone interviews reduces the likelihood of respondents providing answers influenced by the interviewer’s characteristics.

Starting from February 2020, a total of 26 semi-structured interviews (see Table 4.1 and 4.2) were conducted to investigate the Gufeng and WeSing cases. The respondents included consumers, fans, artists, producers, and staff members from digital music services. Specifically, for the Gufeng case, 9 Gufeng fans (GR01-07, GR11-12), 2 Gufeng artists (GR07-08), and 2 Gufeng producers (GR10, GR13) were interviewed. As for WeSing, the respondents consisted of younger WeSing users (R1-5), senior WeSing users (R6-12), and a former Tencent employee (R13).

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Description</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
<th>Occupation</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>GR01</td>
<td>15/02/2020</td>
<td>Gufeng Fan</td>
<td>Female</td>
<td>20s</td>
<td>New York, US</td>
<td>Employee</td>
<td>Early Gufeng and Audio-drama lover, prosumer</td>
</tr>
<tr>
<td>GR02</td>
<td>17/02/2020</td>
<td>Gufeng Fan</td>
<td>Female</td>
<td>20s</td>
<td>Shanghai</td>
<td>Student</td>
<td>Early Gufeng and Animation lover, prosumer</td>
</tr>
<tr>
<td>GR03</td>
<td>18/02/2020</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Tokyo,</td>
<td>Teacher</td>
<td>Gufeng</td>
</tr>
<tr>
<td>GR</td>
<td>Date</td>
<td>Name</td>
<td>Gender</td>
<td>Age</td>
<td>City</td>
<td>Occupation</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-----------</td>
<td>--------</td>
<td>-----</td>
<td>--------</td>
<td>---------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>GR04</td>
<td>18/02/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Beijing</td>
<td>Student</td>
<td>Gufeng and game lover</td>
</tr>
<tr>
<td>GR05</td>
<td>19/02/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Shanghai</td>
<td>Student</td>
<td>Early Gufeng and Hanfu lover</td>
</tr>
<tr>
<td>GR06</td>
<td>20/03/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Shanghai</td>
<td>Student</td>
<td>Gufeng lover, dedicate fan of a Gufeng artist</td>
</tr>
<tr>
<td>GR07</td>
<td>22/03/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Shanghai</td>
<td>Employee</td>
<td>Gufeng and game lover</td>
</tr>
<tr>
<td>GR08</td>
<td>08/04/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>20s</td>
<td>Beijing</td>
<td>Employee, Part-time Gufeng Artist</td>
<td>Gufeng singer and producer</td>
</tr>
<tr>
<td>GR09</td>
<td>10/04/20</td>
<td>Gufeng</td>
<td>Male</td>
<td>20s</td>
<td>Wuxi</td>
<td>Full-time Gufeng Artist</td>
<td>Gufeng singer and online influencer</td>
</tr>
<tr>
<td>GR10</td>
<td>18/04/20</td>
<td>Gufeng</td>
<td>Female</td>
<td>40s</td>
<td>Haikou</td>
<td>Music Producer</td>
<td>Producer and</td>
</tr>
<tr>
<td>No.</td>
<td>Date</td>
<td>Description</td>
<td>Gender</td>
<td>Age</td>
<td>Location</td>
<td>Occupation</td>
<td>Features</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>-----------------</td>
<td>--------</td>
<td>-----</td>
<td>----------</td>
<td>-----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>GR11</td>
<td>23/04/2020</td>
<td>Gufeng Fan</td>
<td>Female</td>
<td>20s</td>
<td>Nanjing</td>
<td>Employee</td>
<td>Gufeng and Game lover</td>
</tr>
<tr>
<td>GR12</td>
<td>30/04/2020</td>
<td>Gufeng Fan</td>
<td>Female</td>
<td>20s</td>
<td>Nanjing</td>
<td>Student</td>
<td>Gufeng, game, and Hanfu lover</td>
</tr>
<tr>
<td>GR13</td>
<td>05/05/2020</td>
<td>Gufeng Producer</td>
<td>Male</td>
<td>30s</td>
<td>Ningde</td>
<td>Music Producer</td>
<td>Free-lance Gufeng Producer, Gufeng singer</td>
</tr>
</tbody>
</table>

Table 4.1. List of Gufeng case study respondents
<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Group</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
<th>Role</th>
<th>User Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR03</td>
<td>20/07/2020</td>
<td>Young User</td>
<td>Female</td>
<td>20s</td>
<td>Nanjing</td>
<td>Employee</td>
<td>Casual user</td>
</tr>
<tr>
<td>WR04</td>
<td>22/07/2020</td>
<td>Young User</td>
<td>Male</td>
<td>20s</td>
<td>Beijing</td>
<td>Employee</td>
<td>Casual user</td>
</tr>
<tr>
<td>WR05</td>
<td>22/07/2020</td>
<td>Young to Middle-aged WeSing User</td>
<td>Male</td>
<td>30s</td>
<td>Nanjing</td>
<td>Employee</td>
<td>Heavy user, Family with WR02</td>
</tr>
<tr>
<td>WR06</td>
<td>24/07/2020</td>
<td>Senior User</td>
<td>Female</td>
<td>70s</td>
<td>Langfang</td>
<td>Ex-worker</td>
<td>Casual user, Family with WR08</td>
</tr>
<tr>
<td>WR07</td>
<td>25/07/2020</td>
<td>Middle-aged User</td>
<td>Male</td>
<td>40s</td>
<td>Dalian</td>
<td>Employee</td>
<td>Heavy user</td>
</tr>
<tr>
<td>WR08</td>
<td>30/07/2020</td>
<td>Senior User</td>
<td>Female</td>
<td>70s</td>
<td>Dongguan</td>
<td>Ex-worker</td>
<td>Heavy user, comrade with WR11, WR12</td>
</tr>
<tr>
<td>WR09</td>
<td>31/07/2020</td>
<td>Senior User</td>
<td>Female</td>
<td>60s</td>
<td>Beijing</td>
<td>Former Civil Servant</td>
<td>Heavy user, friend with WR 10</td>
</tr>
<tr>
<td>WR10</td>
<td>01/08/2020</td>
<td>Senior User</td>
<td>Female</td>
<td>60s</td>
<td>Beijing</td>
<td>Former Employee</td>
<td>Heavy user, friend with WR 09</td>
</tr>
<tr>
<td>WR11</td>
<td>01/08/2020</td>
<td>Senior User</td>
<td>Female</td>
<td>70s</td>
<td>Harbin</td>
<td>Former</td>
<td>Casual user, comrade with</td>
</tr>
<tr>
<td>Worker</td>
<td>Date</td>
<td>Role</td>
<td>Gender</td>
<td>Age</td>
<td>Place</td>
<td>Type</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>-----------------</td>
<td>--------</td>
<td>-----</td>
<td>----------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>WR12</td>
<td>02/08/2020</td>
<td>Senior User</td>
<td>Male</td>
<td>70s</td>
<td>Tianjin</td>
<td>Former Teacher, Heavy user, comrade with WR08, WR11</td>
<td></td>
</tr>
<tr>
<td>WR13</td>
<td>29/10/2020</td>
<td>Tencent Employee</td>
<td>Male</td>
<td>30s</td>
<td>Shanghai</td>
<td>Former Employee in Tencent Music Entertainment</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2. List of WeSing case study respondents

The length of interviews varied from 41 minutes to one and a half hours, with the typical interview duration being around one hour. Prior to the interviews, an information sheet outlining the interview process and the rights of the interviewees was sent to all participants, and oral consent was obtained. All interviews, except one with a Gufeng artist who did not wish to be audio recorded, were recorded for transcription purposes.

During the interview process, new issues often arose in the discussions, which led to the inclusion of additional questions for future interviews. For example, in the Gufeng interviews, it became apparent that many fans were not solely attracted to the genre based on their interests in ancient Chinese musical culture, but instead, many of them discovered Gufeng through the foreign Nijigen culture (Japanese-influenced animations, comics, games, or novels). The overlap between Gufeng and Nijigen contributed to the unique
development and presentation of the genre and enabled its emergence and growth within the Nijigen community. Consequently, additional questions were asked during the interview process that explored the relationship between Gufeng and Nijigen culture, such as “How would you explain the high degree of overlap between Gufeng music culture and other Nijigen culture, such as gaming, cosplay, audio drama, and so on?”

Similarly, in the case of WeSing, many elderly users raised issues regarding the rating systems and virtual gifts, which were the two most popular but also controversial features. They often complained about the inaccuracy of the scoring system while relying on it to evaluate their works, and would tirelessly re-record songs in an attempt to achieve a better score. In terms of virtual gifts, they were aware that the virtual gift systems are schemes designed by the platform to generate profit. However, they still adopted the free-version virtual gifts as their "capital," the primary way to show their levels of appreciation to other users, and working hard to collect these virtual gifts by engaging with WeSing’s gamification mechanisms. These detailed usage issues prompted the inclusion of additional questions in future interviews to capture their opinions and experiences related to the main features of WeSing.

Furthermore, follow-up interviews regarding the case of WeSing were conducted after the fieldwork, following the new policies and implementations concerning elderly users on WeSing. In September 2021, WeSing launched its "Care Mode," an alternative mode within the app with simplified features and enhanced accessibility functions specifically designed for elderly users and others in need. The design of the "care mode" was a direct result of the Elderly-oriented and Accessibility Reform mandated by the Ministry of Industry and Information Technology (MIIT) in December 2020, which required a total of 452 websites and apps to provide elderly-specific versions. As a result, the elderly interviewees were invited to participate in the follow-up interviews, with two of
the previous respondents agreeing to provide additional written interviews to
discuss their experiences using the care mode and share their opinions.

4.6. Data Analysis

After the interview data has been recorded and transcribed, the next step
is to conduct the data analysis for the two cases. The data analysis in this
research consists of two parts: case study analysis of findings for each case,
inspired by thematic analysis (Braun & Clarke, 2006), and cross-case analysis
which combines the findings from both cases to discover the empirical and
theoretical insights of the entire research.

4.6.1. Case Study Analysis

Thematic analysis is a widely used approach in qualitative research that
aims to identify, analyze, and present patterns or themes in the data (Braun &
Clarke, 2006). According to Braun and Clarke (2006), a theme represents
patterns or meanings within the dataset that capture significant aspects of the
data related to the research question. They also identified the main phases of
thematic analysis, including 1) Familiarizing with the data; 2) Generating initial
codes; 3) Searching for themes; 4) Reviewing themes; 5) Defining and naming
themes; and 6) Producing the final report.

Once all the interview recordings are collected, each recording is initially
transcribed using AI transcription service Xunfei, and later revisited for hand
correction. To preserve the integrity and essence of the interviewees' discourses and language use, all interview transcriptions are done in Chinese,
as well as the coding during the data analysis process. The texts are only
translated during the writing process when quotes are needed. After completing
the transcriptions, they are read several times to become familiar with the data.

Thoroughly reading the transcriptions allows for the generation of initial
codes, which are added to the texts for each individual case. The initial codes are labeled descriptively, using the respondents' original wording, to provide honest representations of their views and show potential repetitive patterns. In this research, data analysis software ATLAS.ti is used to develop the codes as it offers efficient ways to organize large volumes of qualitative data, handle all transcriptions in one bundle, and provides convenience in viewing and categorizing codes in the network view, as well as shortcuts to view the list of quotations under each individual code. As a result, a total of 435 codes are generated for the Gufeng case, and 282 codes for the WeSing case (overview of the coding layout can be seen in Appendix 2).

The codes are then categorized and connected in different groups, grounding the initial themes supported by the connections of codes. During this process, patterns emerge based on the prevalence of quotations and their relevance to the research questions (Braun & Clarke, 2006).

After establishing all the initial themes, they are reviewed based on the relationship with the entire list of themes. Several changes can be made in this phase, as themes and the connections of codes are often rearranged and re-conceptualized to fit the new relationships across other themes in the entire case. This phase of analysis involves an interpretive perspective, going beyond mere descriptions based on the face value of the data. For example, elderly users' musical engagement on WeSing has been categorized into three initial sub-themes: "Interests Development," which describes engagement by users with no prior music experience who use the app for educational purposes to learn singing skills and cultivate interests; "Hobby-Driven," a type of engagement by users who already have an interest in singing and utilize WeSing as a tool for singing and sound recording with a large song catalog; and "Public Performance," which indicates users using the karaoke service as a platform for self-expression and presentation, carefully crafting their content
and sharing it with family and friends seeking recognition.

The reviewed themes are then defined to determine their scopes and different aspects. In this process, some themes become the main themes with separated subthemes, while others are merged to become one theme. For example, in the Gufeng case, the discussions under the theme of "Gufeng Circle in the Nijigen World" was originally separated under various themes such as "Early Development of Gufeng Music" and "What Makes a Gufeng Circle," but it is later merged to become an independent theme due to its contextual importance to the Gufeng circle. Finally, the themes for each case are formatted and assembled in the case study report, and themes that are less relevant to the main research are discarded. For the selected themes, key quotes are extracted from the transcripts as examples.

4.6.2. Cross-Case Analysis

After conducting the data analysis for each case study, the next step is to perform a cross-case analysis that combines both cases to derive overall findings for this research. Khan and Van Wynsberghe (2008) argue that cross-case analysis involves utilizing knowledge gained from individual cases to produce new knowledge at a broader level. It involves accumulating knowledge and analyzing both cases for comparison and contrast, allowing the knowledge from each case to serve broader purposes.

Both the Gufeng and WeSing cases present distinctive backgrounds and contexts, involving diverse individuals engaging with various genres of music to varying degrees. This contributes to distinct participatory cultures associated with diverse approaches to digital music production and social interaction. The first case focuses on an emerging online youth culture within the new media environment, originating from a fusion of traditional Chinese and contemporary Japanese musical cultures. It is characterized by the independent production of
user-generated content (UGC) and a vibrant, self-sustaining community. The Gufeng circle and the genre gradually developed to a level of artistic maturity and professionalism, which was later appropriated by firms and policymakers to produce commercial value from the fan economy and promote political ideologies and patriotism.

The second case involves a commercial product that utilizes UGC and user interaction to generate profit. The application focuses on entertainment and socialization, aiming to increase user engagement through gamification features and extract commercial value through the datafication of user engagement. However, marketed as inclusive and free of charge, it has also become popular among elderly users, including those who were previously not musically active. These users can learn, produce, and share music while socializing with friends and family. The platform's popularity among the elderly has resulted in elderly-oriented reforms and the introduction of a "care mode" led by policymakers to bridge the digital divide and protect vulnerable communities. However, the elderly users have already well adapted to the platform's mechanisms and commercialization strategies, building their own participatory cultures and making the most out of the platform.

Each case is presented with thick descriptions in their separate chapters to capture rich examples of individual cases with contexts. However, the aim of the cross-case analysis is to highlight the most significant aspects of each case related to the research objectives and generate new knowledge (Yin, 2003; Khan & Van Wynsberghe, 2008). Despite the uniqueness and differences between the two cases, on a broader level, the combination of the two cases reveals China's mass bottom-up music production facilitated by the development of digital music technology and various services, allowing everyone to engage in music in diverse ways. Moreover, from these music participatory cultures of various online communities, a multiplicity of potential
values can be created and captured by multiple actors across individual, organizational, and governance levels through their interactions in the digital music ecosystem.

Furthermore, in comparison to thematic analysis, which is developed more as an inductive process, the cross-case analysis is conducted with an abductive manner, with mix of both inductive and deductive approaches. The researcher conducts the analysis on the case study topic combined with prior research and existing theory (Yin, 2003). New theories can also emerge during the induction process of case data analysis. Hence, the framework of the cross-case analysis is inspired by existing literature and models but is further developed and modified based on the case findings, resulting in empirical and theoretical contributions of this research.

Firstly, drawing from cultural value studies, a multiplicity of values created in China's digital music sector from a multi-level perspective can be identified and analyzed based on the individual case data. Secondly, the cross-case analysis maps the relationship and value co-creation of actors inspired by Lepak et al.'s (2007) three-dimensional analysis. The model is further developed into the notion of China's digital music value ecosystem, highlighting the variety of values, cross-level actor interaction and co-creation, the role of technology, and context. Thirdly, built on various views and perspectives on value across business management, marketing, cultural value studies, and social science, the nature of value can be conceptualized and framed from an interdisciplinary and networked perspective.

4.7. Summary

In summary, this chapter provides an overview of the methodology employed in the research, and presents a roadmap for the entire research to address research objectives and questions, to discover the multi-level value
creation process in China's digital music sector. Section 4.2 discusses different research paradigms, such as positivism and interpretivism, and their implications for selecting appropriate research methods and techniques. It highlights the strengths and limitations of quantitative and qualitative research strategies and their implications for selecting the most suitable strategies.

The research problem and objectives were defined in section 4.3, where two research questions were formulated. The first question (RQ1) seeks to explore the development process of China's digital music by developing a multi-level framework which focus on the interactions and value creation processes among the Chinese mass users, digital music platforms, and the state. The second question (RQ2) aims to bring theoretical understanding on the complexity of value co-created by actors in the digital music value ecosystem during this changing process. To address these research questions, the main objectives of the study are to discover the development process of China's digital music sector, examine how value is created and perceived by key actors in the ecosystem, analyze the relationships and interactions between these actors, and gain a theoretical understanding of the nature of value. Four main steps are outlined to achieve these research objectives.

To address these research questions and objectives, a qualitative and interpretive research approach has been adopted and justified in section 4.4. This approach allows for a deeper understanding of the perspectives and experiences of the actors involved, with an analytical view. Moreover, the study employs multiple case studies, focusing on the development of online Gufeng music and the elderly prosumption of the karaoke platform WeSing, to provide robust evidence and enable comparisons and contrasts between cases, contributing to the generalized findings of the research. The section also emphasizes the application of research ethics to this study.

In section 4.5, the data collection process is discussed, which involves
gathering both secondary and primary data. Secondary data provides a comprehensive background and context for the study and contributes to the contextualization chapter, as well as the contextual background and analysis of actors at the governance level for each case study. Primary data is collected through open-ended and in-depth interviews, direct observations, and exploratory activities. The design of the interview guide, recruitment process of interviewees, and challenges with measures to mitigate the issues such as the recruitment and impact of the COVID-19 pandemic are addressed.

Finally, the data analysis process is explained in section 4.6. First, a case study analysis inspired by thematic analysis is adopted to generate findings for each case. Various phases of the case data analysis, including transcription and data familiarization, coding, generation of themes, review of themes, theme definition and naming, and report writing, are discussed. Then, a cross-case analysis is performed to combine the findings of both cases and generate broader knowledge for the overall research. This reveals mass bottom-up music prosumption in China's digital music ecosystem, as well as the multiplicity of potential values created and captured by multiple actors across individual, organizational, and governance levels. With a mix of inductive and deductive approaches, the analysis contributes to empirical and theoretical findings of the research, including the identification and analysis of value creation in China's digital music sector, mapping actor relationships and value co-creation in a music-technical value ecosystem, and conceptualizing value from interdisciplinary and networked perspectives.
Chapter 5. Case Study: The Development of Online Gufeng Music

5.1. Introduction

Chapters five and six will focus on two selected case studies, providing empirical and theoretical insights for future analyses on the value creation of China's digital music sector within a multi-level framework. These case study chapters will center on the development of Gufeng (古风), which was once a niche online music genre and youth culture aiming to revive and transform Chinese ancient musical traditions in a modernized and digitized setting. With the spontaneous participation of young Gufeng enthusiasts within the online community, the growth of the domestic online "Nijigen" culture, and the further commercialization and politicization of the genre, it has evolved into a mainstream phenomenon with nationwide popularity.

This case is particularly unique because the genre would not have existed in its current form without the involvement of multi-level actors (fans, artists, firms, policymakers), and the mediating role of digitization and Web 2.0 technologies. The advent of online music distribution, home-based music production, music sharing platforms, and social media made it possible for Gufeng lovers (both users and artists) to create, re-create, consume, and circulate Gufeng music in a networked and collective manner. The genre's later commercial and public success is also directly linked to the engagement of new generations of digital music platforms under copyright reform, as well as the direct endorsement from the state to promote nationalism and patriotism among young people. However, while actors from the organizational and governance levels enshrined the genre and renamed it "Guofeng" (国风), changing the word from "Ancient" to "Nation," this translation process gradually moved Gufeng away from its original roots.
The aim of this chapter is to comprehend the developmental process of Gufeng music, exploring its emergence in the digital age, the initial actors involved, their participation in this online culture, and how the interaction of firms and policymakers translated and transformed this culture to achieve their own value propositions. The following section (5.2) will delve into the "core spirit" of Gufeng music, aiming to understand its musical and cultural background, as well as the emergence and early development process of Gufeng as an online grassroots musical culture, including its unique production methods and the role of early Gufeng platforms. Section 5.3 will then focus on the online participatory culture of the "Gufeng Circle," seeking to explore this group of young and vibrant Gufeng enthusiasts who engage in the production, consumption, and circulation of online Gufeng music influenced by Japanese Nijigen culture. It will uncover how Gufeng artists learn and create Gufeng music outside the professional system and how some of them eventually enter the professionalized Gufeng music production as the genre becomes further commercialized. Additionally, it will discuss the key role of social media in Gufeng circulation and how Gufeng fans and artists communicate and interact in various ways. Lastly, section 5.4 will center on how Gufeng music evolved into "Guofeng." The transformation of Gufeng into Guofeng was influenced by joint external forces, with firms commercializing the once niche genre and transforming it into mainstream culture consumption, while state organizations utilized their influence on young people to promote their ideologies by directly engaging in the development of Guofeng music.

5.2. Contextualizing Gufeng Music

5.2.1. The Core Spirit of Gufeng Music

The Musical Characteristics of Gufeng Music

Gufeng Music (古风音乐), directly translated as "Archaistic music," is an
online-based music genre developed in the early 2000s, fusing Chinese traditional music elements and ancient Chinese culture-influenced lyrics. Musically, Gufeng music often shares similar traits with traditional ancient Chinese music, such as the use of Chinese musicology (the music system surrounding the pentatonic scale of gong 宮, shang 商, jue 角, zhi 徵, and yu 羽) in songwriting and traditional Chinese instruments added to the arrangement, such as Dizi (Chinese flute), Guzheng (Zither-liked instrument played using a plectrum), Erhu (two-stringed bowed instrument), and so on. The adoption of Chinese musicology and traditional Chinese musical instruments into making Gufeng music retains the unique flavor of traditional Chinese music, easily resonating with mass Chinese listeners who have experienced traditional music in the past.

As a relatively novel music genre, the definition of Gufeng music is still under debate (Xue, 2015; Tong, 2015; Wang, D., 2019), particularly concerning the distinction between "Gufeng" (古风) and other similar genres fused with Chinese classical culture, namely the sub-genre of Chinese popular (C-pop) music, "Zhongguo Feng" (中国风, translated as "Chinese style music"). Although Gufeng music and Zhongguo Feng share attributes in adopting traditional Chinese Arts, the former is a niche music genre with a greater emphasis on using authentic Chinese music elements (e.g., Chinese pentatonic scale, traditional music instruments) and ancient Chinese lyrics with exquisite rhythmic structures and rhymes to create an archaistic feel or imagery (Tong, 2015). Zhongguo Feng, on the other hand, is a type of popular music that only adopts similar traditional musical elements and ancient prose lyrics as additional "flavor," instead of recreating traditional music culture as its core theme. Often categorized as part of "Mandopop," Zhongguo Feng is strongly influenced by Western popular music genres such as R&B (Rhythm and Blues) and rap, making the music more mainstream-oriented, despite often lacking the core spirit of classical Chinese culture (Wang, D., 2019).
Furthermore, compared to Zhongguo Feng, Gufeng not only strengthens the application of traditional Chinese musical instruments in contemporary popular music but also focuses on utilizing music software and online music platforms as technical means of music production and distribution, closely integrated with the lifestyles of younger generations. Moreover, Xue (2015) argues that, unlike Zhongguo Feng, which is well established and commercialized by record labels and top artists (e.g., Jay Chou, Leehom Wang) in Mandarin-speaking countries, Gufeng music was introduced and developed by music lovers, amateur artists, and music groups emerging from Chinese contemporary urban internet culture to distinguish the genre from other popular genres with professionally-produced content.

However, both Zhongguo Feng and Gufeng are not aiming to revive true traditional music as it was played and heard in ancient China; instead, they use musical styles and elements from the past, adding their own creativity to Gufeng music in a modernized and popularized manner, often blending popular music elements such as Western harmonic systems (chords), rhythms, instruments, and sound effects on top of the "linear" Chinese style melody line and traditional instruments to rejuvenate ancient music into a new sound that suits the taste of today's audiences.

Musically, Gufeng music often adopts Western New Age music as the foundation, as the acoustic and synthesizer-dominant music style can offer a calm and ambient mood. The peaceful and spiritual sounding New Age music provides a sense of tranquility, which is very suitable for expressing Gufeng music, leaving more space for the traditional music instruments parts and vocal part with Classical Chinese lyrics and scripts.

Another style of music that has been adopted is traditional-styled popular music from Japan. Many early Gufeng works are direct covers, which involve re-recording the original songs with altered Chinese lyrics. This is due to the
musical, instrumental, and stylistic similarities between traditional Chinese and Japanese music, as well as the incorporation of traditional music elements into popular music. Due to the long history of cultural and musical exchanges between China and Japan since the Tang Dynasty, including the introduction of Chinese musical systems and instruments, Japanese traditional music has been heavily influenced by Chinese music. Conversely, newer Japanese popular music, developed based on Japanese traditional styles, also bears closer resemblance to the form and style of Chinese traditional music compared to Western music. As a result, Japanese songs with similar traditional styles are often used for Gufeng covers, where the backing track is taken and mixed with Gufeng vocals, accompanied by altered Chinese lyrics. For example, Satomi Takasugi's popular Japanese song *Hyaku Koiuta* has been one of the most frequently chosen songs for Gufeng covers. More than 10 different versions, such as *Tongyoucisheng Jinwuhan* (同游此生今无憾), *Zhuyanxie* (朱颜偕), *Fushishang* (浮世殇), *Hechusizunqian* (何处似樽前), and *Chenxiangyimeng* (沉香一梦), have been created based on the same Japanese song, each with its own unique approach and thematic elements.

However, due to the commercial development and genre expansion from its early stage, the musical content of Gufeng music has become increasingly diversified, with more professionally trained artists and producers joining from various backgrounds in both the Chinese traditional music and popular music sectors. More authentic productions of Gufeng music have emerged as artists and groups work towards the goal of reviving true ancient Chinese music, such as Zi De Guqin Studio (自得琴社), which focuses on producing audio and visual representations to revive the ancient musical culture, featuring performers with age-corrected instruments, traditional costumes (汉服 Hanfu), and makeup (see figure 5.1). In contrast, much more contemporary and commercial Gufeng music compositions can also be seen, such as *Mangzhong* (芒种, one of the 24 traditional Chinese solar terms) by Gufeng group IntrestingCN, which combines
electronic pop music and catchy vocal parts with Gufeng music that features traditional instrumental parts such as Guzheng during the interlude.

Figure 5.1. Zide Guqin Studio featuring performers with age-correct instruments and costumes (source: sohu.com)

The Cultural Characteristics of Gufeng Music

Since more original Gufeng music is produced in a variety of styles and genres, from slow tempo love songs to heavily orchestrated battle hymns, and from electronic music to Gufeng-styled rap, it is becoming difficult to categorize any particular style of music as Gufeng. Despite this, the common goal that all Gufeng music has is to capture the "core spirit" of traditional Chinese culture.

As suggested by its name, the core spirit of Gufeng (古风) music, apart from other musical genres, is the aim of its artistic conception to bring back the "Huai Gu Zhi Feng" (怀古之风) - the tribute to traditional Chinese aesthetics, or at least the contemporary interpretation of such aesthetics. The use of traditional music elements, Classical Chinese lyrics, stories, writing style, and logics all work as supporting elements reflecting these aesthetics.

One of the most important aspects of Gufeng music is its various ways of poetic storytelling and imagery expressions, which Gufen artists aim to provide
an empathetic feeling to the audiences not only through music but also verbally through lyrics and spoken parts. Gufeng artists emphasize creating the feel of "Huai Gu Zhi Feng" through vocal expression in the singing part of lyrics, as well as the spoken part of Nianbai (念白), and the non-singing inscriptions (文案). Since the beginning of the genre, which emerged from gaming fans creating altered-lyrics covers of background music in popular Chinese mythology games, Gufeng music has been heavily dominated by Gufeng songs rather than instrumental tunes, and the use of lyrics is one of the most important trademarks of Gufeng music to bring the ancient, nostalgic feeling, and imagery to the audience, even without actual traditional-styled background music. Here is the discourse with a Gufeng fan who found out the early Gufeng music she liked are actually direct covers from Cantonese popular songs: "I think it is very strange for me because I remember all those great early Gufeng songs I love to listen to are all covered from Cantonese songs. And when I heard the original version, to my shallow knowledge of music theory, I think it simply does not have any Gufeng musical elements in it, but the lyrics changed all the feeling to make that sound like Gufeng, and that's why I think this song is very good. But once you listen to the original song in Cantonese version you will find, in fact, there is no relevance at all [...] Maybe I think the kind of Gufeng feeling of these covers may still come from the lyrics adaptations." (GR12).

In general, three types of lyrics are used in the making of Gufeng music. The first is the adoption of Classical Chinese language poems and literature, especially well-known classical pieces such as Lisao (离骚), Pipaxing (琵琶行), Xiaoyaoyou (逍遥游), which are more relatable to the Chinese audience and thus easier to be popularized. However, the originality could be compromised, which is often seen in various different Gufeng songs using the exact same title and lyrics. The second type is the rearrangement of the lyrics by re-creation or altering the classic poems and literature, making it not only more suitable to the song’s musicality but also showing the writer’s own creativity by adding new
meanings to the original materials while retaining the spirit of the source. One example could be HeTu's song *Yin* (隐), the lyrics depict the solitary and rough life of poet Li Shangyin in the Tang Dynasty by referencing Li's own words and allusions, making it more authentic and compelling. The last type is the purely original lyrics, which lyricists use Classical Chinese writing style and add their own creativity to create new lyrics that provide the same nostalgic feelings and imageries close to the traditional ones. This is the most common type of Gufeng lyrics writing, whereas it is the most challenging way to create Gufeng lyrics since it requires deep knowledge of history and culture as well as expertise in writing skills.

Another special feature widely used in Gufeng music is the "Nianbai" (念白, spoken parts) performed by the singer or voice actor of the song, which is a unique performance style between spoken and sung words, rooted in many Chinese traditional operas such as Peking Opera. Due to the limited length of a Gufeng song (similar to popular songs, around 4 minutes), Nianbai is thus designed and adopted to tell the whole story of a song within its time limit, also allowing the songwriter to add more lyrical content without having to match the melody, thus providing the space for a more elaborated narrative with more dramatic emotional expressions.

Apart from lyrics, Gufeng songwriters also use inscriptions (文案), the non-lyrical written parts to provide additional background information, support the expression of the emotion, or to show the atmosphere. For example, in Gufeng artist He Tu's third album *Qing Jin Tian Xia* (倾尽天下), each of the 11 songs has an individual inscription that introduces its background, and all songs are strung together by the inscription and the chronology of the fictional story of Bai Yan, the founding emperor of the Zhou Dynasty, Emperor Jing of the previous dynasty, and Zhu Sha, the last concubine of the previous dynasty. By using the inscriptions, the album could bring a more consistent and immersive feeling to
the audience beyond the scope of musical content, with new meanings generated from the inscriptions with the additional history, story, literature, and culture elements adding to each song.

5.2.2. "Generating Electricity with Love" - Early Gufeng Music Development

The Emergence of Gufeng Music as a Niche Music Genre

Gufeng music emerged as an online-based niche music genre in the Chinese mythology role-playing game community, with pioneer artists of the genre mostly being young gamers and music lovers residing in online gaming forums. They created derivative works from songs and music soundtracks in the games, with lyrical alterations to fit the themes (Zhou & Xiong 2016; Wang, D., 2019). According to one of the Gufeng artists, who witnessed the early development of Gufeng music in the gaming community:

"Gufeng is a kind of popular music form on the Internet produced by a group of people who love traditional culture, literature, and games, such as Xianxia [mythology] and Wuxia [Martial Art]. They cooperate in different aspects, such as writing lyrics, composing music, and arranging music." (GR08).

Especially in its nascent stage, Gufeng music was often labeled as grassroots production created through the appropriation of existing cultures. During that time, gamers did not focus much on the originality or quality of the music, nor did it carry much aesthetic value. Instead, their main concern was whether the end result was fun to create and listen to, and whether it could evoke the "ancient style" they were seeking (Wang, 2020). Thus, the early period of Gufeng music was created primarily for self-entertainment without financial or career incentives.

In 2004, a Chinese mythology-based game series called The Legend of
Sword and Fairy (仙剑奇侠传, see Figure 5.2) launched its official theme song, Xianxia Wenqing (仙侠问情). The song set a precedent for expressing nostalgic imagery of ancient Chinese culture with pop music, which is considered the "blueprint" of the Gufeng genre. Although the music incorporated many Western popular music elements, the lyrics depicted love stories in this ancient adventurous world and were written in ancient prose (Tong, 2015). The song quickly gained popularity within the gaming community, leading to numerous derivative works with altered lyrics being created and shared by game fans on social media (Zhou & Xiong 2016; Tong, 2015). Additionally, theme songs from other Chinese mythology-based game series (e.g., Fantasia Sango, Xuan-Yuan Sword) and also Japanese and Korean new age music (e.g., Tsukiga Watashi, Sennen No Niji) with a similar archaistic mood were reproduced in the Gufeng style (Zhou & Xiong 2016).

Figure 5.2. Promotional material from The Legend of Sword and Fairy (Source: rawg.io)

Early Gufeng Production
Technological advancements in music digitization played a crucial role in creating an environment to nurture the growth of online Gufeng music. Music production technologies, such as user-friendly Digital Audio Interface (DAW) programs, midi keyboard, USB microphone and audio interfaces, as well as social networks and online music sharing platforms available in the digital age, made it possible for amateur artists to digitally record and mix music and share it online. This provided them with a way to create, produce, and distribute music with a low barrier of entry, enabling the emergence of Gufeng music as an independent genre at the early stage.

However, due to the niche and self-entertainment nature of Gufeng, only few could create original Gufeng songs, and most of the Gufeng production in this era involved in reproducing existing, copyrighted music. Due to the scarcity of quality Gufeng content in the community, most Gufeng creators have to search for East Asian popular music or background soundtracks from movies, games, animations, etc., and later dubbed with additional vocal tracks for the singing part of alternative lyrics using DAW. In 2005, amateur artist Xinran uploaded her first cover work Waiting, adding lyrics to the theme music of a role-playing game called Juedai Shuangjiao (绝代双骄), which was considered the pioneer Gufeng cover song to be recognized by the Gufeng community (Wang, B, 2019). Despite the lower musical and audio quality of these early Gufeng works compared to professionally produced mainstream popular music, they were significant as they allowed more people without professional background to participate in music production of Gufeng by adopting user-friendly technologies and manipulating existing tracks in practical ways. As a Gufeng artist from the early stage expressed:

"We are all hobbyists, and at that time, being post-90s [generation born between 1990-1999], we actually had no awareness of copyright on the Internet when we were young. However, for example, I am a lyricist, I can write very
good lyrics, but no one is helping me compose and arrange my music or find me a singer and sound engineer. To actually complete a composition, you have to go through many steps—from making a demo to finding a lyricist, composer, arranger, to the actual recording and music production. In fact, it is necessary to involve these professionals and go through the whole process to put out the finished product, which, in fact, is very unlikely. So at that time, people might go to find some existing tracks, 'hey, I listen to this certain Japanese song', and try to fill in the lyrics, and then send it to their music sharing site, just like sharing my personal life or something on social media." (GR09).

Compared with the professionally produced content in the mainstream popular music, early Gufeng music was created by grassroots artists with non-professional production, making most of these early works unoriginal and lacking in quality. However, Gufeng lovers dealt with this challenge in a collective manner. Due to convenience of instant communication through social networks, a large number of grassroots singers, composers, lyricists, and producers with more specialized skills and talents were attracted to participate together in the early development of Gufeng music. By collaborating in the form of "Gufeng music society" (古风团体), they had the capability to produce original content at a higher standard. Typically, a Gufeng project was conducted by a group of team members who shared the same taste and had a common interest in a certain topic, with no financial incentives (Ma & Chen, 2016). These co-producers, from different geographic locations, worked together online with a clear division of labor on project planning, arrangement, lyrics, promotion, release, etc. (Wang, D., 2019).

In 2007, China's first original Gufeng music society, MMQMusic, was established. Created by two like-minded music lovers (user ID: "ediq" and "Diuzi") on social media, the group started to recruit members from around the nation and collaboratively produced and distributed hundreds of songs purely
on the internet (Ma & Chen, 2016). MMQMusic’s model became the standard of Gufeng music production, as it achieved higher standards and efficiency through the collaborative efforts of like-minded Gufeng lovers with different musical backgrounds and skills. Following this, the number of Gufeng groups mushroomed, producing and distributing large numbers of both original Gufeng songs and covers digitally.

Early Gufeng Music Platforms

Due to the mass grassroots participation in online Gufeng music, Gufeng platforms, especially UGC (User-generated Content) platforms that distribute purely user-generated content, played a crucial role in the early development of Gufeng music. During the early 2000s, before nationwide copyright enforcement and the domination of large technology companies, these smaller scale UGC platforms provided free distribution channels for any content creator to upload and share their work, regardless of whether the recording quality met industry standards, whether the song was a cover version or an original song, or whether the market prospects were viable or not. On the other hand, as music-sharing platforms, any user could listen to a bulk catalog of user-generated musical content for free. As a result, the UGC platforms became the testing field for Gufeng development, as everyone had a fair chance to present their work and be valued by mass audiences through click rates, follows, comments and likes. Well-made Gufeng content could be selected in this process through "votes," leading the genre to gradually evolve into a more mature form, while talented artists could be recognized by a large audience base and start building their reputation in the community.

Fenbei (fenbei.com, closed in 2010) was the first online music platform for mass Gufeng music lovers to create Gufeng music and distribute it online. As a UGC platform, the website became known for bringing forth the first generation of network music singer Yang Chengang and Xiang Xiang, and many top
internet-based music productions, such as *Mouse Loves Rice* (老鼠爱大米) and *Perfume is Poisonous* (香水有毒). Similarly, Fenbei became the earliest online community for Gufeng music under its sub-forum "Gufeng alt lyrics."

With the decline of Fenbei due to unsuccessful business transformation around 2007, its successor 5sing (now part of Tencent Music Entertainment), another UGC platform, became the dominant site for hosting Gufeng music and witnessed the rapid growth of the genre and the community. Since its establishment in 2004, 5Sing has mainly focused on connecting music fans with independent musicians in niche genres. The platform nurtured many well-known Gufeng artists such as Wang Sulong and Dong Zhen. Due to 5Sing's vision of market segmentation, focusing on more independent genres and artists, it has become the main platform for Gufeng distribution, with 70% of the music content on the platform being Gufeng songs (Guo, 2017).

5Sing provided a more creator-friendly platform, offering not only online space for music distribution but also a wide degree of support for users to upload content. This support ranged from (unlicensed) recording software and plug-ins resources for music production to detailed tutorials on singing technique, music theory, composing, and music production for any user who wanted to learn from scratch (see Table 5.1). 5Sing also encouraged users to upload their own cover versions of existing songs on the platform via the cover song section. Users could download the backing tracks of compositions on the website and add their additional singing tracks using the music production software provided, then upload them as covers. This function was well-used by Gufeng artists and fans, contributing to the collaborative cover singing culture of the genre.

"I remember [using 5Sing] because I also love to sing, and I used to make cover songs and then upload them to 5Sing because 5Sing has a lot of backing tracks available. The first thing I did was to use the software downloaded from
the site, and then you can sing and record it, and it's quite convenient. There are a lot of Gufeng singers, or music lovers who like to do covers on 5Sing [...] You can upload your own, for example, your original Gufeng song, and if it becomes viral and many people want to sing it, you may upload your original backing track, and then others can come to download, record the cover version, and upload this song on their own homepage. Then you can see whether anyone listens to it and gives you flowers [virtual gifts on 5Sing] or something like that. If people like your version of the song very much, then your cover could be on the chart and even featured on the home page and so on, and then some people may contact you, such as music companies or music studios. I remember in the early stages, a lot of Gufeng singers, or some of today's top Gufeng artists, which were more niche back then, were first established that way." (GR02).

<table>
<thead>
<tr>
<th>Sections</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Tutorials</td>
<td>Cool Edit Pro 2.0 Detailed Tutorial; Beginner's Guide to Recording; Mic Simulation Effects; Fine Processing of Vocal Effects; Cool Edit Pro 2.0 Recording Tutorial; Compilation of Frequently Asked Questions for Recording with Cool Edit Pro 2.0; Cool Edit Pro 2.1 (Tutorials + Download); How to Use CE to Remove Original Vocals from Songs; How to Use CE to Create Accompaniments for VCDs; How to Upload Songs to 5Sing.</td>
</tr>
<tr>
<td>Recording and Mixing Techniques</td>
<td>Reverberation Parameters; Recording Effect Production; Fine Processing of Vocal Effects; Tips for Recording Vocals; Preparations for Recording Karaoke; Miscellaneous Recording Techniques; Cool Edit Pro 2.0 Limiting Processing; A Simple</td>
</tr>
<tr>
<td>Soundtrack Production</td>
<td>Trick for Processing Vocals; 20 Essential Mixing Tips; Recording and Production Methods; Techniques for Using Audio Effects; How to Record Songs; How to Check the File Extension and File Format; How to Warm-Up and Train Your Voice.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Soundtrack Production</td>
<td>How to Make Accompaniments from VCDs using COOEDIT; DART Karaoke Author 1.35 - Method for Eliminating Original Vocals to Create Accompaniments; Making Accompaniment Tapes with DeComposer; Automatic Accompaniment Band - Music Accompaniment Software BAND IN A BOX; Cooledit Karaoke Production - Functions of Common Frequency Points; Several Methods for Removing Vocals; How to Eliminate Singing in Recorded Songs.</td>
</tr>
<tr>
<td>Recording Software Downloads</td>
<td>Adobe Audition 1.5 Download; Cool Edit Pro 2.1 Download; Cubase SX v2.2.0.35 (Audio Processing Software) Download; Cubase SX Video Tutorials; Samplitude Video Tutorials; Samplitude 8.0 Download.</td>
</tr>
<tr>
<td>Related Software Downloads</td>
<td>GoldWave 5.05 Chinese Version (Instructions + Download); BAND IN A BOX 9.0 (Tutorial + Instructions); Cakewalk SONAR 3.0 (Instructions + Download); Cakewalk Pro Audio 9.03 Chinese Version (Instructions + Download); T-racks Guide - Mastering Master (Tutorial + Download) ; Effects Plugins (Part One): Exciter Plugin BBE Sonic Maximizer (Instructions + Download); Effects Plugins (Part Two): Reverb Plugin Ultrafunk2 Introduction (Tutorial + Download); Effects Plugins (Part Three): Audio Plugin Wave3.0 Various Effects Introduction (Tutorial + Download); CDex - High-Quality Free</td>
</tr>
</tbody>
</table>
By analyzing the background and early development of Gufeng music, it becomes evident that the phenomenon of Gufeng music is a genre developed mainly through the mass participation of young online users. These users, mostly amateurs in terms of songwriting and performing, have the ability in the digital age to learn from online resources, use music production tools, and collaborate with other co-creators to create a new form of music in ways that could not be seen before digitization. Various music and social media platforms also give them opportunities to not only distribute their works without any obstacles but also provide spaces for Gufeng lovers to gather and interact with each other, shaping the development of the genre as well as the community.

5.3. The Online Participatory Culture of Gufeng Music

5.3.1. Online Participation of the "Gufeng Circle"

What Makes the Gufeng Circle

The early development of Gufeng music is mainly contributed to by the spontaneous participation of like-minded Gufeng lovers, with Gufeng music being produced, consumed, and circulated in this small circle of the online Gufeng community. This phenomenon of online Gufeng music culture is similar to Jenkins's view on "participatory culture," which he defined in his book as: low
barrier of artistic expression and civic engagement, a supportive environment for creating and sharing with informal mentorship, members valuing their contributions, and fostering social connections and concern for others' opinions about their creations (Jenkins, 2006).

This section will focus on the participatory culture of the online "Gufeng circle," inspired by Jenkins's view, to discover the perspectives of the individuals in the circle, such as the Gufeng fans and artists, to gain more insight into the people involved in Gufeng music production, consumption, and circulation, and how the community involvement of the Gufeng circle contributes to the growth of the genre.

The Gufeng circle ("Gufeng Quan," 古风圈) is a term widely used by the Guefng community to represent people who identify themselves as part of or deeply interested in Gufeng music and its related cultures, including regular Gufeng listeners and active internet users in the Gufeng community, dedicated Gufeng fans of a particular Gufeng artist, and the Gufeng artists and other types of creators and promoters who produce Gufeng music and relevant content individually or as part of the Gufeng music society.

As discussed in the last section, the Gufeng circle emerged as an inclusive, non-commercial community with a low barrier of entry. Anyone could listen and discuss others' work within the community, learn to produce Gufeng content and create covers with the convenience of music production software available on music sharing platforms, do collaboration projects with peers, and share their work on online platforms. Gufeng music and related content (e.g., Gufeng music videos, illustrations, alternative lyrics) are freely available online, and the contributors often welcome others to listen, share, and reproduce the content, with little concern about commercial aspects such as copyright and profitability.

With the digital space provided by various social media platforms, even
Gufeng fans who don’t directly produce music actively engage in the participatory culture of Gufeng music. They go beyond being mere listeners or consumers and gain direct access to the Gufeng circulation, collectively expressing their thoughts and feelings through activities like commenting, liking, and sharing. They form fan groups, connect and interact with artists socially, and actively participate in building a community with its cultural identity and meanings. Through the active consumption, interpretation, and circulation of Gufeng music, they are empowered as a community to shape the development of Gufeng music in this distinct cultural form, thus co-creating the online Gufeng participatory culture. Additionally, online-based communication breaks geographic boundaries, allowing them to produce and consume music online and also meet like-minded friends offline in their city areas across China.

Based on the Gufeng fans and artists being interviewed, as well as the observation from online ethnography, the Gufeng circle is formed by a group of young and vibrant community. Being born and raised in the same era with rapid evolution of technologies and social media, they are also very tech and internet-savvy in terms of learning and using various hardware, software, and internet communication tools, which could help them to gather new information and knowledge, consume and produce content, and interact with each other and forming virtual communities in the Gufeng circle at ease. Also, since the Gufeng circle is formed by younger generations, there is a higher rate of Gufeng lovers with higher educational background as many Gufeng communities, including Gufeng music groups, are formed in the music societies in universities and schools. Lastly, Gufeng music fans are mostly female-dominated, partly because the genre is often associated with a softer and more tender style, which is more attractive to female listeners, and also the community of many other Nijigen cultures (which will be discussed in the next part of this section) closely related to, such as Danmei (耽美, or Homoeroticising) novels and audio dramas (Wang, 2020), or cosplay and Hanfu that are also heavily female-dominated.
Being the minority, male Gufeng lovers are sometimes labeled as "girly" outside the Gufeng circle, whereas in the online Gufeng community, they are often praised for having a good taste and associated with being gentle or more cultured.

By the discussion in the first section, it is clear that the core spirit of Gufeng music is heavily influenced by traditional Chinese culture, both musically and culturally. Many Gufeng lovers are already interested in some aspects of traditional Chinese culture, which makes them more drawn to Gufeng compared to other popular genres, as it presents a richer literature, history, and cultural context. Without an interest in Chinese classical culture and some adequate knowledge, it is difficult for people to develop a strong interest in this type of music. The interests they have cultivated over time have also made them very loyal to Gufeng music than other genres.

However, it is not accurate to say people in the Gufeng circle are fully embracing the traditional culture as it is; instead, they carry its spirit and actively choose various cultural symbols in the creation of their own culture and imaginary world. In fact, the excessive use of flowery classical language without understanding its meaning has been a longstanding criticism of Gufeng music, especially regarding the lyrics (Zhou & Xiong 2016). However, by "appropriating" Chinese culture and history, they add their own interpretations in the contemporary context and blend it with online culture. Gufeng lovers often use Gufeng-styled cartoon avatars and personal signatures on their social media as a way to show their Gufeng identity. They may post a Gufeng song and quote a line of traditional Chinese poems, or wear Chinese Hanfu to comic conventions or write comments about an artist only in Classical Chinese. Not necessarily experts on these cultures, they actively use the culture in a fragmented and entertaining way to create something that resonates with their personal feelings and identities.
Nonetheless, this non-serious "appropriation" of traditional culture could eventually lead to a deeper understanding and serious interest in true traditional Chinese culture. Through listening to Gufeng and engaging in the Gufeng circle, many Gufeng lovers have gradually developed more curiosity and understanding of its underlying culture, which they were previously not familiar with. For example, a Gufeng fan shared her newly discovered interests after being attracted to Gufeng:

"After I listened to Gufeng music, I was willing to understand some of the things it is related to, like ancient poetry or something. For example, some of these stories have Classical Chinese texts with certain literature background, and some of these are historical stories, and then I would like to find these stories to understand what happened, like the historical aspect, and ancient poetry. Then I would also be interested in Chinese costume Hanfu as well. Also, I'll be interested in museums; I feel like I can't get out of this circle once I get into it [laugh]. You'll want to explore a lot of different things. For example, I used to know less about history, and I didn't go to museums much, but after entering this circle, you will start to be interested in cultural relics, including some TV programs like National Treasures and Archeology Open Class, and you will want to learn about the life of people living in that time, or why these relics are valuable and what the value is, and you want to understand them all." (GR03).

**Gufeng Circle in the Nijigen World**

From analyzing its core cultural spirit, it appears that Gufeng music is the contemporary interpretation and recreation of ancient Chinese culture and aesthetics. However, the participatory culture of the Gufeng circle is actually deeply related to and intertwined with the foreign, Japanese Nijigen culture (二次元, translated as "two-dimensional" culture, referring to Japanese animation and comic culture, as opposed to the three-dimensional reality). Also called the "ACG" or "ACGN" culture (abbreviation for its fundamental components:
Animation, Comic, Game, and Novel), Nijigen culture is the product of the global circulation of Japanese cultural products, such as animation, manga (comic), games, and novels. With its distinctive visual characteristics and narratives that can be easily recognized by its audiences, Nijigen cultural products often carry rich narratives and meanings with distinctive visual styles, which heavily influenced the growth of the younger generation in China in terms of cultural aesthetics and creation.

The influence of Japanese Nijigen culture on Gufeng music is hard to ignore, as seen in the visual design in the Gufeng music culture, the animation clips used in Gufeng videos, or the Nijigen music being covered as Gufeng with alternative lyrics. Based on the fieldwork conducted concerning Gufeng music, nearly all of the Gufeng fans consider themselves as "Nijigen," having shared interests apart from the music genre itself, such as Japanese Comics and Animations, mythology-based Gufeng games, audio dramas, and so on. Influenced by the online Nijigen culture, they have developed distinctive interests, worldviews, languages, and group identity along with the Nijigen culture, which they bring into the development of Gufeng music culture.

As a result, online Gufeng music and the Gufeng circle could be seen as key components of the greater domestic Nijigen culture among young Chinese netizens. Compared to some other genres, such as rock or jazz, where music is at the center of these cultures, Gufeng music is a part of this Chinese Nijigen youth culture, and its development was also mutually influenced by many other existing youth cultures and lifestyles, such as its four fundamental components of animation, comic, game, and novel, as well as Cosplay and Hanfu (汉服, revitalization of Chinese fashion and lifestyle) culture, and so on. Based on the conversation with Gufeng fans, they often consider Nijigen as a broad culture which Gufeng music is also included within:

"In fact, my definition of Nijigen was not as broad as I understand it now. I
probably defined it too narrowly before, thinking that Nijigen is anime, and I just
don't think I'm Nijigen because I don't like watching anime myself. But now I
think it's a very broad term with all kinds of cultural derivatives? Or I don't know
how to define it, but I think it's very broad [...] Because, for example, cosplay is
also a kind of Nijigen culture, not only for anime characters but also game
cosplay as well, and then you involved in the voice acting circle and gaming
music circle, under the same Nijigen culture. Then, in the same game, there will
be people editing the game characters into Doujin videos [fan-made videos], I
think they are all considered Nijigen." (GR12).

Nijigen culture also affects the way Gufeng music is presented and
perceived within the Gufeng circle. Apart from professionally produced content,
a large portion of the content is created by regular fans in the community, such
as the abundant "Doujin" (同人, see Figure 5.3) content, a Nijigen term
represent a type of fan-made derivative work based on existing official materials
of a particular work, often with fictional or alternative storylines built on the
original worldview. Hence, it's not surprising that the same culture of
appropriating and mismatching existing work by adding individual creativities in
terms of altered-lyric covers, rearrangements, and video mash-ups on top of the
existing works is commonly appeared and well accepted in the Gufeng circle,
as it can also be considered as a part of the doujin culture.
Figure 5.3. A screenshot of doujin video for novel and audio drama *Modaozushi* (魔道祖师), featuring original Gufeng song *Tijianlaiyao Hongchenke* (提剑来邀红尘客), with bullet screen comments (source: bilibili.com)

More importantly, the concept of Nijigen culture and its way of culture production, consumption, and circulation have influenced not only the development of Gufeng music but also the way people engage with Gufeng culture compared to other popular cultures. Nijigen, or "two-dimensional world" in direct translation, is a concept that originally describes the fictional worlds of the comics or games exist within a two-dimensional space, as opposed to the three-dimensional reality. The artificially created virtual world does not rely on the rules of the real world, but it is created on the imaginary characters, things, languages, cultural backgrounds, and so on. In this sense, the existing cultural forms and genres are only the ways to unfold and expand the imaginary worlds.

In Jenkins's book (2006), he introduced the concept of "transmedia storytelling" existing in the processes of cultural convergence, which Jenkins uses the term to describe a process in which a story (or a brand) could unfold across multiple mediums such as movie, music, TV, game, novel, and so on, with each delivery channel creating its contribution to unfolding the story (Jenkins, 2006). One of the most well-known examples is *The Matrix*, which started as a feature film in 1999. The franchise expanded the story with two sequels, an animated film *Anymatrix*, several collections of comic books, and video games. Each work of the franchise is self-contained, but as a whole, they contribute to the construction of the transmedia narrative world (Scolari, 2009).

Similar processes of transmedia storytelling can be seen in the development of Gufeng music by its inter-relationship with other cultural mediums in the Nijigen culture. However, compared to the corporate top-down transmedia storytelling of *The Matrix*, the case of Gufeng shows participation
from the bottom-up level, which the online users are spontaneously utilizing various art forms and media channels in the Nijigen culture as ways to present replenish their own narrative world of Gufeng and interact with other related worlds. In fact, the genre itself had emerged from the gaming community in 2004 when game fans created derivative doujin music based on the soundtrack of Chinese mythology-based game series *The Legend of Sword and Fairy* (仙剑奇侠传). Since then, the close link between Gufeng music and other cultural and art forms (e.g., game, audio drama, cosplay) sharing the same themes has always been a unique characteristic of the music genre (Zhou & Xiong 2016; Tong, 2019), with Gufeng music acting as a vital element (in the form of theme songs, promotion songs, background music, or fan-created doujin music) in co-constructing the transmedia narratives with non-musical art forms.

The bottom-up transmedia storytelling of Nijigen culture across multiple mediums has created a greater fan community, resulting in fragmented but overlapping fan bases of various interests. Gufeng fans often possess several other cultural labels in the Nijigen culture, and vice versa, which under the influence of these different social circles, a pattern of culture co-development and mutual enrichment can be seen: some people who like Gufeng music will be attracted by wearing Hanfu and learning ancient Chinese etiquettes and rituals, while Hanfu enthusiasts could also be affected by traditional Chinese musical culture and start enjoying Gufeng music. Hence, this fragmentation of Gufeng consumption could provide more opportunities for the Gufeng music community to expand exponentially (Ma & Chen, 2016). On the other hand, since the large fan base has diverse interests in Nijigen culture, Gufeng music seems not only to be considered as a stand-alone music genre but rather as the musical part of the greater Nijigen-Gufeng culture. For many Gufeng fans, their first encounter with Gufeng music was when these Gufeng songs appeared in the theme song of their favorite audio drama of an online novel based on ancient China, or as the soundtrack of a mythology game, or as the
background music for a Hanfu video. More than just the purely audio form, Gufeng music is embedded within the greater range of mediums in the Nijigen culture, which allows for its early development that nurtured on existing materials derived from various related cultures.

As a result, the "nutrients" of Nijigen culture, such as its distinct mediums, cultural elements, worldviews, narratives, terminologies, and languages, were quickly absorbed by the young people in Gufeng circle, which subsequently offered them a way to adapt these elements to the recreation of the traditional Chinese culture into online Gufeng culture. They are eager to use familiar and readily available Nijigen cultural elements as tools, thus creating an interesting way of elaborating and domesticating foreign Japanese cultural influences on the Chinese traditional culture, which becomes a major stylistic characteristic of Gufeng. With the continuing development of the genre, as well as the growth of Nijigen culture in China, the once-niche Gufeng music has gradually co-evolved with Nijigen culture to become a more popular musical culture with devoted fans and viable commercial prospects. With the increased popularity of domestic Nijigen culture, Gufeng artists are facing new opportunities not only to create and share Gufeng music as self-entertainment but also to become professionals, participating in various commercial activities in the greater Nijigen culture, such as writing songs for video games and soundtracks, attending Gufeng live small-scale gigs and large concerts, comic conventions, cosplay, and even reality shows (Li, 2021).

5.3.2. The Development of Online Gufeng Artist

Making Gufeng Music as a Hobbyist

As discussed in the first section, most Gufeng artists, especially the earlier ones, were primarily unprofessional music hobbyists in the Gufeng community. They were often students or full-time employees in non-music industries. Many
of the early Gufeng artists were regular online users who were attracted to the genre and began learning to produce Gufeng music themselves or create alternate-lyrics covers. One Gufeng artists shared his earliest experience on producing Gufeng music on 5Sing:

"There is a website in China called 5Sing, which is a sharing website for music lovers, and it does not have a commercial nature. So at that time, most of the Gufeng artists in the circle at that time got together to make Gufeng covers as a hobby: I write lyrics, then find a good singer to sing the lyrics, and then release it on this site, and we share it together. 5Sing is not a commercial level distribution platform, unlike QQ music or NetEase Cloud music, so in the early days, it was done this way."(GR09).

For these Gufeng artists, the incentive to produce and share music online was often not economic gain or career development, but rather a form of self-expression, self-entertainment, or self-validation. Due to the lack of business motivation, many Gufeng artists enjoy the freedom of creating Gufeng music covers based on existing materials and don't mind their work being covered by others or being downloaded and shared freely. To them, the process of successfully creating Gufeng music and sharing it online is already fulfilling enough. In addition, due to the scarcity of Gufeng music in the early stages, as well as the help of user-oriented music production technologies, amateur Gufeng artists with musical talent could easily put out decent quality content within the Gufeng community to receive positive feedback from fans and achieve recognition in the Gufeng circle, which also motivates Gufeng artists to create more content.

DIYing Gufeng Music

Based on the interviews, many artists primarily make music on their own instead of looking for professional studios and sound engineers, apart from the
more obvious reason out of necessity for a pro-production. They choose to "DIY" music at home also because of the lower barrier of entry for music production technology, lower cost, a more relaxed atmosphere, and higher efficiency and autonomy.

The advance of digital music production technology, such as user-oriented recording and mixing software, has created the opportunity for Gufeng artists to make music in home studios with ease. Compared to professional means of music production, musicians nowadays have the capability to create the whole recording using just a laptop, a microphone, a midi keyboard, and a sound interface, with much similar quality (See Figure 5.4). The barrier of entry for music production has dropped significantly both in terms of financial cost and skill requirements. An artist could easily learn and accomplish the whole production of a song by themselves, and the end result could still meet the standard for Gufeng music, according to a Gufeng producer from the interview:

"I built a recording studio at home because you know, like in the early days, even artists like Faye Wong [Chinese artist] and so on, they also recorded tracks in their own home and then took them to make records. In fact, uh, in our generation, electronic technology like home recording equipment has developed very, very fast. Now there is even the kind of microphone with USB dock and audio interface all integrated in one piece, as cheap as 400 Yuan [around 47£], and I was really surprised at the quality of dry sound as well as the sound in the mix, which is almost as good as the microphone and interface I spent several thousand Yuan years ago. So I think it's a big step up in technology."

(GR13).
Figure 5.4. Music production setup of GR 13 inside his college dormitory in 2016, with only a laptop computer, midi keyboard and a pair of monitor speakers (Source: courtesy of interviewee)

For those Gufeng artists who are not professionally trained or don't have access to studio equipment, the ability to create music at home-based studios has created an opportunity for the development of "all-round" musicians. These artists can cover all areas of their music production stages from songwriting, performing, recording, mixing, and mastering all the way to online distribution. Compared to more professional settings, they are more comfortable producing music at home for a more relaxing experience, and they have full autonomy to decide on the songwriting, music arrangement, recording, mixing, and so on, without compromising the quality of the end product. This has become a standard practice for Gufeng production, which was shared by one of our interviewees during the discussion:

"In fact, I don't think the difference is particularly big, and I even think I do better with some of my home recordings because you have different experiences in the studio [than at home]. You can be completely relaxed at home, and you don't have a psychological pressure if you sing badly, but if
you're in the studio, you still have to take into account the feelings of the recording engineer. If it does not work at one or two takes, you have to keep going over and over, they may become crazy [Laugh]. Another thing is that if you change to that environment, you may feel uncomfortable, which may affect your performance; maybe you will feel uncomfortable wearing their headphones, or the microphone tone is too sharp, there are all kinds of details that will make you feel 'ouch, the feeling is not the same,' and you may not perform properly. So I personally prefer to record at home; I actually know a lot of Gufeng singers who are not too fond of going to the studio, [quite a lot of them] never going to the studio, but only doing it at home."(GR09).

Professionalization and Commercialization of Gufeng Artists

With the development of the genre and expanded audience base from other Nijigen cultures, and further the general public, Gufeng music has evolved from a niche culture of self-entertaining among hobbyists and fans to a commercialized music genre of high-quality content, an expanded audience base, and professional music business practices. However, its process of development directly resulted from the professionalization and commercialization of Gufeng artists, whose skill sets (e.g., singing technique, music production, composing) have to be constantly improved to meet increasingly professionalized standards. This transition process from being an amateur music lover to a professional artist could be seen in many Gufeng artists, especially the earlier ones. Despite achieving early fame with their talent in the early stages in a more inclusive and non-commercial environment, they often need to improve their skills to reach the next level.

Gufeng music was often criticized by the general public for a lack of originality since this grassroots music genre was often associated with covers from Japanese or Cantonese songs, with many Gufeng singers directly copying other's work without giving credit to the original composer (Wang, D., 2019).
However, the situation changed significantly over the years, with a large number of high-quality original Gufeng music created due to the increasing efforts of artists and various Gufeng groups focused on original Gufeng music. Gufeng music had started to become a stand-alone music genre, not limited to the reproduction of mythology-based game music or new age music (Tong, 2015). Also, the production of Gufeng music became increasingly professionalized as Gufeng became more commercialized during its development, with more budget endorsed by gaming companies and music production companies. As a result, more professional Gufeng production could be seen, with collaborations between singers, professional songwriters, lyricists, producers, the use of high-quality recording equipment and facilities (see Figure 5.5), and professional session musicians recording traditional Chinese instruments instead of synthesizers (Tong, 2015).

Figure 5.5. GR13’s new music studio with professional music production setup in 2022 (Source: Curtsey of interviewee).

In the digital era, with new technologies and tools reshaping musical culture
and new forms of online communities emerging, a new learning environment has formed for alternative ways of music education and practices (Salavuo, 2006). Without formal training with personal tutors in conservatory or other music programs, the process of improvement for Gufeng artists differs from conventional professionally-trained music education. Many of the Gufeng artists have to go through the process of trial and error, learning to create music by making it, as well as utilizing the abundant online resources available, such as songwriting or music production tutorials, communicating with other creators within the online Gufeng community, or directly gaining support by meeting other more professional artists in order to improve, as mentioned in the interview with a Gufeng artist:

"How to improve? Mostly self-learning. In fact, in the Gufeng circle, most of them are self-taught. There are also many people, for example, I know some sound engineers in the circle, now working in the game companies helping with the sound effects, they are also self-taught to do those things, music production, or mixing, through some online tutorials. And later I have friends to teach me a lot, since I met some friends that are really good at this, they are professionals, so I started to learn from them."(GR08).

The professionalization of Gufeng artists is directly correlated with the commercialization of the genre. The successful development of Gufeng music from a niche online subculture to a new trend with an increasingly large fan base showed great business potential. Many business opportunities appear, often provided in the way of well-paid cross-sector collaboration outside the music industry, such as producing commissioned work for Gufeng-styled games and Web series, or performing live shows and attending events at comic conventions. The production has shifted from lower quality and non-original content to a standalone music genre with higher quality and originality. The Gufeng community has also expanded, with artists once from other parts of the
Nijigen music culture also joining to seek opportunities, such as online singers/influencers who used to sing only Japanese Animation music, as well as professionally trained artists who studied traditional music performance.

Despite the rapid development of the genre and the expanded audience base, working as a full-time professional Gufeng artist is still rare since only a tiny proportion of them have the talent, dedication, as well as the opportunity and luck, to become top artists. Even those who could make it, many top Gufeng artists are still part-time musicians beside their full-time jobs outside the circle, as the revenue is not stable enough for them to consider quitting their jobs.

Compared to pursuing their careers and making money as purely Gufeng artists, a large number of them are finding work opportunities in the Gufeng community behind the scenes, such as being music producers, recording session musicians, educators, and so on. In this way, they do not need to worry about their income as artists, constantly put out new content, or actively maintain a fan base. Instead, they could earn a more substantial income by working full-time on the backstage. The content they put out may not fully support their living; however, it serves a promotional purpose to showcase their working capability and could be discovered by other Gufeng artists who are seeking help. As discussed with full-time Gufeng producer:

"[In terms of income] That must come from behind the scenes. Because I don’t have many fans. And also, I haven’t released a song for a long time. Today I checked, I actually earned 3 Yuan [roughly 0.24GBP] today on NetEase Cloud Music. With this kind of income, and someone may occasionally ask you to sing in a commissioned project if lucky, that's all I got as a Gufeng artist for now. Since I am currently not big on social media, I would still rely mainly on being a producer behind the scenes."(GR13).

However, it seems like they are more or less moving away from the original
vision of their music dreams as Gufeng artists through the process of commercial development and market expansion. Gufeng production has become more professional and segmented to meet higher standards and business demands. Many Gufeng artists once driven by self-entertainment and self-expression are now moving away from creating Gufeng for their own sake and are more or less changing their attitude to a more serious and professional approach when facing career opportunities to work in the music and related industries, such as music production work assisting other singers, commissioned work for online games, working as online influencers, product or event endorsements, and so on.

5.3.3. Gufeng Circle on Social Media Platforms

Online Gufeng Communities on Social Media

As a music genre based purely online, the development of Gufeng music heavily relies on online communities within social media platforms. In addition to the online music sharing platform 5sing in the earlier stages, music streaming platform NetEase Cloud Music, video streaming platform Bilibili, social media platform Weibo, and short-form video and live streaming platform Douyin (the Chinese version of TikTok) are the main platforms for the Gufeng community, providing online spaces for Gufeng-related distribution and circulation. For example, on China's largest Nijigen video-sharing platform Bilibili, the overall number of Gufeng-related videos played on the service had reached 100 million in 2017 (Li, 2018). Also, based on the survey conducted by Tong (2015) among 1783 Gufeng fans, 91.08% of Gufeng fans consume Gufeng music through China's largest social media platform Weibo, of which 26.08% listened to their first Gufeng song on the platform.

Despite these platforms serving different functions with different market segmentation, they are all considered as social media due to the emphasis on
media distribution and online-based social interaction. Apart from providing musical and video content, these platforms often incorporate various social networking features and encourage users' interactions based on shared interests, resulting in various large and small Gufeng communities on multiple platforms. This greatly increases the publicity of Gufeng music and expands the audience base, especially among the Nijigen community and the younger demographics (Wang, D., 2019). These users, on the other hand, also engage in the further development of Gufeng music, thus shaping the development through the participatory culture on social media platforms.

**Gufeng Fans on Social Media**

Jenkins identifies four forms of participatory culture: Affiliations, which refer to informal or formal membership in online communities in various forms of media, such as social network or music platforms; Expressions, which involve producing new creative forms, such as digital sampling, modding, fan fiction, and mash-ups; Collaborative problem-solving, which involves working together to complete tasks and develop new knowledge as teams, such as Wikipedia and crowd-funding; and Circulations, which involve shaping the flow of media at the bottom-up level, such as blogging or podcasting (Jenkins, 2006).

In the case of Gufeng, Gufeng fans' affiliation is often shown in their membership of various fan groups or interest groups on social media, which provide them a sense of belonging within the Gufeng circle. Moreover, these online groups are often private or have certain barriers to entry, such as authentication questions designed by the group's administrator, to ensure that only true fans have access to enter the group. In return, being a member of such a group also means having certain types of "privileges," such as the opportunity to closely interact with the artists within the group or access "welfare" (福利), which includes limited online resources shared within the group, such as exclusive musical content, photos, or greeting messages from the artists that
could only be found in the group. The group chat is often not just about sharing and communicating about Gufeng music, but also involves casual chatting about day-to-day life. Nonetheless, as a fan in a niche genre like Gufeng, being a member of the group could bring a collective identity and a sense of belonging. One of the Gufeng fans shared her past experience in adding to a fan group:

"There were not so many people in the group when I added. Maybe it was less than 100. So it was OK. I felt that the circle was relatively small, and although we say that we are fans, the artist is not arrogant at all, like regarding himself as an idol or anything like that. He will still talk with everyone, and the atmosphere is good. Then if you want to add to this group, you will answer some questions to verify whether you are a fan or not, like naming two of his songs […] There are some welfare benefits if you join the group, maybe the collection of his songs, because if you search on the Internet, a lot of old songs don't have resources so you may not be able to find it. So he will be in the group sending some group files, which are non-commercially distributed music collections, and then you can download them. And then there are some ringtones as welfare, maybe it's for New Year's Eve, or voice messages saying happy birthday, to talk to you to sleep." (GR12).

One major way for fans to participate in the form of expression is through social media's comment section. The comment section not only offers regular users a function to reply and interact, but also a way for them to directly participate with the content itself and add more value to the original post. When an artist posts a new song, the fans will participate in various ways in responding to the song, and the best comments may be shown on top of the comment section based on the "like" counts received from other users, as discussed by one of the respondents:

"For example, if a musician releases a new song, or a link to a music video, you can see the comments below with many talented people who comment on
it, whether they are sentences or some lyrics made by themselves. It really makes you feel 'Wow, it's awesome!' And then there will also be some people who will, uh, paint their own illustrations, to match this song. It's kind of like 'a master hidden in the folk' [高手在民间]." (GR05).

In addition, the comment section also provides a space for storytelling and collective feelings among regular users, allowing them to express their own feelings after listening to the music and gaining resonance with others, which sometimes even goes beyond the topic of the content itself. The most notable example would be user participation in the comment section of NetEase Cloud Music. Compared to mainstream Western streaming services that focus on the deep catalog and audio quality, NetEase's main competitive advantage is its social networking function and the vibrant comment sections. Many top songs on the platform have more than 100 thousand comments (which shows 10w+ on the platform), creating a unique listening culture on the platform. Based on the interviews with the Gufeng fans, our respondents often use NetEase Cloud Music in such way, listening to music while browsing through the comments at the same time. One interviewee shared her view of the experience on NetEase compared to listening to music offline:

"For example, I have a habit when I listen to a song; I will check the comments at the same time. I think this is the difference. If you listen to it alone, you can only express your feelings on your own, kind of like self-amusement. However, if you listen to it with this app, you may see others' reactions to the song, and some comments are very touching. Also, there will be some comments that may bring you to some new experiences which you don't have when you listen alone, which is very interesting. So instead of one person listening to the song, you could find out that so many people are feeling the same way." (GR07).

The collaborative problem-solving of fan participation on online Gufeng
music is shown in the collaborative relationship and support between fans and artists, such as various crowd-funding projects. Commonly seen in the Gufeng community, crowd-funding is a way for online Gufeng artists to initiate new projects with the collaboration of their fans and seek funding without the involvement of record producers and labels. In return, fans could also receive limited edition physical records and merchandise by being donors. Since Gufeng music content was often freely available online, crowd-funding is also considered the main way for fans to financially contribute to the artists and show support. In 2015, The Seaing (汐音社) released its fourth album Renjiancihua (人间词话), a tribute album honoring 19th-century poet and historian Wang Guowei (王国维), on 5Sing's crowd-funding page. Expecting RMB 260,000 just to cover the budget of the production, the campaign quickly gathered RMB 670,000 from loyal fans only in the first round of the campaign, finishing with a total of RMB 820,000 and 6,000 physical album sales (Xu, 2019). One of our respondents shared her experience of buying the 2018 crowd-funding album of the same group:

"Many of them sell their records at the Comic-Con, also do crowd-funding on 5Sing, because they are limited-time offers, also in limited quantity, they would always be snapped up very soon, and you can't buy them later if you want to [...] There is a Gufeng group called The Seaing [汐音社] which I really like. They have a lot of crowd-funding projects, but the quality of their albums is also quite high. They have an album called Dunhuang Dingruoyuan [敦煌定若远]. I remember this album because I heard it right after I came back from Dunhuang, so I felt very excited when I heard it and I felt that it was really a great album. When I bought their crowd-funding album, they also gave me a lot of other merch. To be honest, I don't really need these things, but I still got them."(GR03).

Artists on Social Media
As a genre that emerged and developed solely online, social media plays a vital role for online Gufeng artists in terms of distribution and circulation. The majority of Gufeng artists are showing higher engagement in the participatory culture by actively engaging in "self-media" (自媒体) on various social media channels such as NetEase Cloud Music, Bilibili, and Weibo. This offers them a way to bypass traditional channels such as record labels and traditional media and deliver their content straight to online users. These social media platforms also provide an alternative space nurturing the growth of upcoming artists and facilitating the commercialization steps for newer genres such as Gufeng music.

Apart from making and distributing music alone, Gufeng artists can easily connect with other like-minded artists on social media, providing collaboration opportunities and collective problem-solving that break geographical boundaries and expand their offline friend circle. Gufeng artists can simply find and select potential collaborators based on their past works online and directly present themselves in the same way to seek out collaborations. Due to the ease of networking with other collaborators through social media channels compared to offline, it is very common in the Gufeng circle for artists to form different Gufeng groups or engage in online collaboration projects, which bring more opportunities for them to be heard. According to an interview shared by one of the artists:

"There are some musicians that I know, not just singers, but maybe some arrangers, lyricists, and then some illustrators as well. I think they are very good. I found them through other people’s reposts, and then I would actively seek their cooperation. Some will become collaborators in reality, from online to offline, and then there are also some people that could become real friends." (GR08).

As Gufeng music has evolved into a more commercial genre, Gufeng artists rely more on social media to engage with their fan base. In a way, they are losing some autonomy as pure artists by putting effort into "public relations,"
whereas it has become essential for Gufeng artists' career development, especially for a genre like Gufeng, as success is directly linked to the number of followers. In today's social media landscape, with an abundance of content and talented artists competing for scarce attention, both new and established Gufeng artists have to follow similar paths as online influencers by working on their online personas, regularly posting content, keeping up with the latest trends, and interacting with their followers to maintain valuable online traffic.

When asked how to keep up with the attention or "Redu" (热度, online popularity, similar to online exposure or "clout") on social media, one of the respondents, an established Gufeng artist, responded:

"I think I didn't have this kind of consciousness until recent years. I didn't think about the word 'Redu' before, or I didn't think that the frequency of new content was THAT important, right? That is, you must have a certain exposure over time, a certain amount of works uploaded, to remain active on various platforms, and not to be forgotten [Laugh]. [...] There will also be other ways to maintain exposure, not necessarily writing new songs. This includes posting something similar to Weibo [microblogging] on platforms such as NetEase Cloud Music, and then chatting with fans in QQ groups, and then chatting with them during live streaming. Well, something like that. Now there are live streaming, offline performances with everyone, and then some derivative works, including videos. I just started doing vlog [video blog] this year, and I plan to stick to it. I think no matter what kind of materials, if it can reflect your personality or some connotation of your work, I think they are all very good and very helpful." (GR08).

Despite established Gufeng artists having to engage a variety of non-musical activities on social media, these activities hold deeper meanings for Gufeng fans, driven by the mass fans' urgent need to connect with their idols. Apart from the traditional social media channels, much of the direct artist-fan
interaction today takes place on live streaming platforms such as Douyin (Chinese version of TikTok) and Kuai. Compared to the traditional celebrity-fan relationship, live streaming brings more authenticity and casualness, allowing artists to establish a sense of intimacy with fans. According to one Gufeng fan who enjoys watching her idol's live stream:

"They will do some live streams, like chatting with fans. They will occasionally do voice chat [‘Lianmai’ 连麦, a function to publicly voice chat with another user when live streaming] during the live stream, so that fans can chat with them. It's very happy to find out if they are live streaming. Sometimes if I'm under pressure, it will reduce a little bit. It’s a great pleasure to watch them live, and listening to their songs will make you feel better […] I felt like watching him doing a live stream is just like hanging around with them closely, that is, you will feel the distance suddenly become closer, like close friends doing a video chat […] I would also interact with him by typing in the message box down below, to send some words from my heart, just some words to show support, like keep it up or something. There are many people sending messages, so he would choose a few comments from time to time. If someone asks questions, he will also choose some questions to answer. Because everything refreshes very fast, your message may be buried immediately after sending, so who got picked is all depends on luck." (GR06)

5.4. Beyond the Niche - The Commercialization and State Endorsement of Gufeng Music

5.4.1. Commercializing Gufeng to "Guofeng"

Out of the Gufeng Circle

After several years of continuous development of the Gufeng genre as a whole and expanding its fan base, the music genre has moved from an online
Subculture to the mainstream popular culture. In 2016, the Gufeng concert "Xinshiji - Guofeng Gala Concert" was held at Beijing National Stadium. Organized by Miman Culture Media, the first Gufeng promoter and content provider derived from the famous Gufen group MMQM, the concert was the largest Gufeng event of all time, with 42,000 tickets sold. It was considered a milestone for Gufeng music's entry into the mainstream (Li, 2018; Wang, B., 2019). Subsequently, Gufeng music has become "out of the circle (出圈)," a term used in China's fandom culture to represent the popularity of a certain star or event spreading not only among its own fans but also among more people in the general public.

Interestingly, in order to promote the genre to a wider audience, Miman renamed the genre in the title of the concerts, introducing the term "Guofeng music" (国风, translated as national Music) to replace the former "Gufeng music" (古风, translated as ancient music). According to an interview with Gu Zhenyu, a Gufeng artist and the founder of Miman Culture Media, "Both Gufeng and Guofeng are forms of music that have transformed from excellent traditional Chinese culture. In our definition, 'Gufeng' is short for 'Huaiguzhifeng[怀古之风], which means 'tribute to traditional culture.' However, the Chinese character 'Gu [古, ancient or old]' is opposite to 'Jin [今, today or new], ' which could make people feel outdated. We changed it to 'Guo [国, nation],' to elevate the name to the level of national identity so that more people will accept it." (Li, 2018).

After the 2016 concert, the usage of the term Guofeng became prevalent, especially among people outside the original Gufeng circle, to be used as an all-encompassing term to describe all music genres (e.g. Gufeng, Zhongguo Feng, Chinese traditional music, Chinese folk music) related to traditional Chinese culture. It was further generalized to describe the collective of all cultural products representing the excellence of traditional Chinese culture and history (Wang, D., 2019), including games, music, artifacts, and more.
Rather than relying on various forms of Nijigen culture and communities to expand its popularity, Guofeng music at this stage started to become a distinctive cultural form that could not only represent the Chinese version of Nijigen culture but also serve as a key element of Chinese domestic cultural production. Guofeng music started to move beyond the two-dimensional space and entered popular culture by featuring in various games, movies, TV series, and reality shows, significantly increasing its popularity. People outside the Nijigen Gufeng circle were introduced to the genre. One respondent remembers the first time she found out her mother started listening to Gufeng music:

"I remember one thing very clearly. In high school, I didn't care about popular music too much, and I listened to Hetu's [Gufeng artist] songs a lot. Then several years later, when I was in college, my mother suddenly recommended the same song to me, and then I looked at her and said, 'Mom, isn't this the song I listened to in high school? Why are you starting to listen to it now?' [...] I was shocked. That is to say, although my mother likes listening to music, she is definitely not the kind of person who would listen to this kind of music, maybe because there are still some popular elements in it." (GR12).

Commercialized Guofeng Music

Gufeng music, under its new title Guofeng, took the opportunity to become fully commercialized, joining the force of China's rapid development and the domestic music and entertainment sector led by major online intermediaries to become a part of mainstream musical culture.

Firms in the digital music sector realized the rapid growth of the fan base in Gufeng music and its potential economic value, actively involving themselves in the Guofeng business. The largest Nijigen content provider Bilibili announced that the Guofeng-related user base had increased 20 times in 5 years from 2012, thanks to the growing cultural consumers among the younger generation with
middle-class backgrounds and higher education (Chen, R., 2017). Similarly, in 2016, the total number of Guofeng music plays on NetEase Cloud Music throughout the year exceeded 10 billion, a 374% increase compared to the previous year (Li, 2018). In 2017, recognizing the increasing popularity of the genre, streaming service NetEase formed a strategic partnership with Miman Culture Media for Guofeng music promotion, content licensing, and co-production of offline events.

The commercialization of Guofeng music was fueled by large amounts of capital acquisition and investment. Online platforms, as well as venture capitalists, saw the huge potential of the development of Guofeng music and the underlying online consumerism and fandom culture. In 2017, being the leading content provider in the Guofeng market, Miman Media received nearly 100 million Yuan (£11.8M GBP) in B round investment (Chen, 2017), after the previous 63.5 million in 2016 (£7.47M GBP), resulting in the company's estimated worth of up to 700 million Yuan (£82.4M GBP). Tencent Music Entertainment (TME), on the other hand, acquired the music sharing platform 5sing, which predominantly distributes Guofeng music, to promote the development of Guofeng Music and seek new Guofeng talent. In 2018, TME and Guofeng group The Seaing reached a long-term cooperation deal, with TME providing RMB 10 million (roughly £0.85 million GBP) in funds to support The Seaing's team of singers and musicians in content production, in return for exclusive distribution deals on TME's platforms (Xu, 2019).

The vast business and financial input of firms entering into the commercial development of Guofeng music is correlated not only with the internet traffic of the increasing audience base but, more importantly, with the prospect of today's online consumer culture of fan economy. The successful business development and business models in terms of crowd-funding albums, merchandise sales, and offline concerts of independent Guofeng music in the earlier years showed
the possibilities not only to gather more Gufeng fans but also to monetize their support and consumption in various ways. Apart from being musicians producing music, Gufeng artists with large fan bases are often idolized, carrying more meaning to their fans and creating more motivation for fans to purchase records, merchandise, and attend concerts as a way of financially supporting their idols. One of our respondents is a strong supporter of Gufeng singers Hetu (河图) and Ershen (二婶). She collects their physical records (despite only listening to their songs online), attends comic conventions, queues up for signing sessions, and buys merchandise such as posters and T-shirts. When asked whether she is comfortable seeing online Gufeng artists perform in person, as some respondents only prefer seeing their idols in the Nijigen world:

"Yeah, of course I can accept that, ha-ha. It's so great to see them perform live, and even seeing them in person feels great to me [...] I consider them [Hetu and Ershen] as idols, maybe idols and musicians all together. I think they are making music so earnestly, and their songs are so good, that's why I buy their records and see their live performances to show support." (GR06).

Moreover, the commercialization of Gufeng music is heavily related to its expansion into related cultural industries, most notably the gaming industry, film and television industry, and advertising industry. During its earlier development, it was common to see Gufeng music being used not only as music per se but also as a supporting element for other forms of art such as Gufeng-styled comics, games, or audio dramas in the Nijigen world to provide a unified mood as a way of transmedia storytelling. With the increasing popularity and commercialization of traditional Chinese themed games, movies, TV series, and reality shows, the new Guofeng music started to move beyond the two-dimensional space and entered popular culture, adding value to various cultural productions. In November 2019, the hit show *Chenqingling* (陈情令) held two consecutive Guofeng Music Concerts in Nanjing, featuring the main actors
singing its Guofeng original soundtrack. With ticket prices ranging from 627 to 1980 Yuan (roughly £74-233 GBP), all tickets were sold out within five seconds. In addition to the offline ticket sales, online users also needed to pay 30 Yuan (50 Yuan without VIP subscription) to obtain "electronic tickets" before they could simultaneously watch the live streaming of the two Guofeng concerts. By the end of the concert, the broadcast room had reached 3.267 million viewers, generating almost 100 million Yuan (£11.8M GBP) in online revenue (Zhang, 2019), opening a new profit model in the entertainment industry driven by the fan economy.

The Effect of Commercialization on the Gufeng Circle

The process of commercialization of Gufeng music is strongly affecting the original Gufeng music production in terms of copyright. After the commercialization of Gufeng, it is valued by people outside the Gufeng circle in the same way as other commercial genres and is inevitably scrutinized for infringement practices. However, this is a very complicated matter in the case of Gufeng since it is one of the trademarks of Gufeng music for artists to often cover other's songs with different lyrics and singing styles as a way of circulation within the community. This complexity is accentuated for non-commercially oriented Gufeng artists who engage in Gufeng music covers as a hobby, often without considering copyright implications. As a result, the Gufeng circle has to change its view on the issue of doing covers and comply with the rules of the rest of the music sector. As shown in the interview with a Gufeng artist:

"In fact, I think this situation, of course, exists. Some people are aware of copyright issues but still willingly do these things; those are the people who should be ashamed. But in fact, most people being criticized are those who did early work, like the old cover songs I did on 5sing, later being downloaded by someone and passed on to other music platforms. That is, in fact, not quite an intentional move or, uh, illegal conduct, but I was also being criticized, and
others are in the same 'pot stew.' So nowadays in the Gufeng circle, we are quite afraid of these things." (GR09).

Also, as the copyright enforcement regulation tightened in China around 2015, and more artists started to create original Gufeng songs and make a profit from licensing, the view on copyright also changed in the Gufeng artist community. Having original composition has become the gold standard for more matured Gufeng artists, and asking for permission before doing a Gufeng cover has also become the "politically correct" way in the Gufeng community.

"Now if we want to cover a song and publish it on the music platforms, I must go to the owner and ask for authorization. I will do a cover only after receiving consent, and then I may release it to the platform. It's not easy to cover a song nowadays. This happened around 2018, the second half of 2018. I've been aware of this since I started releasing my own original music." (GR09).

As opposed to Gufeng artists going out of the circle, there is another trend for popular artists going into the circle. As Guofeng music enters the Chinese popular music scene, the convergence between original Gufeng music and the professionally made Guofeng music can be seen, with many professional artists who once did not belong to the online youth culture now joining and putting out Guofeng themed content to follow the trend and expand their audiences. Compared to the early Gufeng music, which was dominated by user-generated content, an increasing amount of professionally made content has appeared.

Another issue that early Gufeng fans are mostly concerned with regarding the commercialization of Gufeng music in the Guofeng era is that the over-commercialized genre could potentially jeopardize the core spirit of Gufeng music. With the entry of profit-driven music companies and new Guofeng artists lacking authenticity in their music, Gufeng was being appropriated by the firms in the music sector, becoming merely a label to follow the trend as a business
In 2018, NetEase Cloud Music collaborated with Miman Media to host a music gala, "Guofeng Jile Ye" (Guofeng Carnival), in Beijing National Stadium, where the 2016 Guofeng concert was held, as well as live-streamed on NetEase’s live-stream platform. Interestingly, compared to the last time, the carnival featured two groups of lineups: "Nijigen singers," mostly popular online Guofeng artists in the two-dimensional world, and "three-dimensional singers," who are established artists in popular music scene. To clarify the mixed lineup, NetEase claimed that "No matter if it is Hip-Hop, Rock, Pop, or Electro, as long as it includes traditional Chinese elements, it is Guofeng music. (Song, 2018)"

In the same year, online video streaming platform iQiyi hosted a Guofeng-themed musical talent show, Guofeng Meishaonian (The Chinese Youth), with the aim of reviving Chinese culture, promoting Guofeng music, and discovering new Guofeng idols. Despite the online show bringing Gufeng music to a broader platform with many Gufeng songs being recognized by the general public for the first time, the show nonetheless received mixed reviews for over-commercialization and lacking authenticity (Wu, 2018). Here is a Gufeng fan arguing about the poor selection of judges in the show:

"I don’t think it’s bad to promote this, and many of the contestants in the show are also excellent. For example, Ershen [a well-known artist in the Gufeng circle] is also in it, right! However, many things may be made for commercialization purposes. For example, some judges, such as Huo Zun [a popular artist], are professional pop musicians engaged in traditional Chinese styles, and many songs sound very Gufeng, or Guofeng, which can be brought to the discussion. But I really don’t understand why Ju Jingyi [an idol in the girl group SNH48] appeared there. Is it because she looks like an ancient person? [laugh]. In fact, I can’t understand this, whether you want to really promote it or just want to grab people’s attention in the name of Guofeng and do some hype.
I think, at least, I don’t think I can accept it.” (GR05).

5.4.2. State's Support on Guofeng music

State-Supported Traditional "Guofeng" music

As argued in the contextualization chapter, political and ideological meanings are deeply embedded within arts in socialist China, where the Chinese communist party and state government actively participate in the development of music and other forms of art, using music and arts as a means of promoting ideologies since the start of the socialist movement in the 1930s. Despite the decline of political influence on music at the end of the cultural revolution, the Open-Door Policy and economic reforms since 1978 loosened the political control of popular culture and encouraged the market economy, resulting the music development in the post-reform era more secular and commercial. However, the state's vision of influencing China's music development never disappeared. Instead, it has become more subtle and ambiguous. On one hand, the Chinese authority encourages the development of music to carry more official functional roles for social cohesion while limiting its unofficial entertaining roles to an extent that does not conflict with socialist values such as ethnic unity or patriotism (Fung, 2007).

As a result, two trajectories of China's music development have appeared. The first one promotes state-supported official art such as the ideologically-embedded traditional Chinese music, folk music, or military-themed songs directly funded and produced by the authority and its cultural organizations. The other trajectory involves the controlled development of market-oriented Tongsu music (通俗音乐) or popular music with a mass audience base, which primarily serves an entertainment function and is ideologically secular. It is loosely controlled by the authority in terms of cultural policies and censorship to meet its socialist values. An example of this can be seen in the government's tension
with the development of rap music in China (Flew et al., 2019).

However, due to the high popularity of Tongsu music compared to state-supported official art, the state-funded cultural production and events could not keep up with the increasing demand and popularity of Tongsu music. The situation intensified after the process of digitization, which heavily disrupted state-supported art, including various Chinese traditional art forms, by the online popular culture. In the digital era, state-controlled media channels such as China Central Television (CCTV) or China National Radio (CNR) no longer have the same influence compared to other newer media channels. The market inevitably favored the more catchy and entertaining online popular culture, especially among the younger generations. For example, compared to the tradition of watching the annual Chinese New Year Gala, the government-produced TV show broadcasted on CCTV with a nationwide audience, which often carries a grand narrative of political vision, family-nation identity, and collectivism, many young people nowadays are more attracted to the New Year's Greetings (哔哩哔哩拜年祭), the live stream Chinese New Year show hosted by Nijigen video streaming site Bilibili. It features various online celebrities on the site and user-generated videos and music performances. Despite CCTV's efforts to attract younger demographics by inviting various top celebrities and adopting various online catchphrases in the show, it still fails to compete with Bilibili's low-budget live stream show among younger viewers, which shows the cultural and aesthetic division of the two trajectories of musical culture (Ma & Ren, 2020).

Incorporating Young People through Guofeng

With the development of Gufeng music, especially when Gufeng music becomes Guofeng and enters mainstream culture, and becomes increasingly recognized by young people and the general public, another trajectory has emerged where the authority can praise the existing popular culture that suits
its ideology and visions and cultivate its development in a spontaneous way, which yields better results rather than producing the official high art in a manner hoping the public will be attracted to.

The newly developed, domestic Guofeng music has become an important resource for the Chinese authority to rejuvenate itself and reach the younger generation, with its organizations working closely to promote its development. For instance, the Communist Youth League (CYL) has been actively supporting the development of Guofeng music by regularly sharing Nijigen Guofeng music on its official Weibo account and promoting Guofeng artists. They also organize events such as the "China Guofeng Music Development Symposium," which consists of government officials, representatives from digital music platforms, Guofeng labels and promoters, and Guofeng artists, hosting non-profit campaigns to promote domestic cultural brands and an awards gala (see Figure 5.6) that attracts 20 million views on live-stream platforms (Li, 2019). Party-run media People's Daily has also gotten involved, launching a collaborative campaign called "Guochao Night" with Kugou Music to support Guofeng music by hosting live-streams and offline events (Ge, 2019). This resonates with the emerging Guochao (国潮, translated to Chinese trend) movement representing the rise of domestic consumerism of culture content and products targeting young people.
Similar to the incorporation of mainstream celebrities into the state media's political ideology-embedded Chinese New Year Gala discussed in the Contextualization chapter, the direct engagement of state organizations in promoting Gufeng music is driven by the authority's reliance on Gufeng artists with huge popularity and influence over the mass audience, which state-supported artists often lack. On the other hand, Gufeng actors (e.g., labels, artists) are also willing to get involved with these organizations to gain more official exposure and recognition, which will be beneficial to their future development.

However, when compared to the invitation of popular music singers to perform in the Chinese New Year Gala, where the state needs the celebrity's popular influence to attract people to CCTV's official platform, there has been a shift in the influence today due to the failed impact of traditional state-controlled media and the growth of online culture among young people. As a result, the state has adopted a new strategy by actually engaging with online cultures and trends and actively pursuing online "Redu" (exposure) in order to be heard. According to one of our respondents, she sees this new phenomenon of state organizations entering to promote Gufeng music as a way for the authority to "crouch down to speak with young people":

"First of all, the audiences who like Guofeng music are mainly young people, and the main group of fans, including the producers and the singers, are also young people. So, like the Communist Youth League and the official media, they will certainly pay attention to this aspect, as same as Anime, Hanfu, or other fields in the Nijigen community. Xi Dada [Uncle Xi, nickname for current leader Xi Jinping] also proposed about Cultural Confidence. It cannot be
improved just by shouting slogans or preaching. It depends on what young people like. First of all, you must, kind of like crouch down to speak with young people, to start with young people's preferences. If the official pays attention to these things, it could receive the liking or recognition of young people, and it can be said that the official seems different from people's traditional impression of the authority." (GR07).

Cultural Confidence and National Pride

In recent years, Chinese government organizations have become active agents using various strategies to actively engage in music development to resonate with national ideologies (Fung, 2007) and to seek resonance with the younger generation. Moreover, it is also a crucial element for the state to nurture domestic music content in order to create "Soft Power" (Hunter, 2009). In the digital age, nurturing and promoting domestic music content has become a main strategy for the Chinese authority to compete with other countries' cultural input, such as the unequal flow of Korean and Japanese music into the Chinese market (Chua, 2012). With the state's involvement in the current "Guofeng movement," Guofeng music has transcended its original meaning as a youth culture that fused traditional music with online Nijigen culture. It has now evolved into a broader narrative associated with Chinese cultural confidence. According to one of our respondents:

"It could create this virtuous circle. I think it is possible that more people will pay attention to it, and more people will see the good side [of traditional culture]. At least, in the past, when I was studying, it seemed like J-pop and K-pop were quite popular, right? Now I feel that, in addition to these foreign cultures, this kind of Chinese culture has gradually developed, a popular culture with its characteristics. It may not be able to spread to the world, but at least in China, it may be more popular than before. In the future, it may be that children in China will not only listen to foreign music but also be willing to listen to these domestic
Guofeng music, which are fashionable, but also can promote the domestic traditional culture." (GR07).

The state's reorganization and active support of Guofeng music work have justified the once "unorthodox" Guofeng music according to professional standard, which often faced criticism in the past for poor quality and lack of originality. By developing Guofeng music as part of the Guofeng movement, which brought the genre to the national level, Guofeng fans, who once felt proud of traditional Chinese culture, now experience increasing cultural identity and national pride as a community (Wang, D., 2019). As discussed with a Guofeng fan on Guofeng music and patriotism:

"It's like [the popularity of] many Western festivals or Western music nowadays. Can we return to our country's culture and use these poems and literature left by our ancient ancestors to compose music? We are not necessarily inferior to other cultures. Just like the movie I watched, 'Our Shining Days'[Guofeng music-themed film], there is a quote 'it doesn't matter even if we are weak. We have partners!' Right? Even though us being Guofeng fans, many people may think you are a bit corny, [They may say] 'Why do you like this kind of thing?' or something, but isn't being part of this kind of thing is more proud than them? After going abroad, I can learn your western musical instruments or some of your skills or whatever, but we can say that our musical instruments are still the best and carry more history, right?" (GR05).

However, some Guofeng fans, especially the earlier ones, are not entirely pleased that the genre has been appropriated by the authority and politicized. They prefer to "stay in the circle" and stay away from the recent fad of Guofeng. Here is the discourse with an old Guofeng fan concerning the national support on Guofeng music, which she is not fond of the newly developed Guofeng music and people's changing reaction before and after the State's recognition:
"I think people have more recognition of Gufeng now. One thing is that listening to Gufeng has become a kind of 'political correctness.' Some people listen to Gufeng just because the state supports it, so you must follow the trend [...] After the support from the state, it will certainly develop better with more effective promotions than fighting alone, and the production quality will also improve. But, you will lose something else when you get these, like me, a very picky person [laugh]. I think Guofeng music is good, but the taste is gone, that is, the feeling of hanging together in the circle is gone, far gone [...] In fact, the feelings are quite peculiar. The feedback I once received as a Gufeng fan was very negative. Now more and more people will recommend to me, saying this song is good and that song is good, and then when I found it out, I was like 'hey, isn't this the Gufeng musician I heard when I was a child?' At that time, this singer was not famous at all, and now very famous. In fact, I feel a bit strange in my heart; I think everyone seems to accept Gufeng now. And for the so-called old fan like me, hearing these new songs, I feel very complicated. I may not be that open to express that I like Gufeng music as before." (GR02).

5.5. Summary

This chapter provides a comprehensive exploration of the development process of online Gufeng music, a unique Chinese youth culture that pays tribute to ancient Chinese culture and aesthetics in the digitized and online environment. This chapter is focused on the Gufeng circle, a group of young people blending traditional musical and literary elements with contemporary popular music and worldview to construct their own participatory culture. The chapter also discusses how the influence of firms and policymakers outside of the Gufeng circle could interact with this community and co-shape the development of this culture and add new values and meanings to this musical culture.

The context and early development of the genre were examined in section
5.2. Gufeng music, an online-based genre developed in the early 2000s, is defined by its achievement in reviving the "Huai Gu Zhi Feng" - the tribute to traditional Chinese aesthetics. Combining Chinese traditional music elements and classical Chinese lyrics and spoken-parts, Gufeng music captures the essence of ancient Chinese culture while retaining a unique flavor of traditional music. Gufeng's early development was fueled by grassroots participation in online gaming communities, with amateur artists collaborating to produce and reproduce content. User-generated content platforms played a crucial role in its growth, providing distribution channels and fostering a collaborative cover singing culture. The early stage of Gufeng music was characterized as amateur work with lower musical standards, also lacking originality and copyright awareness. Despite that, advancements in music production technology and online communities enabled more talented artists to participate in the creation of Gufeng music, and quality content is being consumed, valued, and circulated by other users within the online Gufeng community, paving the way for the genre to grow to its mature form and gaining popularity.

Gufeng thrived as a niche genre driven by mass grassroots involvement and collaboration. Drawing inspiration from Jenkins's concept of "participatory culture," section 5.3 highlighted how the Gufeng circle produces, consumes, and circulates Gufeng music from the perspectives of fans and artists to shed light on the community's involvement and its role in constructing and shaping the genre's growth. Their cultural roots between traditional Chinese and contemporary Japanese Nijigen culture also significantly influenced the circle's distinct tastes, characteristics, and narratives. The section also discusses the development process of Gufeng artists in this participatory culture. With the advancement of digital music production technology, DIY music production became widespread, allowing artists to produce and reproduce music with ease in home-based studios. Initially driven by amateur artists as a hobby, Gufeng music and alt-lyrics covers were freely shared on platforms like 5Sing with little
production quality and copyright concerns. However, as Gufeng's popularity grew, the genre evolved into a marketable music genre, leading the artists to rethink their engagement in Gufeng to become more professionalized and commercialized. Lastly, social media platforms played a vital role in Gufeng's development, in terms of distribution, circulation, and audience engagement, where fans actively participate and collaborate with artists through comments and crowd-funding, while Gufeng artists use social media to engage with fans, establishing intimate connections.

At last, section 5.4 discussed how this niche genre of Gufeng music has transitioned from an online youth culture to mainstream popular culture through the engagement of players outside the individual level, the firms, and policymakers, and the effects on the Gufeng circle by their engagement. This shift was marked by the firm's participation in Gufeng development to extract its commercial values, leading to the "nationalization" of Gufeng music as part of the "Guofeng" movement to appeal to a wider demographic. This was driven by its growing fan base in Gufeng and the broader Nijigen culture and the recognition of its economic value by online platforms and venture capitalists. State endorsement also played a significant role in promoting Guofeng music as a means of cultural confidence and national pride. However, the commercialization and state support have raised concerns among some Gufeng fans about the potential loss of authenticity and the core spirit of the genre, and nostalgic about the more intimate community within the niche Gufeng circle.
Chapter 6. Case Study: Elderly Prosumption of Mobile Karaoke Platform WeSing

6.1. Introduction

This case study chapter explores the prosumption of elderly users on China's mobile karaoke platform WeSing. In contrast to the previous chapter, which focused on young and tech-savvy music lovers co-constructing a unique music genre and online Gufeng music culture through innovative digital technology, the WeSing case illustrates how further music digitization, mobile technology and platformization have reached a much broader user base, including once marginalized elderly users, and understand how these "digital immigrants" participate in digital music, socialization, and building their own digital online identities. The chapter aims to delve into the elderly prosumption of WeSing, analyzing the evolution of technology and services in terms of mobile karaoke, understanding the music participation and social interaction of elderly users on the WeSing platform, exploring the cross-level interactions between elderly users, the platform, and policymakers, and uncovering the underlying economic and societal implications concerning elderly engagement in digital music and technology.

To contextualize the case study, Section 6.1 will first explore the background of mobile karaoke service in China, tracing its transformation from a popular entertainment and social activity in pre-digital era to one of the most successful business models for China's digital music providers. The section will then focus on the leading mobile karaoke platform, WeSing, by analyzing its core competitive advantages in social entertainment features and social network building, which have contributed to its large and diverse user base. Lastly, the section will discuss the community of elderly online users and the various motivations driving their use of WeSing.
In Section 6.2, the focus will be on the participatory culture of elderly prosumers on the karaoke platform, examining three aspects: musical engagement, entertainment engagement, and social engagement, to understand the distinctive participatory culture within this community. The first part of the section will discuss how elderly users utilize WeSing's core karaoke functions to practice, record, and publish musical works, allowing them to learn music from scratch and present their performances with minimal barriers of entry. Their entertainment engagement through WeSing's gamification features will also be discussed, which plays a significant role in their everyday usage, with elements such as AI scoring, chart system, and virtual gifts carrying special meanings that enhance their experience on WeSing beyond pure musical engagement. Finally, the section will examine the social engagement of elderly users on WeSing, discovering how they interact and form closed circles of real-life acquaintances for socialization, collaboration, and problem-solving.

In Section 6.3, the chapter will discuss the case of WeSing from both business and societal perspectives, examining the agency of the firm and policymakers that affects this network. The section will first explore how WeSing, initially targeting younger users, captured the expanding elderly generation market with its elderly-friendly features and "freemium" strategy, which shows the underlying business logic of WeSing and its parent company Tencent. It will also discuss how elderly users "resist" the commercial efforts made by the platform and insist on using the app for free. Additionally, the section will delve into the state's efforts to bridge the digital divide among the elderly population, with policymakers implementing initiatives to provide more accessible and elderly-specific digital services. However, the section will argue that the unpopularity of WeSing's "care mode" among elderly users is due to the failure to recognize and support the active engagement and motivation of older users, as well as consider their actual needs for creative expression, social interaction, and entertainment.
6.2. Contextualizing WeSing

6.2.1. The Development of Mobile Karaoke Services in China

Karaoke Consumption in China

For decades, karaoke consumption has been deeply rooted in Chinese culture, with singing karaoke considered a major leisure activity for people of all ages and classes (Fung, 2009). Karaoke, direct translated as "Empty Orchestra" in Japanese, was originally invented in Japan in the 1970s. With this invention, users could sing any popular song available in the format using a sing-along machine with pre-recorded backing tracks. Karaoke as a leisure activity was introduced to China in the early 1990s when large Taiwanese KTV (Karaoke venue) chains started opening franchises in southern China. It quickly spread across the nation, becoming one of the most popular music entertainment activities. In Mainland China, there are not only more expensive KTVs with classy interiors and good services suited for business people, but also large numbers of Wholesale KTVs with larger venues and cheaper prices, scattered throughout every city. At its peak in 2014, there were more than 120 thousand KTVs in operation (Sina, 2021), making karaoke greatly popularized and democratized as one of the top choices for urban nightlife (Fung, 2009).

The popularity of Karaoke in China is related to its cultural and social function, which resonates with the Chinese context. Compared to the stage karaoke settings in bars and pubs with live audiences, common in the West, Chinese karaoke venues are more private and intimate, consisting of many private karaoke boxes that allow people to express themselves without the limitations of musical skills and stage fright. Being a democratized way of music expression, karaoke is not limited by age, and it acts as a "cultural marker" for people, allowing different social groups and classes, including students, employees, businessmen, and elderly individuals, to not only consume karaoke
equally but also showcase their own identities through the selection of songs and the way of consuming (Fung, 2009). Karaoke venues also serve social and community-building functions beyond just singing. They have become places for social activities, ranging from informal socialization to casual business meetings, where people can socialize through karaoke singing and dancing to strengthen their bonds. One respondent mentioned, "Before WeSing, we would just go to karaoke if we wanted to sing. A few old friends would call and contact each other, first have a meal outside, and then directly go to the KTV. Before the epidemic, we would go there twice a month on average [...] We just get together, chatting, singing, and so on. Sometimes if people are singing too loudly in the booth, we even rushed into the corridor and talk. Just sing as you like, and if you feel like chatting, just sit outside and chat, we are all good friends for decades." (WR12).

However, with the increasing availability of new means of entertainment and leisure activities, as well as the development of online karaoke platforms, the karaoke industry is facing a decline in its consumer base, which according to a respondent used to go to karaoke regularly: "Nowadays, I don't go to KTVs very much. On one hand, I am getting busy with work and have less leisure time. On the other hand, it seems that KTV is not the mainstream way for people to entertain and relax. Sometimes if I want to find someone to go to KTV with me, I can't even find anyone. Now I only go to KTVs two or three times a year, but I used to go there every month." (WR07). Data in 2016 shows a large number of KTVs went out of business, leading to a decline of 60% in the total number of KTVs in China (Sina, 2021). The impact of Covid-19 in 2020 further exacerbated the situation, with the total customer volume of karaoke venues dropping by 70% and a decline of 53.3% in revenue from 127.72 billion Yuan in the previous year to 59.69 billion Yuan (CCEA, 2020).

The Birth of Online Karaoke Platforms
With the development of music digitization and the internet breaking the physical barrier of music distribution, people can now access music anywhere at any time. To cater to the popularity of karaoke in China, many software developers and online service providers started putting out karaoke software and online platforms since the early 2000s, enabling people to sing karaoke at home without the need for personal karaoke machines or going to physical venues. Despite the availability of many karaoke software and online services at the time, none of them successfully popularized or had a significant impact on offline karaoke. These early attempts were less successful due to poor design, hardware and software limitations, resulting in a limited user base and poor market performance.

Various early online karaoke software were developed during the 2000s, such as iSing99, iKala, MVBox, and others. These personal computer-based programs offered similar functions to offline karaoke (see Figure 6.1), such as an online catalog for backing tracks and lyrics, audio recording via computer microphone, and other features like key changing and practice mode. However, these early software programs were not well-developed, with messy interfaces, slow loading times, and missed search results, among other issues. Users often needed to pay a monthly subscription to access the full catalog. As a result, PC-based platforms were mainly used for personal practice by karaoke enthusiasts rather than appealing to the general public of karaoke goers. The lack of social features and a stable online user community for offline software made these programs easily replaceable by other new services.
Some community-based online platforms like 5Sing (music sharing platform, 2004) and YY (audio-based chat rooms, 2005) also fulfilled karaoke functions, allowing for social features. In 5Sing, users could search and download backing tracks, record vocals through hardware (microphone, audio interface), and use separate music editing software (e.g., Cool Edit) to self-upload and share finished songs as covers. However, the platform was more suitable for professionals and amateur enthusiasts with experience in various music production software and hardware. YY, on the other hand, provided chat rooms with built-in voice message boards, including a karaoke feature for users to record audio from the computer microphone with the background track played in the chat room simultaneously. Although it served a similar function, sound quality was often compromised by compatibility issues with PC microphones and onboard sound cards unless external audio interfaces with more professional microphones were used. Sometimes, the service failed to produce sound or provided only one channel instead of stereo, requiring
advanced settings to resolve the problem. Additionally, live karaoke could not be recorded and saved without add-on software.

The Rise of Mobile Karaoke

With the development of smartphone technology integrating essential hardware units for karaoke singing (e.g., microphone, speaker, audio interface), software applications, and social networking functions into one portable device, a technological convergence of portable karaoke emerged, offering a more convenient, instant, interactive, and networked user experience. By replicating the same usage scenario as offline karaoke, including singing, entertainment, and socialization functions, mobile karaoke platforms reshaped people's perception of online karaoke, fulfilling their basic and fundamental need for karaoke.

Changba (唱吧) was the first mobile karaoke application to receive huge popularity. Marketed as "karaoke + community," with a focus on music-based socialization and innovative "gamification" features and functions such as chart systems and competitions (Shen et al., 2018), Changba became China's top music application in 2012. Since its launch in May, Changba reached 10 million registered users by the end of the month, and the number continued to climb to 140 million within two years (Bai, 2022). Observing the huge popularity of Changba, many internet companies started offering similar mobile karaoke services to compete in this vast market, including Kugou AcSing (酷狗唱唱), TLKG (天籁 k 歌), and others.

Following Changba's success, Tencent also entered the mobile karaoke market by developing its own karaoke service, WeSing (全民 k 歌, translated as "All-people Karaoke"). Initially considered a side-project accompanying Tencent's core music streaming business, WeSing's potential was not highly regarded by Tencent, as stated in an interview with a Tencent employee: "At
the beginning [in 2014], no one was optimistic about the direction of online karaoke. They all felt that the demand for listening to songs was more rigid and high-frequency than singing." (Chang, 2018). However, soon after its launch, WeSing quickly attracted a large number of users, dominating the mobile karaoke market. In 2017, the platform reached 460 million users (QuestMobile, 2019).

Although WeSing followed the same basic features and business models as Changba, the reason for WeSing's dominance is heavily related to Tencent's strong background and business strategy, which focused on social network building based on real-life acquaintances. WeSing's core strength in the mobile karaoke market was contributed by its strategic development of "platformization," with support from its parent company, Tencent. One aspect is the strategic collaboration between WeSing and Tencent's music streaming platform QQ music, through which the latter shared its exclusive licensing deals from all three major record labels (Universal, Sony, and Warner) with WeSing. This enabled the karaoke platform to acquire a large volume of repertoire at a lower cost, allowing it to compete with competitors like Changba (Chang, 2018). Additionally, for every song streamed on the platform, QQ music provided a feature of "I want to Karaoke," directly linking to WeSing and providing additional features while increasing traffic to the platform.

Apart from QQ music, WeSing also utilized the connectivity of a vast user base and traffic gained from Tencent's social network platforms WeChat and QQ to strengthen its social networking capabilities. Compared with other standalone karaoke services like Changba, where users need to register separately, resulting in a more centralized and anonymous community, most users on WeSing were directed from registered users of WeChat and QQ, as well as their social networks of real-life acquaintances on these two platforms. WeSing thus became an extension of users' social networks, making regular
users' music content on WeSing more easily discoverable, shared, and interacted with within these decentralized networks.

Due to its strategic positioning of decentralized social networking of real-life acquaintances, WeSing attracted a large number of middle-aged and elderly users, and the booming period of older generation internet users also contributed to its rapid development. On the other hand, Changba retained a relatively small market share, benefiting from its early entry into the market, a well-accumulated development team, and a high brand reputation and public awareness, allowing it to maintain a steady market share following WeSing's emergence as a mature product in the mobile karaoke sector.

With the implementation and application of newer technologies such as artificial intelligence (AI) and machine learning, new forms of mobile karaoke services could enter the market in the future, providing users with more diversified functions and experiences. For example, Alibaba's karaoke platform, Changya ( 唱鸭 Singing Duck), introduced new functions beyond merely karaoke singing, such as AI-assisted virtual instruments for self-accompaniment and AI composing on user-generated lyrics. Since its launch in 2019, the number of Changya users exceeded 10 million within one year (Sina, 2020).

6.2.2. The WeSing App

Overview of the App

WeSing is a mobile karaoke service developed by Tencent in 2014, which includes multiple functions such as music recording and mixing, sound fixing and altering, AI scoring, chorus singing and battling with friends, and social networking. Tencent categorizes WeSing as a comprehensive social entertainment platform rather than merely a music app or a mobile karaoke
machine. Its slogan, "You Actually Can Sing! (你其实很会唱歌！)", shows WeSing's inclusive and indiscriminate nature. Rather than providing an online community for karaoke enthusiasts like Changba, WeSing differentiates itself by encouraging all people to participate in karaoke, with or without musical skills and talents.

Generally speaking, WeSing has developed functions and services in four aspects to fulfill people's needs, including the need to sing anywhere at any time; the need to fix and embellish their own sound; the need for creative expression; and the need for socialization. Its core functions include the basic karaoke features of song request and song recording. Known for its editing and post-production features, users can not only edit and re-record the song line by line for better results, but they can also freely select various post-recording sound effects, such as various reverbs from "music studio" to "music hall", to embellish the original recording. WeSing also introduced the AI sound fix (修音) function to automatically adjust the user's singing notes to the ideal pitch if enabled. Once the song is finished recording and editing, users could either locally save the work for playback or choose to distribute the song via WeSing, and share on other major social networks such as WeChat. As a social media platform, WeSing itself also has various social networking features such as personal home pages, social media feeds, friend followings, virtual gifting, and other entertainment and gamification features for users to engage music in a socialized manner.

Although WeSing provides a variety of music and entertainment features and services for users, such as singing karaoke with a large catalog available and engaging in various entertainment and social features, the basic function of WeSing is completely free. Compared to the American karaoke app Smule, which only offers a 7-day free trial for the same function followed by a yearly subscription fee of $39.99, or Apple Music's newly developed karaoke function,
which is included in its £10.99 monthly subscription, WeSing adopts the unlimited "freemium" model. The platform provides mobile karaoke services to users entirely for free, and the platform's profit relies solely on advertising and other value-added premium services. This strategy enables a mass user base to participate in mobile karaoke freely without any economic obstacles.

**From Singing Tool to Entertainment Platform**

Since WeSing's main user base is not only serious music hobbyists but also the mass online users who have an interest in singing, the platform is thus positioned itself to become an entertainment platform rather than merely a mobile karaoke service provider. WeSing has developed various mobile-based entertainment features to make the singing more entertaining, which makes the app go beyond a singing tool only for karaoke hobbyists. WeSing implemented various gamification features, which designed various game-like features and functions related to karaoke singing to capture the entertainment value and attract users for more frequent and longer usage.

WeSing's AI rating system is one key feature to attract users to actively and continuously use the platform to achieve better scores. WeSing will extract various information through codes from the user's audio file and compare it with the original sample, based on the level of compatibility of five dimensions of pitch, rhythm, emotion, breathing, and technique, and give out individual scores in every melody line. Based on the user's performance of these dimensions, WeSing will automatically rate the song from the lowest score C to B, A, S, SS, and all the way to the highest SSS. By adopting the scoring system, it works as a systematic and effective way for users to reflect on their singing, find flaws, and improve their singing technique to achieve a better score.

Another feature to increase user activity is the "top chart" (榜单) system on the platform, such as the WeSing National Chart, Daily Chart, and the Local
Chart shown on the homepage of every individual song. The chart system could offer a sense of achievement as well as a sense of competition on top of regular karaoke singing. As opposed to singing and sharing the song with a small circle of people, it is a way for the user's work to be presented to the greater audience, as works on the chart have the opportunity to be exposed to more listeners, especially those who want to learn the song through comparison of other's performance, or other competitors who want to be on the chart as well.

WeSing also implements various in-app games for users to engage with the app. One example is the game of Qiangmai (抢麦, fight for the mic), an in-app game where a group of randomly selected users rush to answer and sing along with song clips of partially provided lyrics and backing track. Each game has 12 song clips to be played, and the player scoring the most wins. One match of Qiangmai only lasts around 10 minutes, providing more entertainment value to users compared to recording a karaoke song, especially in fragmented times.

WeSing's Social Features

One of the notable features of WeSing is the emphasis on social networking mechanisms, creating a similar social setting of offline karaoke singing for users instead of singing online alone. In the past few years, WeSing has revised and updated the platform several times, focusing on adding increasing numbers of social interaction functions. The service has launched "People Nearby," where users can discover WeSing users nearby based on geographic locations. The service also enhanced its private messaging functions to include voice messages and photos, and developed its group chat function for multiple users to communicate. For multiplayer singing, WeSing has also continuously strengthened its interactive singing room for users to sing karaoke in a group setting rather than individually, launching functions such as multi-user KTV, friend battles, friend-matching sing room, split-screen chorus singing, live stream, and so on.
WeSing especially relies on social interactions in a more private setting with real-life acquaintances such as friends and families. In WeSing's official description, it shows the platform as "the world's first social karaoke app for acquaintances, combines song practice mode, friend battle, and other specialty features. It can also interact with friends by sending bullet screen comments, download quickly, and compete with partners for the champion!" Compared to its competitor Changba, which focuses on building a large and public community of online users within the app, WeSing's smaller acquaintance-based communities are formed more naturally, stable, and enables more spontaneous user interactions. The large scale social interaction on the platform is supported by the massive user base of Tencent's social media platforms WeChat and QQ. When registering in WeSing, users can log in with their WeChat or QQ account more conveniently rather than registering a new account, and by doing that, all the contacts of WeChat or QQ who use WeSing are automatically added as friends. This could save users time and energy looking for friends on the platform and help build a social circle instantly after the user starts using WeSing.

6.2.3. Elderly Users on WeSing

Being Digital Immigrants

This case study mainly focuses on the mobile karaoke prosumption of the elderly generation in China. The elderly generation is defined as people aged 50 and above who regularly use the mobile karaoke platform WeSing. This age range is based on the starting point of China's legal retirement age. Unlike the younger generation, who grew up during or after the digitization and web 2.0 era, making them technology-savvy "digital natives" accustomed to gathering information, entertainment, expression, and communication on social media, the elderly generation is often considered "digital immigrants." They lived most of their lives without digital technologies and the internet. However, as digital
technology becomes more popularized, cheaper to acquire, and easier to use, it has inevitably entered people’s everyday lives and become increasingly inseparable from society. As a result, people from the older generation are also starting to learn and participate in the online community, collectively becoming a part of internet culture. WeSing, being a mobile karaoke and social entertainment platform, has become one of the first online platforms to see a growing user base among the elderly generation. They are not only passively consuming digital music but are also actively involved as prosumers in the creation, distribution, and circulation of content, building their own participatory culture based on their digital identity, shaped by the distinctive cultural and historical context.

WeSing provides a way for regular users, including the elderly population, to actively engage in music, or "musicking" (Creech, 2019), with relatively low barriers to entry, both in terms of technical and musical difficulties. According to interviews with its elderly users, the WeSing app is quite easy to use, especially compared to its predecessors of various karaoke software and computer-based online platforms. The mobile-based app is directly linked to WeChat, which is an application that most elderly users are already familiar with. Within WeSing, it also offers clear guidance for new users to use the app and its functions, and the interface is intuitive and friendly for new users.

Also, as WeSing is promoted as a social entertainment karaoke app for all people, the majority of older WeSing users are not already karaoke enthusiasts or music lovers. Many of them are regular users without any musical training or experience in singing, and some are even not comfortable singing at the beginning. Many elderly WeSing users first encounter the app through listening to their friends’ work shared on social networks and being intrigued by its functions. They further learn to download the app and start imitating, transitioning to the role of active content producers, and gradually develop their
interest in singing. Eventually, they become karaoke enthusiasts who are loyal to the platform. This contrasts with younger generation karaoke app users who are already interested in karaoke singing and use WeSing as a singing tool.

This could be explained by the older generation's lack of experience with other social media and entertainment platforms and their utilitarian view of digital technology. While younger digital native users have experienced many media channels tailored to their different interests, such as sports, video games, and fashion, leading to user bases on those platforms being more hobby-oriented, many digital immigrants among the older users seldom use other apps apart from the pre-installed ones on their phones, and utilitarian apps such as WeChat, which is vital nowadays for communicating with friends and family. WeSing, often recommended by their acquaintances over WeChat, has thus become their first and only social entertainment-related app, as suggested by more than half of the elderly interviewees.

On the opposite side, since they lack experience with other entertainment platforms and social media in general, their experience on WeSing is also different from that of younger generation users. Older generations WeSing users often have more viscosity on the platform, spending 60% more time on WeSing compared to younger users born after 1995, and 230% more time compared to users born after 2000 (Shi, 2021). They sing for long hours, repeatedly re-record one song for achieving higher scores, use various tools to edit and embellish their songs, and carefully manage their homepage to select the best work to publish and showcase the best content possible. Compared to the more "dedicated" older WeSing users, younger WeSing users often use the app in segmented time and use it as a singing tool for practicing songs.

Online Identity and Expressions for Elderly Prosumers

With differences in generations, personal backgrounds, and culture, the
older generation also has a different cultural identity compared to the younger generation, as well as the same need for cultural expression. Due to age, retirement, social status, and other factors, the older generation often lacks the same level of expression and communication in their everyday social life compared to their younger years, resulting in their social identity being more marginalized. Especially before digitization and social media, the cultural identity of the older generation only existed internally, separated and scattered across the nation, without a proper medium to express it. However, the development of digitized media has not only provided a new way of communication but also new means of self-identity and expression. Smartphones and various applications being more accessible, interactive, connective, and easy to learn for the older generation compared to personal computers create an opportunity for them to use social media platforms as extended selves and form a closer bond within the elderly community to express their own cultural identities in various ways.

On WeSing, karaoke becomes the medium for elderly users to express their cultural identities. There is a large collection of decades-old and nostalgic songs available on WeSing that are mainly popular among elderly users, from revolutionary "Red Songs (红歌)" to military songs, traditional folk songs, regional opera and plays, and old popular songs from the 80s such as those sung by Teresa Teng. Through listening, singing, and sharing these old songs, they can express their identity musically and build their online identity in the community with people who share the same experiences:

"Sometimes I also like to sing old songs on WeSing. Many are old songs from decades ago. Older people are more nostalgic; singing some familiar old songs could make me feel like returning to that era. Like our group of educated youths [知青, students who attended the Down to the Countryside Movement], every time we meet up we sing the old songs from the time when we met, as
they resonate with our feelings. Like the scent of a thing, when you hear this song, sometimes it will directly bring you back to the state when you were young. We are old, so we think differently than you." (WR11).

The Pursuit of Mental and Physical Wellbeing

The extensive use of WeSing by older generation users is also related to the pursuit of entertainment beyond simply enjoying the music itself. As they age, the life pattern of the older generation becomes more stable as they gradually move away from professional occupations and social life. In return, they have more free time after retirement, which could lead to a sense of boredom and meaninglessness. Based on interviews, many older generation users use WeSing as a way to pursue happiness and a meaningful life. When asked "why do you use WeSing?" many interviewees answered, "just to be happy." Some users stated that after singing karaoke with WeSing, their sadness and pressure go away. By using WeSing, they can break the status quo in their daily routine and express themselves in a new way that shows their outgoing, active, and happy side, reflecting back into their more "mundane" everyday lives:

"[WeSing to me] It's just that I could have one more hobby, since I'm not so busy now after retirement. I just need to find more hobbies for myself, just to kill some time. Sometimes after finishing chores, and I don't want to watch TV, I just go to sing in WeSing for a couple of hours as an extra hobby. Sometimes I even use WeSing while watching TV." (WR12).

Another popular reason for elderly to engage in mobile karaoke is considering the potential health benefits. Many older users claim therapeutic value or general health benefits perceived after long-term singing on karaoke apps, such as improving the respiratory system, increasing lung capacity, lowering blood pressure, or enhancing mood and general wellbeing. Singing
online karaoke is thus often treated as an "exercise" for the older generations, which, according to one elderly WeSing user who believes in singing's therapeutic effects:

"Singing on WeSing is good for my lung capacity. It's not much different from running. It belongs to the whole body movement because when singing, the whole body, face, and everything are exercising. The more you practice, the more 'Qi' ['lung energy,' a traditional Chinese term] you have. Like me, in my group of 100 people, I am one of the best in terms of singing because I have enough Qi; they can't catch up with me. Like singing high notes, they can't sing."

(WR08)

6.3. The Participatory Culture of Elderly Prosumers on WeSing

6.3.1. Music Prosumption on WeSing

Learning to Sing from Scratch

As the app proposes, WeSing is a social entertainment karaoke platform for all people, with or without a singing background. The majority of older WeSing users are not regular Karaoke enthusiasts or music lovers; many of them are non-musical at the beginning without any musical training or experience in singing, and some are even not comfortable singing. However, by using WeSing, they can find a way to try out their singing skills by simply recording a song and listening back without any pressure. This opens up the opportunity for many older people to engage in musical activities.

"I am not familiar with this. It was introduced to WeSing three days ago [2017] by one former colleague. I just thought it was fun, fun, and a little bit curious at the beginning. After singing a song, I found out 'oh, my voice was like this.' It turns out that my singing is OK as long as I don't sing out of key, and I felt a sense of achievement. I always think my voice is not good, and I am not
good at singing... after I sang the first song, ‘I really miss you’ [真的好想你], ‘hey, I found that I actually can sing.’” (WR10)

WeSing not only acts as a tool for people to adopt digitalized music production but also enables the self-learning process through active participation in the app's music learning features. One common theme of the discourse between the respondents is their process of self-learning. In the app, WeSing not only offers guidance for users when they record, to monitor their pitch and rhythm in real-time but also offers a practice mode in which users can practice the song line by line. Moreover, the app also offers premium features, such as tutorial videos for individual songs and even personal tutorials where users can send their recordings and get feedback from registered tutors on WeSing, which costs from 20-80 Yuan (2.4-9.4£) per song. One of our younger respondents used both of these premium services to improve his techniques and put out better content:

"It will briefly explain what details to pay attention to, which techniques are more suitable for this song, and then help you to make a better sound. Then it will teach you which line to sing louder or use or add emotion. It can help you sing this song well in a short time. I need to be a VIP member to use these functions, so I bought the membership. If I want to sing a song, I may sing it myself first. If it sounds good, I will upload it. If I feel that my singing is not good, I will go through the tutorials. There will be many tutors offering different versions for me to choose." (WR07).

Older users are also eager to improve their singing skills on WeSing and put time and effort into practicing. However, when discussing the music training features with older users, they are not too willing to use these premium services to improve compares to the younger users. Instead, they use different methods to improve without paying, such as listening to the original soundtrack and exercising each line repeatedly in the exercise mode, learning singing
techniques from tutorial videos elsewhere, discussing with other users, and so on. For instance, one user shared her way of practice:

"I like to exercise, so I listen to the song I am practicing when I go for a walk every morning. I usually learn a new song once a week, learn how to sing it for a week, go through the details of the song, and basically start recording it the next week. [...] This software may sometimes pop up messages saying 'your breath is not enough' after I sing, and recommend me their teachers, which will definitely cost money. But instead, I would go to TikTok to search videos for popular singing techniques, and then I can see how to make 'bubble sound [technique called vocal fry], ' and then some breathing techniques. I started out roaring at the very beginning. But I like to improve myself, so I learn these skills. Sometimes when I walk the dog, I practice my voice according to the teacher's instructions." (WR09).

Presenting Content on WeSing

WeSing provides a way for users to move from consumers to become prosumers, actively participating in digital media by creating and distributing their work and presenting themselves on the platform. Compared to the younger generation expressing themselves on social media becoming customary, people in the older generations who are new to the Web 2.0 environment have to cope with the pressure to share their work, such as having doubts about sharing their voice online, not being confident in their singing, and being afraid of being commented on and judged by others. One respondent shared his thoughts on posting songs on WeSing:

"I was timid at the beginning. When I stared to use WeSing in 2016, I was timid because after listening to my singing, I felt it was not good enough. So I hesitated, thinking whether I should put it out. After a while, I think I'll post it anyway, at least I can sing again when I get better. [...] Some of my classmates
said to me 'Ah, I don't dare to post songs on WeSing.' I said, you just do it. We are here to entertain ourselves, not to serve others. Don't be afraid of being commented on by others. If you think you are good enough, just send it. People could comment whatever they like, just don't take it personally. If you are too concerned about this and that, you won't even dare to play." (WR12).

Due to the desire to produce content with top performance, as well as the lack of confidence in their skills and the fear of negative comments on WeSing, elderly WeSing users often post well-crafted content, which ends up taking extra effort in producing the songs by constantly re-recording every song and comparing different takes to eventually select and put out the most ideal one. Rather than considering WeSing as a Karaoke platform for casual singing, they are treating their content more seriously, have higher standards for their uploads, and generally spend more time and effort on every song compared to the younger users:

"When I started, I was very enthusiastic, but the result of the recording was not very good. Once, I listened to all my songs ever uploaded, more than 300 songs. I found that the songs recorded in 2019-20 were much better than those recorded in 2016. Just because at the beginning, I sang it two or three times and thought it was alright, so I uploaded it. In fact, I didn't know how to do the right articulation and breathing technique because I didn't even know these concepts at the time [laugh]. Now, I pay more attention to these. For some songs, I even did 50 or 60 takes just to get the best one." (WR12).

Based on the observation, it seems like older WeSing users treat their presented content as an extension of their best self, and they like to use various ways to "Photoshop" their work by manipulating and embellishing their musical content. With the help of various user-friendly sound editing tools developed by WeSing (see Figure 6.2), they would like to try out different in-app functions and
sound effects to achieve a better end result, such as the single-line editing (单句修改), the function for users to edit and re-record lines that are underperformed; AI Tone Fix (AI修音), which is the modification feature designed for users who want to "cover up" their singing by matching the audio to the right pitch and rhythm of the original one; and the Intelligent Sound Effect (智能音效), which adds different reverb (e.g., simulation of recording studio, music hall) and equalization on top of the original audio.
Figure 6.2. A screenshot of WeSing’s editing interface, with features including master volume, equalization, AI sound fix, single-line editing, various post-recording intelligent sound effects, and cover selections.

One respondent shared her experience on experiment with different sound modification features: "In WeSing, there are many scenes for you to choose from, such as the KTV mode, the intelligent mode [AI Tone Fix], which helps you automatically fix the tone, and then there is the feature to make you sound like a chorus, like two people singing together. It also has many special effects, like many simulated scenes. [...] Like the recording software, which can add special effects in the later stage. The effect is OK. Anyway, it depends on what kind of special effects you want. Then, for example, after you sing a song, if you think it is not good, you can edit every line separately. Basically, everyone can do it. It's very simple. It's not a professional thing, you just click a button." (WR08).

After working on their musical content, some older WeSing users would also like to use additional non-musical materials to embellish their social media posts when they put out a song (see Figure 6.3). They may share some pictures they shot personally or download from the internet, or write out some short lines such as daily greetings or sentiments to add more meaning to the song itself. Some users also learn how to make custom album art, which appears as the background when the song is played, as shared by one respondent:

"There are also functions that allow you to release your own pictures as the background when the song is playing. You can also record a video when singing, but I don’t want to show my face. People at our age are not as beautiful as young people. We usually send out some pictures, like pictures of my dog, or the calligraphy I wrote, landscape pictures, and so on. Sometimes I find a landscape picture online and put it there. For example, for morning greetings, I will select some photos of flowers, download them, put them in my photo album,"
and then I can make them into the cover art. If you listen to this song, you can see my photo on this song." (WR06)

Figure 6.3. A screenshot of a respondent's published work which she uses her Chinese traditional style paintings as cover album of her song

6.3.2. Engaging in the Gamification Features

Improving through AI Scores

WeSing has developed the AI score system that automatically evaluates
every song recorded on the platform. The scores range from the highest SSS to SS, S, A, B, and C. This feature not only provides a standardized system to evaluate users’ performances and offer quantified feedback for each melody line, which is not possible in conventional Karaoke booths or karaoke software, but also adds entertainment value, encouraging users to sing songs repeatedly to achieve high scores.

However, from interviews with respondents, many users complain about the inaccuracy of the score system. It can only analyze performance in limited measurable aspects such as pitch and rhythm. While it might guide users sing more in tune with the standardized reference programmed for each song, the AI score does not automatically represent the overall musical performance:

"WeSing will give you a score, but the score is not absolute. Sometimes, the scores you get on this platform are not 100% reasonable. But it’s all entertainment; I don’t take it too seriously. Sometimes, I get a hundred points when I finish singing this line, and after singing the next line, which sounds pretty much the same, how can I only get 80? Why is the score so different? I just say forget about it; just don’t think about it. If the total score is alright, I will send it out anyway. Because it is a machine scoring system, there may be some criteria for different factors, like rhythm, volume, long note." (WR11).

Nonetheless, for many WeSing users, the score they receive for their work is still seen as the official, unbiased, objective, and scientific evaluation from the platform. Especially for users in the older generation, who are often unsure of their singing skills due to the lack of experience in musical training, live performances, or music competitions, they might rely entirely on the scores they receive and consider it the only way to measure their performance. Despite the inaccuracy of the AI score, many WeSing users still cannot simply ignore the scores they receive, which also affect their decisions on whether the performance is good enough to be released to the public. Despite knowing the
inaccuracy of the AI score system on musical performance, one of our respondents would still re-record one song many times until achieving a better score:

"If I share the song in my WeChat friends' circle (朋友圈, WeChat Moments), I'm sure they will say I sound good even if I sing poorly. However, I have my own standard. If I can sing better on this song, I must repeat and record it again, just to improve a little. When I started playing in 2016, some of them even got C and A, so I will repeat it again and again, not to settle until the letter S appears. After I improved after re-recording a few times, I give them a listen, the version I got an SS is very good, but not so much for another version which I got SSS. So later on, I worked hard in the direction of S, and now I get SS or SSS a lot. No matter how inaccurate it is, it's still better than getting a C or an A." (WR12).

Competing in the Charts

Another gamification feature of WeSing that is often brought up and taken seriously by older WeSing users is the chart system. For every single song available on the platform, there are two corresponding charts for the top 100 performances: the National Chart for all-time best performances and the Daily Chart for the best performances that refresh daily. Each individual song has a separate chart, greatly enlarging the user base who can be on it. Being selected on the chart also brings users a sense of achievement for being recognized and approved by the platform. Despite questioning the accuracy of the chart system, one respondent shared her experience when her song got selected on the chart:

"I released a song called Nostalgia on the 27th. And it went on the chart as third place. Although my voice was not very well, I still got on the chart if I am lucky enough to get SSS. [...] It [the chart] changes every day. I was fourth the day before yesterday and third today. I pay attention to it every time I release it, but if I don't see my name on the list, I don't look up the chart again. And
sometimes even the first or second place is not that great, because we are all amateurs after all." (WR10).

Compared to conventional karaoke and karaoke software that are more casual and relaxed, the chart feature in WeSing could also provide a sense of intensity and competitiveness between users. They would be more engaged not only in the process of practicing and recording but also after the release of the song if they are lucky enough to be on the chart. They may take their charted song more seriously than other non-charted ones, go back to the page and check if the position has moved, listen to other user's songs on the same chart, and compare each other's work. In fact, one of our respondents refers to the chart as a "national competition" and notices that one of his top-performing songs is being reviewed by other "contestants."

"Like there are some songs, if I find that some people sing it well, I go to their homepage and listen, even if I don't know them. After listening, I could learn and sing that song as well. There is a national competition in WeSing. Sometimes I could be in the top 50, then there will be some people I don't know who come to my homepage to see me sing. They won't give you flowers (virtual gift) or give you likes. They just come in to listen to my songs. It seems that they just want to compare. You have sung this song, and I have sung this song. Let's compare and see how it goes."(WR12).

However, the mechanism is neither fully transparent nor musical-oriented; it is more like a way for WeSing to attract user engagement and interaction. Based on the information enclosed on WeSing, the chart position is related to the "virality" of the user, including the user interactions represented by virtual gifts (both monetary K coin and free Flowers) received, listening count, and other factors. To climb up on the chart, many older WeSing users try to engage in more social activities on the platform as a tacit agreement:
"WeSing will tell you about your place in the national ranking and will send you a notification. Then you will be very excited when you see it, just like your art entered the exhibition of a gallery. Like the Jiangnan Watertown [江南水乡], which I recently sang, it has been on the national chart for more than ten days. [...] Now, Jiangnan Watertown is still on the list, but it has dropped recently because it's based on how many people listen to it every day. I only share it with my friends and family, so not too many people listen to it every day, so the ranking drops. But you can check what's new on the list. You can listen to their songs and leave them comments and flowers. At this time, they might listen to you, so that both can have more exposure [...] When other people listen to your song and send you flowers, in fact, their subtext is that they want you to listen to their song in return, make comments, and send flowers. That's because the ranking has something to do with the number of listeners, comments, likes, and gifts. In fact, this is the effect WeSing wants. At the beginning, it was fresh to me, but now we don't care much about the popularity and ranking, just enjoy singing itself." (WR09).

Sending Virtual Gifts

Being a social entertainment platform, WeSing carries a strong social function and meaning for its users, especially among their social circles of real-life acquaintances directly adopted Tencent's other social networks WeChat and QQ. The need for mutual socialization, bonding, and support between these users enables the opportunity for the platform to develop and capitalize on virtual gifts as the social lubricant facilitating relationships among users.

Two types of virtual gifts are offered on the platform: "Flowers," which are free gifts users can get from other users or complete daily tasks, and the more valuable K coins (K币), mainly available for purchase. The scarcity of virtual gifts makes them an "asset" in older WeSing users' socialization. Compared to likes and comments, sending virtual gifts to each other's content symbolizes
more attention to the work and attaches more importance to the relationship. One WeSing user has collected a large number of flowers over the years, which he often sends in large numbers to others' work at once to show stronger support:

"Every user of WeSing has his or her own small circle. It may be your classmates, colleagues, or others who introduced you to the platform. These are the people who would leave messages on your homepage. Other users who you don't know is up to you [whether to socialize or not]; you may listen to their songs, click on them, listen to them, and that's it. You are not familiar with them, so you don't need to send likes or give them flowers. Unless you feel they sing very well, sometimes I will give them more than 60 flowers at once. I don't give them one by one. If I think it sounds good, I will give them a lot at a time [...] Every day, WeSing will give you flowers as soon as you log in. After that, they will give you flowers when you release a song. You logged in for seven consecutive days, and you will also get a free spin. I save all these flowers for many years, more than 10,000 at least." (WR12).

Interestingly, older WeSing users' virtual gift-sending culture is built on the traditional Chinese etiquette of "Lishangwanglai" (礼尚往来), which means the way of reciprocity. For older WeSing users, sending virtual gifts works as a gesture of collaboration to support each other by mutually sending comments, likes, and virtual gifts for both parties' interests. Since most older generation WeSing users are amateur singers with limited followers among friends and families, they rely more on each other's backing to receive a decent amount of comments and gifts every time they release a song (see Figure 6.4). Also, after sending virtual gifts and leaving comments for other users, they often expect that the receiver will do the same, and if so, this act of mutual gifting could last for a long time. One respondent shared her routine of mutual gifting with friends on WeSing to maintain this long term reciprocal relationship with her friends:
"Every time I open WeSing, I'll see if other users I am close to have published new works. If they do, I will send them some flowers after listening. If I send my own works, I will wait for a while, maybe listen to other's songs, and then come back to my work to check if others give me comments, likes, and send me flowers. Some of the netizens I am familiar with would also send me flowers when they see my songs, and also give me likes. It is all reciprocal." (WR11).

Figure 6.4. A screenshot shows that one respondent replied to every user who sent virtual gifts to her work in her own comment section to express gratitude.

6.3.3. Socialization on WeSing
Social interaction based on a closed circle

WeSing is not only developing a singing tool with entertainment features but also creating a social media platform for users to engage in music-based social activities. For many older generation netizens who have not been exposed to social media to share their daily lives on a regular basis, WeSing provides a single and standardized format, making it an ideal medium with a lower barrier to participation. Older users can transition more easily from the more passive audience of traditional media to the interactive new media by creating their content, presenting themselves in a musical way, sharing their works over the online community, and interacting with each other based on a common interest in singing (see Figure 6.5). Through sharing songs on WeChat and WeSing, music becomes an additional bond between older WeSing users in the online space:

"Sometimes, I listen to other people’s works, mostly close friends. I listen to how they sing because I'm familiar with them. I want to know what everyone is doing and how they are singing. 'Ah, he sings this song. It's pretty good. I'll sing it one day as well.' In this way, we influence and encourage each other. Our old comrades sometimes form male and female duets using WeSing's chorus. You may sing the male part. After that, you send it, and I'll fill in the female part. And it will become a work that can be published. [...] Then it can be shared with our own small group, like one of the WeChat groups of our comrades, and people in the group chat will listen and enjoy it with us." (WR11).
Figure 6.5. A screenshot of one respondent's comment section shows comments such as “Sounds good, Thumbs up,” "You sang wonderfully, comparable to the original singer," and "To be able to sing this well as amateurs is already impressive. Missed that era, now only in our old age can we revisit our singing dreams. Thumbs up to you!"

As mentioned in the last section, WeSing emphasizes building a community of real-life acquaintances, with users' social circles based on existing relationships directed from Tencent's social network platforms WeChat and QQ. Compared to other social media platforms (e.g., Weibo microblog, Changba) which are mainly based on virtual and anonymous interaction between strangers, WeSing's social connection is bonded more naturally and offers a sense of safety and intimacy.

Based on the interviews with older WeSing users, most of them are more comfortable interacting with their existing friends and families on the platform, and more cautious and skeptical when interacting with strangers. Making new friends on WeSing is generally not an option for older users as they often stay
in their stable and closed friend circles and may distance themselves or ignore strangers' messages when approached. One older WeSing user shared his experience and thoughts on interacting with other users he is not familiar with:

"In addition to commenting and sending flowers, there is a private message section on WeSing. Sometimes when I finish singing a song, there might be other users sending me messages saying, 'You sing so well, can you teach me how to sing this song?' something like that. I would just tell them that I am not good at singing, and if they want to learn, they’d better learn from the original version because I’m not familiar with them [...] I don’t contact people whom I don’t know; most of my friends on WeSing are people I am familiar with. Meeting stranger users is too dangerous, so I mainly interact with my WeChat friends. That’s my thought. If I don’t know them, I don’t dare to follow them. After following them on WeSing, are you going to communicate with them, and how? I don’t really want to do that." (WR12)

However, with more experience on WeSing over the years, accumulating more followers with opportunities to connect with other like-minded people through commenting and likes, or when real-life socialization becomes limited, some older users might become more accepting of meeting other users online, despite it still being cautious and sensitive and requiring the relationship to meet certain criteria:

"I’ve made some friends who we met on WeSing, one from Guangdong and another from Inner Mongolia. Anyway, we can get along well together. At first, we sent private messages on WeSing, and then I added them on WeChat. I can add people on WeSing if we could share some good conversations, and if I feel like we are not well-suited, I will not add them because I don’t know these people through and through. So later I added these two people; they were both employees with good educations, just like me, not random strangers." (WR10)."
Collaborations and Problem-Solving

The participatory culture of elderly users on WeSing is also shown in the way of collective collaborations and problem-solving among them. The aging process of elderly users makes mastering new technologies and social media more difficult, resulting in a slower learning process compared to younger users when it comes to adapting to digital technology and new methods of music production. However, by working together as a collective, such as completing collaborative works, discussing singing techniques, and addressing general technical issues, elderly users on WeSing have developed a distinct online participatory culture of collaborations and problem-solving, supporting one another to participate in today's social media.

One collaborative function developed by WeSing is the WeSing "chorus" function, which allows users to create collaborative works with others by sharing partly recorded songs or joining other users' existing vocal parts and adding their own voice. After recording the chorus works, the song is considered a collaboration between the users and can be shared by both collaborators. In WeSing, apart from recording songs alone, recording WeSing chorus projects is also popular among elderly users, not only due to the collaborative nature of the function and the entertaining value it brings, but also because it is associated with lower fear compared to publishing a work individually. According to one respondent, singing in a chorus with her friend feels more comfortable compared to completing a work on her own:

"Anyway, I am not good at singing. Sometimes the pitch is too high, or I am singing out of tune or rhythm, but it's just for fun. Generally speaking, I am more willing to sing in the chorus [chorus function in WeChat], which is easier for me [...] Like two friends could join a chorus, we'll discuss who will sing which part, and then I will only send the part I sing, and then my friend will sing the other half, and it could be published by both of us as a collaborative work. Because,
after all, we haven't been trained in music, which is far from professional. It's just entertainment." (WR06)

Elderly users also form online communities to improve their skills and solve musical difficulties. The majority of elderly users do not have access to proper musical training, so they are not able to receive valuable feedback on their work apart from the automatic scoring system. Based on the discourse with older users, the comments received below the published work are mostly mutual encouragement and praise rather than more genuine and critical advices. To seek proper suggestions, they often form or join group chats to have more in-depth discussions with other users to improve the quality of their work. By mutually helping each other and leaving feedback, they are able to be more critical about their work and improve their skills compared to practicing alone:

"We are all music lovers and like to learn from each other in singing techniques. If I recorded a song, I would send it to our choir group [on WeChat]. We have a large group, but a few choir mates with a good relationship formed a smaller group to discuss singing skills with each other. I would say, 'I just sang a song on WeSing, and could you give me some suggestions on whether it's appropriate to publish?' and then everyone listens to it [and gives suggestions]. They might say, 'Listen to this sentence, there is a word that is not clear, and that word is not pronounced right, or this part the voice is too weak, and that part needs to sing a long note.' I would like to ask for their advice, and it really helps me with my work. Because we are really good friends, I feel it's better to discuss these things with them." (WR11).

WeSing not only creates an online space for music-based interaction but also encourages elderly users to solve technical difficulties collectively. When it comes to solving technical issues, elderly users tend to seek help from younger people around them. However, in real life, many elderly users are not able to acquire all the necessary and detailed skills specifically on WeSing
through the help of the younger generation, so they need to work together and rely on each other's help and experience to solve some of the technical difficulties when using the application. One respondent shared her learning process of using the WeSing app with the help of her classmates, and later she passed on the knowledge to others:

"I started to explore the buttons by myself. I just tried them out, and then I roughly knew how to use WeSing. At first, I sang some songs I was familiar with and recorded after I finished singing, but I had no idea about the score, sending flowers, or likes. I didn't find it too hard, maybe it was just a bit confusing when it came to publishing songs. So I asked my old classmates, and they told me how to do it. Like I first thought I could only sing every song once, but then I realized that I could record over and over again, and [I also learned] what the score meant. [...] For me, it was like using computer tools, so I found it pretty easy, but people who weren't so proficient in using computers and mobile phones could find it quite challenging. A lot of my friends would ask me how to use it as they don't know how to use many of the functions. So I taught them what I knew, and gradually, they could all use it. Then I recommended it to my colleagues and friends who like to sing, and they all used it to record songs and shared them with their families, which is pretty good." (WR09).

Community-Based Interactions of Shared Identities

Due to the context of their own history and cultural background, the collective identity of older WeSing users is different from the younger generations. From a socialist economy to a market economy, from collectivism to individualism, from traditional media to new media, Chinese elderly generation have witnessed and experienced the drastic societal and cultural changes shaping their collective cultural identity. Before digitization and web 2.0 affected the older generation, their cultural identity seemed to be forgotten by today's mainstream popular culture, existing separately and individually in
the people who witnessed the past without a proper way to express themselves. However, social media such as WeSing could provide a platform for the elderly community in the same generation with shared values to meet and form a virtual community. Through singing old songs from their generation, they could collectively recreate their online identity through the medium of music.

WeSing respondents WR11 and WR12 were former "comrades (战友)," educated youths who became coworkers from the same farmland during the Down to the Countryside Movement during 1968-1978. With many other comrades in the same farm, these young people who used to live in the city area spent their entire youth in the countryside, which developed unique, lifelong friendships:

"Our comrades still have deep feelings for each other because in that era, when we left schools and our homes, we went directly to the Northern Wilderness [北大荒]. In our community, we all ate, lived, and worked together. We got there when we were sixteen or seventeen years old, gradually growing up from innocent kids to adults, and staying together for so many years. The experience was unforgettable and not easy, so it is a lifelong friendship for us. If you haven't experienced it, you can't feel the experience and impact on us at that time." (WR11)

Even though the members now reside remotely in different cities around the nation, karaoke sharing of Cultural Revolution-era songs in the group has become a regular activity for the comrades to recall nostalgic memories and create community bonding. Through singing and sharing an old song, it works as a nostalgic expression with cultural symbols with meaning embedded within:

"We all like to sing old songs, such as 'red songs' [Chinese revolutionary songs]. Because I also sang and liked it when I was a teenager, I could remember them [...] Like the eight model plays, I can sing any one without
practicing. Why? Because the music was played on loudspeakers in every street, also on the radio since back then there was no TV. We are also very excited after singing these old songs with our comrades in WeSing. We often sing and share songs like 'Miss My Comrades' in the film 'Visitors On The Icy Mountain,' 'very excited and nostalgic.'" (WR12).

6.4. The Aging Digital Society

6.4.1. Capturing the Elderly User Market

WeSing for Elderly Consumption

Although WeSing is popular among all generations, including the increasing and heavy usage among the older generations, the app's marketing was originally targeting the younger generation. It is a traditional trend for digital music platforms to consider younger users as the most valuable user base in the online space, and thus try to rejuvenate themselves to be more cool and youthful in order to compete for the younger users. WeSing also follows this path and puts a major focus on the young users. In their Cooperation Communication Conference in 2018, WeSing's general manager, Mingzhong Ji, stated the platform's four trademarks as "Young, entertaining and social, inclusive, and music-based ecosystem." He also claimed that its younger user base (born after 1990 and 1995) is one of WeSing's core strengths apart from its social entertainment and accurate multi-level marketing (Pan, 2018). To increase its publicity targeting college students, WeSing also puts great effort into holding offline and online events and competitions such as its annual college singing competition "Campus Voice," which in 2020 covered over 1050 universities and colleges with 100 thousand contestants (Dong, 2020).

While WeSing and other karaoke platforms focus on attracting younger users, the older generations of WeSing users have started to take over the
platform, becoming an important component of WeSing's main user base. The free and comprehensive music entertainment function of the platform fulfills the need for the older generation who are looking for a mobile-based entertainment platform for long-term consumption at a low cost. The shared social networks with WeChat (as part of WeChat's vision on music-based ecosystem) also lower the switching cost for older users to participate, as well as the barrier of entry for online engagement and interactions. They are more easily exposed to the app through recommendations from their trusted families and friends and actively create content and interact within closed circles. Based on the 2021 report from iiMedia, WeSing's user base under 25 is 31.3%, compared to 39.5% of users that are 45 and above (iiMedia, 2021). In terms of usage, users who are born after 1970 spend 60% more time on the platform than users born after 1995 and 230% more than people born after 2000. They also use more social functions such as chorus singing, sharing, and messaging (Shi, 2021).

With the increasing number of older users entering the platform, WeSing started to notice this potential new market and the new business prospects. Rather than fighting for the user base growth of the small group of young people in major cities, which becomes increasingly difficult with countless competitions in other forms of entertainment such as net series, short-form videos, and games, there are even greater, untapped markets being overlooked by the platform. The increasing numbers of elderly online users have become the most significant source of new users for internet companies. According to our respondent who was a former employee in Tencent Music Entertainment:

"Many applications have noticed that these middle-aged and elderly users, including those from small cities and rural areas, also have a lot of free time that needs to be spent. Then how do you meet the needs of these people? If it can be satisfied, it could also be a very big business, such as Pinduoduo [budget e-commerce platform], right? The same is true for Kwai [short-form video platform]..."
with a mass rural area user base, only talented people who are resided in bright major cities have the need to present themselves? That we can only do business with? No, it isn't. On the contrary, these elderly people, users in smaller cities, these are huge user groups, because of their huge size, they all have 500 million or 600 million people. If you can meet their needs, even if you catch 20%, you can already make a super successful application. So I think from this point of view, WeSing, also Kwai and Pinduoduo, have actually done something very right. They found a group with enough leisure time, but not enough ways for social or entertainment. Then, by just hitting on one of their needs, it could become a powerful product." (WR13).

WeSing started to pay more attention to this new market and make adjustments to the app to better suit the special needs of the elderly people and keep the steady penetration rate. The platform has enlarged its repertoire by adding "nostalgic songs" and "traditional plays" sections with large numbers of songs popular among the older generations. For those who are not confident with their singing, WeSing even put out the "poetry reading" section where users can select and perform non-musical poetry readings. WeSing has also created other features that benefit the older generation users, such as the "singing academy" offering tips and tricks to sing a song, and the music photo album to assist users in adding their songs into making digital photo albums. To increase socialization with the elderly users, the platform has created generation-specific and area-specific singing rooms for older users to find and interact with other similar users of the same age and location. Its competitor Changba also entered the market for older users in 2021, launching "Peanut Classroom," an educational platform for the elderly generations, providing free live streaming courses including traditional Chinese painting and singing (Bai, 2022).

WeSing's algorithm also helps its users across different age groups to find related content and users that are most suitable for them for a better age-based
user experience. Inspired by TikTok’s groundbreaking AI algorithm recommender system and mechanisms, including collaborative filtering based on user's basic profile, open graph, and interest graph according to the user's social connection and interests (Wang, 2018), WeSing developed similar recommender systems to create a better user experience for its diverse user base. In this way, a young user might see a completely different WeSing than the elderly user, as the app tailors the content customized for every individual user based on their age groups and interests:

"Now it's thousands of faces for thousands of people [千人千面]. A thousand people can see a thousand different home pages on WeSing. This is the first invented by ByteDance [developer of TikTok] in China. This artificial intelligence distribution and algorithm-based distribution mechanism will tag users, and then recommend this tagged content to these tagged users through the algorithm. For example, if you are a user who loves revolutionary red songs, you watched a video of a revolutionary song on WeSing and stay on it for 30 seconds, and then the system will automatically label you as a red song fan. So when you open it the second time, it will push a large amount of content related to red songs to you. At present, all the top-rated apps in China are basically using the same algorithm mechanism, which is to constantly let users nourish or strengthen this cognitive and aesthetic preferences to meet their emotional needs. In this case, it is also increasingly user viscosity." (WR13).

Making Profit from the Mass User Base

As mentioned in the earlier section, WeSing adopted the "freemium" model, in which the main function of the app is free to use, while the VIP subscription offers additional premium services. Priced at 19 Yuan per month, roughly £2.4, VIP subscribers can enjoy several additional benefits, including high-quality soundtracks and audio recording, free audio downloads and exports, free daily virtual gifts, a special VIP badge, and a VIP limited promotional channel to gain
more exposure. However, based on the discourse with mobile karaoke users, few of the respondents pay for the monthly subscription service, and most of them use the app for free. Many of the WeSing users being interviewed claim that they enjoy the free service provided, and they consider the VIP benefits to be less important, making a subscription seem unnecessary.

In this environment of low-paid user penetration, the platform's strategy cannot solely rely on increasing its paid subscribers, but rather on keeping the growth of the mass user base and making profits elsewhere. WeSing and its parent company Tencent are focusing on capturing various non-subscription and indirect commercial values from other value-added sources, such as personalized advertisements, online courses, virtual gifting, and merchandise sales, while providing free service to its users. As a result, WeSing has become extremely friendly to unpaid users compared to those in the West (e.g., Spotify with non-skippable audio ads, or karaoke service Smule with only a 7-day free trial) in terms of user experience, while still maintaining steady revenue income. Together with the live streaming platform Kugou Livestream, TME’s social entertainment sector collectively contributed $1.21 billion in the first six months of 2019 (72.8% of total revenue), compared to $452 million (27.2% of total revenue) contributed by TME’s online music service sector, which includes all of China’s top three most popular streaming services (QuestMobile, 2019): QQ Music, Kugou, and Kuwo (TME, 2021).

According to the discourse with a former employee in Tencent, the core business logic of WeSing is to acquire and keep active internet traffic, which firms could monetize from elsewhere (advertising, e-commerce). In the post-scarcity world of music, attention has become the most valuable resource (Brynjolfsson and Oh., 2012), and internet companies are willing to spend a large amount of capital to develop and purchase popular content and compete with each other to retain users' viscosity in their own platforms. For example,
the various gamification functions (e.g. chart system, in-app singing games) developed by WeSing offer free entertainment to users, engaging them with the app so that users spend more time even outside the normal user scenario of karaoke singing: "The platform wants to attract a large enough user base and then monetize through these users' traffic and attention, such as advertising. This is a very core business logic. How do you keep users? You must have good content, right? The core is that you should have high-quality content [...] Therefore, from the perspective of the construction of the 'content moat,' music is one of the most important parts that must be incorporated into this moat. This is why companies are willing to invest so much money to buy the copyright. Why should he do this at all costs? Because only after the traffic gets big enough, the commercial engines can finally start. Without traffic, everything is impossible." (WR13). Thus, contributed by the free service provided and lowered the barrier of entry of technology/skill requirements, WeSing can achieve wider exposure, leading to market expansion, including the vast aging population in China. The expanded market gives WeSing a vast user base that used to be untapped by the traditional music value chain.

WeSing also profits on e-commerce by selling karaoke-related merchandise. The most notable one is WeSing's self-developed microphone, a portable Bluetooth device integrating microphone, audio interface, and speaker together, with additional features such as noise cancelling, auto-tune, and shortcut keys that are compatible with the app. Priced at lower than 200 Yuan (£24), it not only offers users a better experience and better sound quality but also convenience compared to more professional equipment. In the 12 WeSing users being interviewed, two of the younger WeSing users and one elderly user have bought the WeSing microphone to achieve better results: "I bought a WeSing microphone on Taobao [Chinese e-commerce platform]. It cost 200 Yuan for the microphone, and you can directly connect the microphone to the mobile phone for WeSing [...] In fact, I don't think the sound quality is that much
different, but what is better than earphones is that, emm, for example, sometimes when you sing, there will be popping sounds [distorted sound after a peak signal], or when you sing too close, you may record breathing sounds. This microphone can fix these problems, including the background noise in the room. So now I only use this microphone to record songs." (WR05).

Another important source of income for WeSing comes from its virtual gift mechanisms. The social networking nature of the service has created the opportunity for the platform to generate huge amount of revenue from virtual gift sales. As discussed in last section, WeSing has two types of gifts: the "flower," which users could receive for free from in-app activities such as daily logins or completing various tasks (e.g. publishing a song, sharing the song to social media), and K coin, the virtual gift that costs 0.1 Yuan per coin. The potential profit from user engagement through virtual gifting is the reason why WeSing is building the social network platform on top of the core karaoke function, where users can send virtual coins to each other as a way of social bonding and mutual support. WeSing has created the environment and actively facilitates user interactions and social activities through different mechanisms, such as the user's posting, where the gift received is highlighted on the page and gift senders are ranked in the "gift rank," and the chart system, which is related to the user's virtual gifts received. By offering the free gift "flower," which serves the same function as the paid "K coin," it also works as a way for users to get used to the consumption habit of purchasing virtual gifts.

Also, with the diversification of internet companies entering various entertainment sectors (video, music, gaming, e-literature, etc.) and social media, lateral integration (Shen et al., 2018) has become a prevalent strategy for these large-scale corporations to gain synergy and competitive advantage. In lateral integration, the monetary loss of one particular service (content) will be recovered by the combined profit from other platforms (e.g. e-commerce,
advertising): "Another point is that the business territory is very huge. For example, Tencent Video may burn a lot of money, even if the branch loses money at the end of the year, Tencent will still support them since traffic could be attained on other Tencent's platforms. Tencent has a lot of applications, if one application is not monetizing, the traffic can also be transformed through other applications, right? Because it has a lot of business territory, including e-commerce, entertainment, social networking, and everything, it can have enough ways to monetize as long as they keep these users. Therefore, even if you look at a single product, it will lose money, but if you put all these products together, you will find that it actually makes a lot of money." (WR13).

The Consumption Behavior of Elderly Users

Due to WeSing's core business logic, the platform's strategy and priority are to keep users actively engaged and socialized on the platform as long as possible to generate traffic or data. They then aim to profit from the commodification of user data and create habits of purchasing other value-added elements, such as VIP subscriptions, virtual gifts, merchandise, and so on. This core business logic directly results in the app's development being more entertaining rather than utilitarian. Various functions and mechanisms, such as AI scoring and chart systems, are designed like games to encourage continuous usage. Additionally, the app is developed to be social rather than self-entertaining, encouraging user interaction. The monetary virtual gift system is built on the already existing like and comment function, which serves a similar purpose of social bonding, however this "redundancy" is directly linked to the platform's profit making mechanisms. The app also includes numerous links and pop-up ads that directly lead to sale pages, attracting users to subscribe to VIP, buy virtual gifts, online courses, or merchandise.

Although these mechanisms make the app free and fun to use, it is highly commercialized. Facing the commercialized platform, the consumption
behavior of elderly WeSing users is influenced to some degree, as they also learn to cope with the system for their own way of consumption culture. Older generation WeSing users are often thrifty when it comes to paid entertainment, especially monetary consumption online. They are content with the already free functions and show gratitude for the platform providing free service, with no need to use the value-added features: "I never spend any money, so I don’t know about it. I just use the basic functions, actually you can already enjoy WeSing without paying any money on it. I think just being able to sing is enough. Like in the past, if you were not a professional, you didn’t have a chance to record songs at all. And how much does it cost if you go to a recording studio? Like now, when I go back home, I will play my songs for my 80-year-old mother. She says it sounds very nice, and I feel satisfied enough." (WR09).

In the age of over-commercialization on internet spaces, and reminded by the constant news of online scamming, they are more cautious about their online activities. Interestingly, there is a trend of "resistant movement" in the elderly user community against features that require spending money. They prefer to only enjoy all the free karaoke services and avoid spending on other non-karaoke related activities on the platform. For example, it is common to see users with a homepage clearly stating "no K coin (拒币)" or "no adding WeChat (拒微)" to show their boundaries (see Figure 6.6). They are often proud to speak out that they are not spending on WeSing, which shows a way for them to understand the company's schemes and beat the system. According to one of our respondents who refuse to receive others' K coins: "They [WeSing] always ask me to buy the VIP, the one that requires spending money. They will give all kinds of prizes to you and give you a discount as long as you click in, but you will have to pay for them. There is also the K coin, which I have never bought since I started playing in 2016. Sometimes other users give me K coins after I finish a song. I said, 'stop here, don't give me K coins.' I said I don't play with money. I said you sing well. I will give you flowers and send you likes, not
anything else. They may say that it won't cost much. I said I don't spend money on WeSing, didn't mean I can't afford it, I'm just not interested in this. K coins are like 0.1 Yuan a piece, it seems impolite to always pay back free flowers to others when they give you K coins, so I declare in advance that I will not play with K coins." (WR12).

Figure 6.6. A screenshot of a list of WeSing user that highlighting "no K coin (拒币)" and "no adding on WeChat (拒微)"

However, from the interview observation, it shows that although the elderly users often do not spend money on the platform, they contribute their time and daily activities to the platform with great loyalty. They spend a large amount of time on the gamification features designed by the platform: Older users pay more attention to the AI score they receive and re-record songs repeatedly to
achieve a higher score, they also pay more attention to their chart position once their songs are selected on the chart. Although they are not in favor of paid K coins, they still spend a lot of effort to collect the free flowers offered by the platform. For example, WeSing offers free flowers to their daily signups to encourage users to log on to the platform regularly and be more active. Users need to complete various tasks, such as listening to others' work or sharing a song with friends, in order to receive the virtual gift. Despite one of our respondents stating that she does not regularly use the app, she still logs on to the platform and spends a lot of time every day just to finish the daily tasks and get the flowers: "I used to pay a lot of attention to WeSing, but now I don't spend too much time on it. The obsession has passed. I think I just sing a song every week or so. Now I just sign in every day and spin the wheel every week [another mechanism to get flowers]. I use this old mobile phone, an iPhone 6, for doing this task, and in my daughter's words 'this phone will be destroyed by you one day,' because it's on all day long, and I have to listen to it all the time. You can only get flowers after you finish listening to it, so I usually open one song, and I start to do some work. I look after the children, do the chores. Once I see I got the flower, I close it and go to the next item on the list." (WR10).

6.4.2. The State's Role in Bridging the Grey Divide

The Digital Divide of Older Generations

With the development of digitization and various internet services and social media, digital technologies have become widely popularized and "democratized," reshaping culture, media, industries, and people's everyday lives. While many young people living in major cities have adapted well to the environment of web 2.0, embracing digital technology and networked media, some individuals, particularly older generations, face challenges due to the fast-paced development of technology.
The digital divide is an ongoing topic that concerns the inequality of access and use of information, and it has intensified with the development of Information and Communications Technology (Van Dijk, 2005). Scholars have studied this topic for more than two decades, developing theories at both macro-level and specific models (Pearce & Rice, 2013). Recently, with the continuous technological development significantly increasing the saturation of netizens in both developed and developing countries (Tsetsi & Rains, 2017), the adoption and promotion of the internet and related devices (PCs, tablets, smartphones) are no longer the key issues, except for extremely vulnerable communities (Gomez, 2018).

Researchers have shifted to the second level of study, moving beyond access and focusing on the divide in usage, such as motivations and skills (van Deursen & van Dijk, 2015; Tsetsi & Rains, 2017), sometimes referred to as "digital literacy" (Jaeger et al., 2012; Friemel, 2014; Quan-Haase et al., 2018). In this level of research, the literature takes a closer look at how digital inequalities are affected by previous social inequalities in the context of personal, social, cultural, and other factors, as they are closely intertwined and influence each other (Ragnedda & Kreitem, 2018).

Among the studies of usage divide, the digital divide in how older populations use digital technologies has gained more attention in the discipline. Several socio-demographic categories are considered to explain the differences in internet usage among individuals, including gender, education, social status, and age, with the latter considered one of the most important factors affecting the use of ICT (Information and Communication Technology, Van Deursen & Van Dijk, 2013). Despite being a significant variable, more digital divide research has focused on providing insight into the younger generation, with limited attention on the elderly population (Friemel, 2014). This has led to the problem of the "grey divide" (Morris, 2007; Friemel, 2014; Quan-
Haase et al., 2018) - the digital divide among seniors in terms of access and use of online digital technology.

In general, both the penetration of internet users and internet activities decrease with age (UNECE, 2021), and this trend is expected to continue in the near future. However, research has found that the divide is not only caused by economic and age-related physical barriers but, more importantly, by socio-psychological barriers, such as lack of interest or motivation, privacy concerns, and fear towards digital technology (Helsper, 2009; Charness & Boot, 2009; Bianchi, 2021). Many seniors may experience not only physical barriers, such as weaker visual and auditory perception and slower cognitive processes, negatively affecting the use of technology, but also attitude barriers, such as anxiety and fear towards digital technology compared to the younger generation (Charness & Boot, 2009). Loges and Jung (2001) found that older people often have a narrower range of personal goals for using the internet, which may be due to their lower desire for social interaction, learning new skills, or low motivation to be connected online. Due to these barriers, older users are less active and often regarded as passive consumers, causing a generation gap in interactive new media in terms of online participation and user-generated content (UGC) prosumption (Karahasanović et al., 2009).

**Government Promoted Elderly-Oriented Digital Services**

On a societal level, the issues of the grey divide have become more significant in recent years due to the increasing aging population resulting from factors such as longer life expectancy and low fertility rates. In 2019, Europe had the highest proportion of elderly people, with 21% of people aged 60 or above, followed by Northern America with 18% (United Nations, 2020). Following this trend, the proportion of older persons (aged 65 or over) in the total population is projected to increase from 17% in 2019 to 29% in 2050. As one of the nations experiencing the most rapid aging of its population, China is
dealing with the issue of the grey divide on a large scale. Currently, China is facing the challenges of an aging society with 191 million Chinese citizens above the age of 65, and this number is projected to reach 330 million by the year 2050 (Campbell, 2019), accounting for 30% of the whole population (Pan & Jordan-Mash, 2010).

However, the rapid development of technology and its influence on society and people's everyday lives are at unprecedented levels, with the internet and digital technology penetrating every aspect of public service, education, commerce, transport, healthcare, and entertainment. In order to adapt to today's society, elderly people have to gain access to digital technologies and learn digital skills, which can be a slow and challenging process. Data shows that the shifting online demographics have further penetrated middle-aged and elderly groups, with the proportion of internet users aged 50 and above increasing from 16.9% in March 2020 to 26.3% in December 2020 (CNNIC, 2021). However, the majority of elderly people are still being excluded from the digital development and the increasingly digital society.

To bridge the digital divide among the aging population, major social and political efforts have been implemented by policymakers and society actors (UNECE, 2021), such as the UK government's "Digital Inclusion" strategy, which aims to provide older adults with the skills and support they need to access and use digital technology, and gain digital capabilities (GDS, 2014). In the East, the Chinese government has also actively initiated various projects to bridge the digital divide and help vulnerable groups gain internet access and usage. Since 2015, the "Speed Up and Price Drop (提速降费)" initiative has provided 5G network coverage to every county and broadband internet to rural areas, while the average cost of fixed broadband unit bandwidth and mobile network roaming charges has been reduced by more than 95%, benefiting more than 1 billion users annually and accumulating a total of over 700 billion Yuan
In November 2020, China's State Council announced the *Notice on the Implementation Plan for Effectively Solving the Difficulties of the Elderly in Using Intelligent Technology* (关于切实解决老年人运用智能技术困难实施方案的通知), which focuses on supporting various user scenarios for the older generation, including travel, medical treatment, commerce, entertainment, work, and other high-frequency events, to universally improve the older generation's experience in using technology and services. The notice highlighted the special campaign on "Organize and carry out the special action on the modification of internet websites and mobile applications, especially focusing on promoting services that are closely related to the daily life of the elderly [...] To make it easier for the elderly to access information and services, optimize functions such as interactive interfaces, text-to-speech, operation prompts, and voice assistance, encourage enterprises to provide "Care Mode" and "Elderly Mode" of relevant applications, and incorporate accessible modifications into daily updates and maintenance (GOSC, 2020)."

Under the guidance of government policies, digital service providers in various sectors are asked to participate in the "elderly-oriented and accessibility reform (适老化及无障碍改造)." Since December 2020, led by the Ministry of Industry and Information Technology (MIIT), mobile apps ranging from news, social media, lifestyle, and e-commerce to financial services, travel, and medical health, are required to undergo reform within a specified time frame. Application providers need to follow the MIIT guidelines for designing the additional "elderly-oriented version," and implement adjustments, including font size, spacing, operating guidance, longer waiting times for responses, and strictly prohibiting the appearance of advertising content and pop-up or plug-in pages (MIIT, 2020). Until June 2022, MIIT has organized and carried out the evaluation of elderly-oriented and accessibility reform for 452 websites and
apps, aiming to cater to the needs of the elderly population (Song, 2022).

**WeSing "Care Mode" vs. Active Aging**

WeSing was among the first group of 43 applications included in the reform. In September 2021, WeSing launched its "Care Mode (关怀模式)," which users could switch from the regular mode to the care mode through settings within the app (see Figure 6.7). In care mode, WeSing optimized the process of song selection, karaoke singing and recording, and work publishing, simplifying the basic features and adding accessible functionality such as function guidance and text-to-speech mode, making it accessible for older adults and users with visual impairments.

![Figure 6.7. Screenshots of homepages of WeSing's regular mode (left) and care mode (right)](image)

However, although the interface of WeSing care mode becomes simplified, more accessible, and ad-free, the user experience is lacking. While the elderly-
oriented version provides the simplified song recording function, a cleaner interface, and a bigger font, it also discards some key features, including chorus singing, singing rooms, live streaming, and short-form videos. Moreover, care mode also misses the entire social media functions, preventing older users from sharing songs on social media or interacting with other users on the platform. Based on discourses with elderly WeSing users, despite care mode being designed specifically for functional optimization to increase accessibility for elderly users, they prefer using the standard version due to the lack of social features and user interaction:

"I tried using it once, the home page is clearer but I found it's missing a lot of features, so I switched back. Just using the regular version is fine for me, it's also pretty convenient. [...] Because many functions are missing, you can only sing karaoke and that's it. They don't even show the friends you added before, and you can't share your recorded songs with your friends or hear other people's singing, you can't see the likes or the flowers they send, you can only sing alone, that's not fun. When you sing a song, don't you want to share it with others? So none of our friends actually use it, maybe there are people older than us who could find it useful, but it's not for us." (WR12).

Providing a larger font size and louder voice may compensate for the surface-level needs of elderly generations, whereas the current elderly-oriented reform is lacking consideration of social interaction and psychological needs. On the issue of elderly people and their internet use, many of the current initiatives only focus on the barrier of digital access and use among the elderly population, and consequently compensate for these negative age-related aspects to promote the adoption of the internet and technology among the elderly through the design of elderly-friendly assistive technology (Charness & Boot, 2009), or the implementation of public policies (UNECE, 2021).

However, these barrier-centered approaches are being challenged as they
often emphasize the decline and vulnerability of aging and its negative impact on older people's internet usage. They not only overlook the active engagement of older adults by treating them as passive receivers of technology exclusively but also omit the motivation factors that cause them to adopt technology and participate online (Ferreira et al., 2017; Celdran et al., 2019). Treating aging as a barrier that "needs to be fixed" and later compensating with the "prosthetic" model, these approaches may cause isolation or stigmatization for active and healthy elderly people (Mao et al., 2020).

Moving from deficit-driven approaches, a more active way to rethink aging and technology is needed, in which the majority of healthy and active older adults can engage in social activities and maintain social and physical well-being (Mao & Good, 2018; Mao et al., 2020). As the number of motivation-driven older prosumers increases, they can achieve meaningful participation and bridge the grey divide actively (Celdran et al., 2019). When it comes to using digital services, elderly users not only need easier access and convenience but, more importantly, they also have a need for active participation in self-expression, social interaction, and entertainment:

"For the older generation, I think they actually need and want to be noticed and recognized, and then they need to have a channel for self-expression. It's not like the post-90s or 85s generations [people born after 1985 and 1990], who already have many channels to express themselves and showcase their personality. However, for many elderly people, their way of expression is greatly limited due to their personal background in that era, they are often living for others rather than themselves. Suddenly, there is a channel that allows them to showcase themselves in a more perfect way in the virtual world, and they can receive instant feedback from others, they must feel a sense of satisfaction and a sense of accomplishment. It is inevitable that they will be willing to use it more often." (WR13).
6.5. Summary

The chapter provided an extensive exploration of the development of the karaoke platform WeSing, examined the vibrant and distinct participatory culture of the elderly user community, and discussed the roles and agency of WeSing and China's policymakers in shaping the platform to capture commercial and societal values. Section 6.2 of this chapter offers a comprehensive overview of WeSing's development process and its later entry of the elderly user base. It begins by exploring the history of karaoke, highlighting its localization as a popular leisure activity deeply rooted in Chinese culture, and examines the early but unsuccessful digitization attempts. The rise of mobile karaoke services, however, popularized online karaoke in the digital era and "democratized" consumer-oriented digital music production by offering free and accessible services to the general public. WeSing, developed by Tencent, emerged as a dominant player with its comprehensive social entertainment platform, encouraging users of all musical levels to participate in karaoke and fostering social interactions among real-life acquaintances. Notably, the elderly user community, considered "digital immigrants," entered WeSing and actively participated in music production and consumption, ultimately building their own cultural identity and a strong sense of community.

Section 6.3 focused on the participatory culture of elderly prosumers on WeSing. Designed and marketed for users at all musical levels, the platform provided older users with a safe and encouraging space to develop their singing skills, express themselves, and present their talents through well-crafted musical and social media content. The app included various gamification features, such as an AI scoring system and a chart system, which added meaning and entertainment value, increasing elderly users' engagement and competitiveness on the platform. WeSing also incorporated the virtual gifting system, serving as a social lubricant for relationships between users and
reflecting the traditional reciprocity culture among elderly users. Their socialization on WeSing was primarily based on real-life acquaintances, catering to the needs of elderly users who preferred interacting with familiar people rather than strangers. Through collaborations and problem-solving, elderly users on WeSing established a distinct online participatory culture, supporting each other and actively participating in today's social media.

In Section 6.4, the chapter discusses the case on a broader scale from the business perspective of WeSing and its parent company Tencent, and the societal perspective of China's policymakers. First, the section discusses how WeSing, initially targeting younger users, captured the expanding elderly generation market. Then the subsection analyzes how WeSing captured commercial value with its "freemium" strategy, offering basic functions for free to attract massive internet traffic, providing entertainment and social features and mechanisms to keep users engaged long-term, and acquiring and monetizing the large user base and data through other channels such as advertising, e-commerce, and virtual gifts. However, based on the consumer behavior of older users on WeSing, it seemed like the majority of them were aware of the commercialization schemes, preferring to use its free features and even starting the trend of resistance against paid features such as monetary virtual gifts. Despite that, they were still highly engaged and spent a large amount of time on the app for non-musical activities, such as paying attention to their AI scores and chart positions or completing daily login tasks for rewards, which aligned with Tencent's strategy.

The second subsection discusses how China's policymakers took initiatives to face the challenge of the aging society by bridging the "grey divide," the digital divide among the elderly population. With economic, physical, and socio-psychological barriers, older individuals often had unequal access and usage of information technology compared to the younger population, resulting
in older people being less active online and being regarded as passive consumers, leading to a generation gap in online participation and content creation. The Chinese policymakers implemented policies and initiatives to bridge the divide by providing infrastructures allowing more and cheaper access and put out "elderly-oriented and accessibility reform," which regulated the digital service sector to design elderly-specific versions. However, drawing from the less popular "Care Mode" designed by WeSing after the reform, it showed that most current initiatives only focused on compensating for negative age-related aspects and treating aging as a barrier to be fixed, while ignoring the active engagement and motivation of older users.

The case of WeSing demonstrates the possibility for the elderly community, like any other social groups, to achieve a meaningful life in the digital era by spontaneously engaging in digital technologies and fulfilling their strong need for creativity, expression, socialization, and entertainment. With the advancement of mobile technologies and digital platforms, they could more easily learn and adapt to the digital environment and fully exploit the advantages of digital technology and web 2.0 to meet their needs. Rather than merely being bystanders of digitization, they became active participants, even content contributors in karaoke apps, creating and sharing content regularly on the platform. This phenomenon has started to become a unique participatory culture in which the group once excluded from the development of digital technology could now participate in artistic content production, circulation, and social interaction without obstacles.
Chapter 7. Cross-Case Analysis

7.1. Introduction

In previous chapters, two cases of Gufeng music development and the prosumption of elderly users on WeSing were analyzed to showcase China's digital music development in two distinctive groups. One group is young, digitally native, and capable of utilizing digital technologies and social media to create new online-based culture with commercial potentials. The other group is the digital migrants, the once-marginalized elderly population who were left behind in the digital divide, but are now able to manipulate mobile-based karaoke platforms to actively create and share musical content in a networked way. Despite the uniqueness and differences of the two cases, both cases highlight the multi-level actors involved which these actors interact with each other and creating a multiplicity of values beyond direct monetary one. These levels include Gufeng fans, Gufeng artists, WeSing users at the individual level, digital music services such as 5Sing, NetEase, and WeSing at the organizational level, and various policymakers and government agencies at the governance level.

This chapter will examine the plurality of values created by various actors within a three-level framework using case study materials, and it will analyze how these values are created within this network, further reflecting on the complexity of the concept of value itself. The cross-case analysis will form the contributions of the research, including the empirical contribution of the multiplicity of value creation in China's digital music development, and the model of China's digital music value ecosystem; as well as the theoretical contribution concerning the nature of values.

Later in this chapter, Section 7.2 will discuss the topic of value creation in
China's digital music development across this multi-leveled framework. By discussing various values created by actors in the individual, organizational, and governance levels, it will show the multiplicity of "non-monetary" value that could be created and captured beyond the monetary value and single-actor perspective. Then, in Section 7.3, the section will propose the model of China's Digital Music Value Ecosystem based on the findings in two cases. It will examine the actors in the three-level framework and how they co-create value in the ecosystem through the notion of value co-creation analysis. The section will then discuss the mediating role of technology and the significance of the distinctive Chinese context in shaping the ecosystem. At last, Section 7.4 will focus on the theoretical implications arising from the cross-case analysis, which will discuss the various natures of value based on the findings of the two cases.

7.2. Value in China's digital Music Development

7.2.1. Individual Level

**Empowerment**

The development of digital music technology has made it increasingly easy and accessible for people to create, record, and distribute their music. This brings a sense of agency and control that empowers individuals, allowing them to become active contributors to the music sector by participating in music creation, production, distribution, and circulation (Hesmondhalgh & Baker, 2010). With a variety of music tools and digital music services available for users at all levels, from home studio setups for independent artists to karaoke applications like WeSing, where users can record and mix music using a smartphone without prior experience, individuals can choose the technology most appropriate for them and participate in digital music that is both accessible, convenient, and cost-effective.
In this new environment of online digital music, users have moved beyond merely consuming the cultural products of content providers. Instead, they have the ability to create and share their own music while also discovering and appreciating music created by other users. They are empowered to become "prosumers," individuals who can both produce and consume simultaneously in a more interactive and socially connected way, greatly enhancing their sense of engagement and achievement, and enriching their overall musical experience. The development of mobile karaoke service, WeSing, is an example of this form of active and interactive prosumption, as users can both consume the karaoke service and other users' content, as well as create their own content and share their artistic expression with others within one platform. This form of music prosumption creates a merged experience that brings more value to the individual compared to traditional media or passive digital music services such as streaming platforms.

Moreover, digitization and prosumer participation could potentially bypass traditional structures within the music industry by creating new means of production and distribution, and building a consumer-driven online music culture. With traditional music industry gatekeepers such as record labels, artists often had to rely on them to promote and distribute their music, making it difficult to enter the music sector, especially for upcoming artists with fewer social connections and resources. However, digitization offers artists the opportunity to reach their fans directly via social media platforms, enabling them to grow in their initial stage.

In the case of Gufeng, prosumers have played a central role in the emergence and development of Gufeng music, and their contributions have been essential to the genre's success. Being an online grassroots music culture of users creating derivative work of existing cultural products such as music and games, it was often considered amateur work that was below the professional
standard and unlicensed with intellectual property issues. Hence, the genre could not be supported and promoted by traditional channels. However, due to the availability of online distribution channels and social media such as 5Sing that empower both the content creators and their fans, Gufeng artists and the genre as a whole could grow their influence without the direct involvement of traditional industry players. This has led to the genre becoming popularized and eventually becoming a commercially viable genre with a large fan base.

However, it is overly optimistic to claim that digitization has fully empowered individuals in terms of music production, consumption, and circulation to the extent of "democratizing" new mass bottom-up participatory culture, completely replacing old corporate ownership of media. In the same case of Gufeng, while its early success demonstrated the potential for amateur, grassroots Gufeng enthusiasts to create a new self-contained online culture without traditional gatekeepers like record labels, the development of the niche genre was ultimately overshadowed by the later commercialization process. This commercialization was facilitated by digital music platforms, now acting as new gatekeepers, which leveraged new methods to commodify user participation (see section 7.2.2), such as user-generated content, datafication, and digital fandom. Despite this, it is essential not to dismiss the value of empowerment, as individuals have the possibility to influence various aspects of today's society with the advancement of digital media. Even though this empowerment comes with complexity and tension due to the entrenched economic and political systems, it is crucial not to give up on the idea that individuals can be empowered in the digital era to challenge the control and ownership of the media system (Hesmondhalgh, 2019).

**Diversity and Inclusivity**

Klamer (2003) identifies social value as a separate category of cultural value that concerns a sense of belonging, identity, and social distinction. The
findings in both cases show that social value is captured through people's participation in digital music. Digital music technology and social media have not only made it easier for musicians to collaborate with each other across geographic and cultural boundaries, but by taking part in different online communities, they also provide a space for individuals to build their social and musical identities and engage in social interactions and collaborations.

Digital music communities create distinct online spaces with unique aesthetics and cultures that individuals can collectively participate in. By joining these online communities, individuals who may not find friends in real life with similar interests can form social connections with like-minded people, fostering a sense of belonging, identity, and social distinction that contributes to social value. Additionally, these communities allow individuals to adapt and establish social connections with distinctive norms and rules while creating music. For example, the "Gufeng circle" was mainly formed by young, urban-based users who were originally interested in music, ancient Chinese culture, and Nijigen Culture such as animation and games. Through the process of sharing content and interacting with each other in the online circle, such as forming online-based Gufeng societies to collectively create content or socializing with other users on social media platforms, they were able to collectively construct their unique style of content, language, culture, and values that reflect their collective identities. Individuals being part of the Gufeng circle could also feel a sense of bonding and pride.

As opposed to the Gufeng case of a community of like-minded strangers, online music communities could also enhance real-life social interactions and identity by allowing users to express themselves and socialize through music. Regarding WeSing, its music-based social connections among acquaintances have proven beneficial for many elderly users who benefit from the platform by expressing themselves musically and sharing their "better self" with family
members and real-life friends, adding more social connections and excitement to their rather "ordinary" lives after retirement. Engaging in WeSing also creates opportunities for them to reconnect with old friends and peers as music can stimulate conversations and shared memories.

Furthermore, engaging in digital music is a process for individuals to reflect on themselves and build their identities (Crossick & Kaszynska, 2014). One key feature of the social value of digital music is how participating in digital music communities on social media platforms can shape people's identities in everyday life. In the case of Gufeng, as the genre matured with a deeper underlying culture, many Gufeng artists and fans started to attach Gufeng to their identity. They were keen on learning more about ancient culture, history, and classic literature derived from the music. Some Gufeng fans also started to wear Chinese traditional clothing, Hanfu, as a way to represent and promote traditional Chinese culture. In the case of WeSing, many elderly users started to incorporate music and singing into their everyday routine. They discussed singing techniques and song choices with friends and family and became more active in attending offline music activities such as joining the choir or attending singing courses at their local university for senior citizens.

Community and Identity

The process of digitization has created a diverse online musical environment, with a wide variety of genres and forms of music that can be created, produced, distributed, discovered, and consumed. Before music digitization, the recording industry was often dominated by a small number of professionals, with a few major record labels exerting significant control over what music was produced and distributed. In this traditional recording industry system, a narrow range of top-selling artists and musical genres was favored to ensure production quality and avoid marketing risks. Independent labels, on the other hand, were limited by their economic scale in terms of production and
distribution channels, which affected the diversity of music available to the public. However, with the rise of digital music technology and the lower cost of music production, distribution, and circulation, there has been a proliferation of independent music productions and diverse decentralized online communities. The case of Gufeng exemplifies this trend, as music-sharing platforms and social media have become testing grounds for the development of independent genres. On 5Sing, artists have the opportunity to share their work at no cost, being valued by the users within the online Nijigen community, allowing the genre to be developed in a more mature form.

Digital technology also allows for individuals from diverse backgrounds and cultures to participate in various new kinds of music creation and distribution and to share their work with a wide audience. Being an artist in the digital age is not limited by formal music training, experience, or connections in the recording industry, which enables many talented but underrepresented and marginalized musicians to share their music with the public, potentially increasing exposure and opportunities. For example, many Gufeng artists started as amateur music lovers with limited musical skills. However, with a deeper understanding of lyrics writing and backgrounds in the Nijigen culture and mythology-themed gaming community, they were able to create derivative Doujin music and music videos and grow their influence within the Gufeng community, creating the opportunity to pursue their music career in the future.

The diversity and inclusivity of music in the digital age have also led to mass amateur engagement in music production and participatory culture, distinct from the professional system. People have a wide selection of tools and services that are inclusive of those with any musical and music production skills to create and produce musical content and share it online. While professional-oriented artists can utilize more advanced digital technology to create studio-grade content, regular users without a musical background can also use the
most common and day-to-day tools and services to make music as self-entertainment or to share with friends and family. For instance, in the case of WeSing, users have a significantly lower barrier to entry to creating and producing music directly without any musical, technological, and financial barriers. This benefits the elderly community and other marginalized groups, even for those who were not musically active in the past, as it offers an opportunity for them to engage in music, nurture their interest, learn, and improve their skills by only using a smartphone.

7.2.2. Organizational Level

Free Creative Labor

With the empowerment and active participation of prosumers in the online music sector, the linear process of music production, distribution, perception, and use has transformed into a non-linear and networked media culture, creating more diverse aspects of value creation activities (Winter, 2013). By recognizing and utilizing users' active participation and community-based interactions as important resources for value co-creation, firms can capture and appropriate users' value creation from their activities on digital music platforms.

One of the most important aspects of the value being captured by firms is the utilization of free creative labor in the form of user-generated content (UGC), which enables the development of new cost-effective business models and a variety of innovative digital music platforms in China's online music sector. Compared to providing professionally produced content through licensing or hiring professionals as content creators, major music-related service providers in China, such as TikTok, NetEase Cloud Music (NetEase), and WeSing, are mainly UGC-based digital music services that rely on prosumers' free creative labor to create, curate, and share content. They have become powerful intermediaries that aggregate the artistic creations of users, format them as
bundles of content on the platform’s mechanisms, and then distribute them back to the users for consumption. By encouraging users to generate content and engage on the platform, digital music services can significantly reduce production costs and provide the service for free to a wider audience.

In addition, the content generated by prosumers can add value to the service by providing abundant and diverse content for users. This could open up unforeseen opportunities for the firm’s future development. Professionally produced content is often limited to what record labels release, while UGC platforms allow a variety of users, including professional artists, to create and share their own unique content. This open environment permits a more diverse range of content to be provided, where more creative and distinctive styles can be discovered, attracting new users. It also creates an opportunity for firms to reposition their strategies and brands to fit the target user base. For example, 5Sing was once a music-sharing site that focused on promoting original singers in all genres. However, it was widely used in the Gufeng community to distribute Gufeng alt-lyric cover songs, as the service allows users to share backing tracks and covers. Due to its popularity in the Gufeng circle, the site repositioned itself and became a music-sharing platform predominantly focused on promoting Gufeng music. Similarly, WeSing was once more focused on capturing the younger user market but discovered its popularity among elderly users. Hence, the app was updated with added features and content to suit the taste and behavior of elderly users in order to achieve a larger market share.

As shown in both cases, users’ participation as free creative labor is playing an essential role in the development of music platforms and services at the firm level, which provides more value to the firm and increases its power while lowering the requirement of creative inputs. For example, the major streaming platform NetEase has developed the talent scouting project “NetEase Musician” to sign licensing contracts directly with talented independent Gufeng artists,
with royalty rates set by the platform. This enables the platform to aggregate and distribute a large catalog for free, since the platform does not pay the artists for licensing fees to reflect the amount of work they put in prior to the distribution and only share the income once the platform generates revenue from advertisements and subscriptions. The UGC content has drastically lowered the platform's cost on copyright licensing and pre-paid royalties, and increased the negotiating power in terms of low royalty fees (one respondent with 20 thousand followers shared in the interview that he only receives roughly 3RMB [37p] per day). Moreover, in the case of pure UGC platforms such as WeSing, these firms could pay even less attention and fees on the content development, as the UGC platform only needs to put effort into providing the online space and service itself, such as mechanisms, features, and support, since users are responsible for the whole process of creative input on content creation, curation, and promotion, which ends up being consumed by the users themselves.

Last but not least, the prosumer and their online interactions on the social media features of digital music platforms can also build a sense of community and engagement among users, which provides higher bonding and loyalty between users and the platform. By enabling users to create content and contribute to the service, digital music services can create a sense of ownership and investment among users, which can potentially increase switching costs and loyalty to the service. In terms of WeSing, older users interviewed are often loyal to the platform because both the content and daily posts are formatted and stored on the platform, as well as all the existing social contacts. Hence, once they have used the service for a longer period, it is almost impossible for them to switch to other competitor platforms. For online music platforms such as NetEase, user interaction on the platform has become an asset of the service to keep user bases and create a strong community, as it creates a unique culture on NetEase where users listen to the song while scrolling and liking the top comments written by other users. By utilizing users' comments and
interactions as free creative labor, NetEase is able to add more value to the music content itself, and gain competitive advantages over much larger competitors such as Tencent's QQ music and Kugou.

**Commercial Value of Mass Participation**

In the digital era, online music participation has become popular and integrated into people's everyday lives. With the development of online digital music services, individuals are able to consume, create, and share their music freely. They can also actively interact and collaborate with each other, creating online communities and participatory cultures. Apart from the free creative labor generated by users, which benefits the online music services, firms in the digital music sector are also able to capitalize on this participatory culture and utilize users' mass participation as a key element to capture commercial value.

Datafication has transformed the music sector and has become an essential component of China's digital music services. Through various datafication activities, online music providers can capture, analyze, and utilize user data to optimize the service and enhance user engagement. They also engage in data commodification to achieve "platform capitalism (Van Dijck et al., 2018)". By collecting and analyzing user behavior, preferences, and trends, digital music services can improve their recommendation algorithms, better target their advertising, and identify new areas for growth. This data is used to improve the service, such as offering personalized recommendations and identifying trends in music consumption.

In the post-scarcity system, UGC-based firms have become more concerned with the effectiveness (quality of the content). To dig out and promote high-quality content from the abundant content, China's digital music platforms have utilized AI algorithms and other technologies to develop advanced (but often opaque) recommender systems to create a better user
experience. As discussed in the WeSing chapter, the platform has the ability to distribute highly personalized content using the recommender system by tagging users based on their preferences and then recommending content to each individual user through the algorithm. The platform aims to continually nurture the system based on users' cognitive and aesthetic preferences to meet their emotional needs, thereby achieving increased user viscosity and engagement.

Although data is essential for digital music services, the mass users they represent are more valuable for firms in capturing commercial value, as the large user base provides the foundation and potential to commercialize on. In China's digital music sector, most services provide free content and services for the mass users due to the low-paid user environment. Hence, firms have to generate additional revenues apart from traditional means such as digital music sales and subscriptions, and Chinese digital music services rely more on capturing commercial value from the mass online participation and socialization of users. Data still plays a crucial role in this process, facilitating music services to maximize user engagement, socialization, and viscosity, and ultimately leads to additional revenue from targeted advertising sales or commercialization from social-musical activities such as virtual gifts and e-commerce selling. According to the 2019 report by Tencent Music Entertainment (TME), its social entertainment sector, including platforms with a massive user base such as WeSing and other live streaming platforms, contributed 72.8% of the total revenue, compared to 27.2% from its online music service sector, which includes China's leading streaming platforms QQ Music, Kugou Music, and Kuwo Music (QuestMobile, 2019).

In the case of WeSing, the platform is able to provide entertainment and social networking features and mechanisms to users for free, and commodifying their participation rather than consumption. Since most users prefer to use the
karaoke app for free rather than paying a subscription, the platform’s strategy is shaped to provide a freemium service to maintain the growth of the mass user base and make profits from user participation and socialization. The platform focuses on its entertainment and social features rather than merely providing a singing tool to maintain a steady and active user base and to nurture user behavior on socialization, such as mutual commenting and sending free virtual gifts (flowers) to increase the chance of selling monetary ones (K coins), which have become the key revenue model for the platform. By providing free entertainment services, acquaintance-based socialization, and lowering the barrier of entry for technology/skill requirements, WeSing can achieve wider exposure, leading to market expansion, including the vast aging population in China.

Also, music streaming services are able to utilize online fandom to generate diversified incomes. In the traditional fan economy, revenue-generating activities are based on the relationship between fans and established artists. With online music platforms having social networking features, the relationship between those being followed and fans has become more diverse and enriched. This is seen in the rise of online-based independent artists and live streaming in the case of Gufeng. Additionally, online users are not only individual consumers but also active members in various online "circles" around different artists, genres, brands, and so on. By utilizing user communication and interaction based on shared interests, it creates a sense of belonging and identity and thus creates additional bonds with users and the platform, eventually contributing to a diversified revenue stream in addition to the subscription. For example, in NetEase, there are several established models for fans to contribute and support their idols, such as digital records, live tickets, virtual gifts, and merchandise sales (Yuan, 2016). The key role of the fan economy has been further highlighted after the platform launched the audio-only and video live streaming functions in 2018. In 2021, NetEase’s social
entertainment services sector, where live streaming is located, accounted for 46.4% of total revenue, fueled by its virtual gift sales, while membership subscription revenue correspondingly decreased to 53.6% (Zhong, 2021).

7.2.3. Governance Level

Economic Value and Industry Prosperity

One of the distinctive features of digital music development in China is the active engagement of China's policymakers in the digital music sector to suit economic, societal, and political needs, driven by the state and party's incentives on authoritarian governance and ideology promotion. In the Western world, the recording industry operates within a free-market economy with minimal government intervention, and copyright law and enforcement are the primary mechanisms for protecting the interests of copyright owners. Although China adopted a market economy and allowed the private sector to develop after the economic reform and opening-up policy in 1978, China remains a socialist state with a one-party system and authoritarian governance. Thus, social development is guided by the vision of authorities and policymakers in a centralized and top-down manner. The Chinese Communist Party and central government play a significant role in the development of the digital music sector through state-led economic policies and investments, as well as balancing the power and mediating the interests of firms at the organizational level and the interests of the people at the individual level to achieve greater societal value.

Chinese policymakers are able to use political tools such as laws, policies, propaganda, and governance to achieve commercial prosperity from the development of the digital music sector, contributing to domestic economic growth and employment. Before digitization, mainland China's music sector was relatively underdeveloped, with no major labels in the domestic recording industry to compete with foreign ones and little support for copyright protection.
Instead of a disruptive impact seen in Western recording industry systems, digitization created an opportunity for digital music services to emerge and develop, creating a diversity of innovative music businesses and services. This was enabled by policymakers' governance with less intervention and copyright enforcement to support the domestic market while also implementing regulations (e.g., MOC, 2009) to protect China's developing digital market from foreign competition (Montgomery, 2009).

With the digital music market being developed with the potential for further commercialization, policymakers have shifted their strategy to utilize their role once again to create a legitimate market with great economic potential. The government initiated the campaign "Sword Net 2015" and implemented the most influential copyright enforcement measures over the years (Tang & Lyons, 2016). As a result, 2.2 million unauthorized songs were taken down, eventually leading to the establishment of a legal online market that favored intermediaries and technology companies like Alibaba, Baidu, and Tencent, benefiting from economies of scale (Shen et al., 2019). Due to the development of copyrighted online music and market consolidation, China has now reached the 5th largest music market in the world in 2022, having only entered the top ten global markets since 2017 (IFPI, 2023).

In addition, the Chinese government and policymakers are also able to closely monitor the development of the online music market and utilize their power to maintain control of the sector to restore market competition and avoid overcapitalization for sustainable growth. As digital music platforms have become the dominant players in China's recording industry, there are concerns about dominant players and their business expansion being able to exclude competition and eventually control the market. In response, the Chinese government has tightened control of the digital music sector by implementing a range of anti-monopoly policies. For example, in 2017, the National Copyright
Bureau held talks with the key leaders of Tencent Music, Alibaba Music, NetEase Cloud Music, and Baidu Taihe Music on issues such as inflated copyright licensing fees and exclusive copyrights. The Copyright Bureau requested the market to avoid providing or purchasing exclusive copyrights, prompting platforms to begin cross-licensing. This led to the unique collaboration between QQ Music and NetEase Cloud Music, achieving 99% copyright sharing and leaving only 1% exclusive content (He, 2021). Furthermore, in 2021, the State Administration for Market Regulation issued the administrative penalty decision (SAMR, 2021), ruling Tencent's acquisition of equity of China Music Group in 2016 was breaching the Anti-Monopoly law. The decision required Tencent to terminate exclusive agreements within 30 days from the date of the decision, resulting in Tencent waiving the exclusive authorization rights to all its upstream copyright owners.

**Political Value and Ideology Promotion**

The development of music digitization in China not only creates a vibrant and fast-developing digital music sector, resulting in economic value being captured by the state at the governance level, but it also creates cultural and political value for policymakers in terms of strengthening the nation's soft power through domestic cultural creation and production, as well as increasing the influence of socialist ideology on the public.

Music digitization has enabled the mass-creativity of prosumers by empowering individuals to create and distribute music on a massive scale online, bypassing traditional distribution channels that are part of a system of professionalism and elitism. Online music platforms and social media provide a space for them to showcase their talents and creativity, which has led to the emergence of a vast number of new generations of Chinese artists and new distinctive music genres. The boom of mass-creativity in digital online music has become the main product of the new consumer culture, which has enabled
China's cultural confidence and soft power in the domestic online music culture.

This development is also influenced and shaped by the external involvement of policymakers, with digital music becoming a tool for them to directly reach out to different groups with their nationalist and socialist ideology and values. By showing approval of youthful music culture and actively joining the trend of Gufeng (Guofeng), it creates an opportunity for the Chinese party and state to reshape their image and reach out to young people directly. By rejuvenating their image to suit the tastes of young people, they can promote their ideology of patriotism and national pride in a subtle and more down-to-earth way compared to promoting the ideology through top-down propaganda and state-produced 'high' art.

Moreover, Chinese authorities are able to directly involve themselves in Gufeng music and shape the transition process of Gufeng (Gu as Ancient) music from a grassroots online youth culture to Guofeng (Guo as National), a fully commercialized genre that also carries the spirit of patriotism and national pride. Through publicly endorsing and promoting Guofeng music on social media, holding events, award ceremonies, and seminars, policymakers are able to directly take part in the development of the genre. Emerged as a self-entertaining online youth culture derived from Japanese Nijigen Culture, with much influence from foreign music elements, the new Guofeng music is shaped to emphasize its "Chineseness" to better represent and boost the national "soft power" against foreign cultural influences. The Gufeng alt-lyrics covers, which were once considered as the trademark of Gufeng music and enabled the circulation of Gufeng within the Gufeng circle, were also criticized in the Guofeng era and replaced by the encouragement of professional and original compositions.

In terms of WeSing, policymakers have implemented policies and initiatives to reform the commercial online service sector and create supporting
infrastructure for the elderly and disabled communities to achieve the state’s vision and societal values. To bridge the digital divide, they provide infrastructure allowing cheap and inclusive access to mobile-based internet and have put out an "Elderly-Oriented and Accessibility Reform" which regulates the digital service sector to design elderly-specific versions. State organizations utilize their control of state-enterprises and businesses to guide the direction of development of the online service sector to reach wider communities, including users in underdeveloped areas, rather than only focus on the target users who have the greatest commercial value. This is intended to increase equality and social stability and construct the state’s socialist image as one that cares for the welfare of the mass including the marginalized communities.

7.3. China's Digital Music Value Ecosystem

7.3.1. Digital Music Value Ecosystem

The Three-Level Framework of China's Digital Music Value Ecosystem

By analyzing the findings of the two cases focusing on the tripartite relationship between individual actors (artists, prosumers), organizational actors (digital music platforms), and governance actors (policymakers and state-controlled organizations), we observe that these actors have created and captured a multiplicity of values in the case of online Gufeng music and elderly WeSing participation. However, value cannot be created or captured by a single entity; it is always co-created through the interaction of actors within the network (Vargo & Lusch, 2008). The values discovered are more like a "snapshot" of what actors are able to capture across various levels, whereas the process of value creation through their interactions also needs to be addressed. Hence, this section will examine the value creation in the ecosystem view to gain a better understanding of how value is created interactively and in a networked way.
As discussed in the literature review chapter, the ecosystem approach could offer a more holistic view of explaining how actors react and co-evolve within the network, how external environment and forces shape the ecology, and the value creation and capturing process of actors. To avoid the exchange-based value creation and firm-centric view when assessing value creation and actor relationships in traditional business ecosystem studies (e.g., Moore, 1993), value co-creation is adopted to offer a view in which value is jointly created by actors in the network through the value of use, with an additional focus on the power structure of the network and translation, inspired by Actor-Network Theory (ANT, e.g., Callon, 1984; Latour, 1987). The new model of the "Digital Music Value Ecosystem" is then proposed to represent a heterogeneous network consisting of actors at the Individual, Organizational, and Governance levels, interacting or influencing each other on digital music-related value activities, thereby creating multilateral value linkages within the ecosystem.

Due to the complexity of the ecosystem and the value created within, the three-dimensional analysis by Lepak et al. (2007) is adopted and refined that constitutes the individual, organizational, and societal (governance in this study) levels to narrow the scope of research and focus on the key actors and their value activities in both cases in the ecosystem, namely prosumers and artists in the individual level, digital music platforms in the organizational level, and policymakers and state-controlled organizations in the governance level (see Table 7.1). By equally examining the actors across different levels, it can show the dynamic relationship and value-based interactions.

<table>
<thead>
<tr>
<th>China’s Digital Music Value Ecosystem</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Levels of Analysis</strong></td>
</tr>
<tr>
<td>Individual</td>
</tr>
</tbody>
</table>
At the individual level, the actors are individuals who are engaging musicking activities digitally, such as Gufeng artists and Gufeng users in the Gufeng circle, as well as elderly users in WeSing in the two cases. Empowered by digitization, they can participate in digital music in various ways compared to the physical age, from consuming a vast amount of music anywhere at any time, creating digital music and distributing it online with ease, to interacting with other like-minded people and forming online communities without geographic boundaries. They demand better digital services to suit their needs.
at a low cost, which in return, they contribute their creativity in terms of user-generated content, as well as being the end consumers to add value to the network. By the power of mass participation, they are also capable of influencing the development of the ecosystem in a bottom-up way, whereas the value they created was often being appropriated by actors at the other levels.

Actors at the organizational level include various digital music platforms such as the music-sharing platform NetEase and 5Sing in the Gufeng case, or karaoke platform WeSing and its parent company Tencent. Being intermediaries in the ecosystem, they compete with other actors at the same level to offer different music-related services to fulfill the demand of prosumers for music creation, distribution, and circulation at the individual level. They seek to compete with each other to build their own central hubs for the users and artists' community by providing free services and features that encourage users to participate in digital music. By doing so, they gain control over the user-generated content and data contributed by the prosumers. They balance the needs of prosumers and policymakers and seek to gain control or translate their value activities, such as the commodification of creative work and data or gaining exclusive content by utilizing copyright enforcement policies from the state and maximizing their capitalization.

Actors at the governance level are policymakers and different state-controlled organizations, including key actors in the China Communist Party (CCP), and various organizations that directly oversee the digital music sector, such as the Ministry of Industry and Information Technology (MIIT) and the National Copyright Administration of China (NCAC). Although these actors are not always directly involved in digital music, they have the ability to influence its development externally. They encourage mass creativity in music participation and digital music platformization at the individual and organizational levels as they could potentially lead to cultural value for society and boost the digital
music economy. Meanwhile, they closely monitor the sector and could potentially become involved and shape its development. They have encouraged the development of grassroots Gufeng music while resisting its original foreign-influenced subculture or supporting the digital music market through copyright enforcement while banning exclusive licensing to prevent a monopoly. By exerting their power in terms of policy, monitoring, governance, enforcement, and ideological promotion, they can achieve a balance of political, economic, and societal values benefiting the actors at the governance level.

Value Co-creation Analysis

As demonstrated by the two cases, the distinct social phenomena of Gufeng and WeSing are the results of actors' value propositions and value-based interactions. They interact with other actors to co-create value for their own benefits or to fulfill their needs within the value ecosystem. However, this value co-creation is not always collaborative and beneficial to both parties. Actors often need to negotiate and exert power to appropriate value from others in order to achieve value capture at their own levels. Sometimes, the value could be diminished or even destroyed due to failed interactions in value co-creation.

To clarify the distinction of these value-based interactions, the model of value co-creation analysis is proposed in Table 7.2 to examine the value activities and interactions in China's digital music value ecosystem. This model is related to Saarijarvi et al. (2013)'s dismantlement of value co-creation, which breaks down into value (types of value), Co- (actors involved), and creation (mechanism being used), to distinguish the three constituent parts when analyzing business-oriented research. However, for this particular research, the value co-creation analysis aims to distinguish the different value co-creation activities with different potential outcomes, addressing issues with complex values and interactions such as the debate on the prosumer and digital
platforms, and whether it is considered collaborative and mutually beneficial based on value co-creation research (e.g., Tapscott and Williams, 2007; Chaney, 2012; Winter, 2013), or merely exploitive based on popular music studies (e.g., Hesmondhalgh, 2010, 2015; Negus, 2019; Qu et al., 2021).

<table>
<thead>
<tr>
<th>High Co- (strong interaction)</th>
<th>Low Co- (poor interaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High Creation (effective mechanism)</strong></td>
<td><strong>Low Creation (less effective mechanism)</strong></td>
</tr>
<tr>
<td>Value Co-Creation: Value activity benefiting both sides.</td>
<td>Value Negotiation: Value activity partially benefits both sides through the outcome of constant negotiation</td>
</tr>
<tr>
<td>Value Appropriation: Value activity benefits one side while sacrificing the interests of the other side.</td>
<td>Value Dissolution: Value activity diminishes both side's value proposition</td>
</tr>
</tbody>
</table>

Table 7.2. Value co-creation analysis of China's digital music value ecosystem

Although value co-creation activities are difficult to measure and hard to be distinguished in absolute classifications, four general categories of value co-creation activity could appear depending on the levels of interaction from cooperation to conflict, and the specific value co-creation mechanisms facilitating this interaction. In the most optimal circumstance, with strong actor interaction and effective mechanisms, the true form of value co-creation could
appear which value be co-created in a mutually beneficial way, achieving more value captured for each actor than the resources they put in. For example, during the early development of Gufeng music, Gufeng artists and fans engaged in music creation and re-creation using the free tools and platform provided by 5Sing. They jointly co-created the early form of Gufeng music and later brought a competitive advantage to 5Sing as a Gufeng-oriented platform when Gufeng became a commercially viable genre.

In most circumstances, with strong interaction and less effective mechanisms, value negotiation appears, where value is often co-created through the process of conflict leading to "temporary alliances." Agreements and compromises are reached based on each actor's core value proposition, resulting in value being obtained partially by both actors involved. An example can be seen in the WeSing case: On one hand, the platform provides free service to adapt to the low-paid user penetration, resulting in various gamification features being developed as a replacement to achieve its commercial incentives, such as the free labor from user-generated content (UGC) and user viscosity for datafication strategies. On the other hand, for the majority of elderly users, they can engage in online karaoke and socialize for free, and even resist the commercial features such as sending and receiving virtual gift K coins. However, to use the app for free, they also have to accept and accommodate the compromised experience with advertisements and other promotional features, excessive usage induced by the app's gamification mechanisms, and may even result in compulsive behaviors that align with the firm's intent, such as logging into the app without singing just to collect daily gifts.

Value appropriation can occur when one actor in the ecosystem utilizes the translation process and uses their agency to extract values from other actors' value creation. This is often related to power dynamics, wherein actors from the
organizational and governance levels have more capability in value appropriation activities compared to individuals. An example is the "Guofeng" movement, where the commercial and political value of Gufeng music was extracted by firms and the state after the growth of the Gufeng circle, resulting in the over-commercialization and politicization of the genre with a lack of authenticity, leading to the loss of artists' autonomy and mixed reviews from original Gufeng fans.

Lastly, value dissolution appears when actors in the ecosystem fail to establish value co-creation mechanisms with conflicting interests and insufficient interactions with other actors, resulting in the deduction (even destruction) of the potential value propositions of both actors. The failure of WeSing's care mode could be one example of such activities, wherein policymakers pushed for an elderly-oriented reform to firms to achieve the state's vision and public image. However, due to the firm's lack of intention to cut its commercial features and its reluctance to follow the command from the state, the poorly designed version was eventually abandoned by the intended elderly users it was supposed to serve. Due to the neglect of elderly people's actual needs and conflicts of interest between the state and businesses, the failed value co-creation resulted in wasted resources and the reduction of potential value for both actors.

7.3.2. Technology Mediated Value Ecosystem

The role of technology heavily influences the development of the digital music value ecosystem and shapes how people engage in digital music and create value. From the early development of home-based studios and music sharing platforms like 5Sing, which allowed grassroots users to DIY and distribute musical content and covers, enabling the early circulation of Gufeng music, to the commercialized Gufeng period where independent Gufeng artists used social media and live streaming to interact and maintain their relationship
with fans, to the development of mobile karaoke platforms that allow users to create music without any hardware or skill requirements apart from a smartphone. Both cases showed how the development and innovation of various music technologies are shaping people's music participation in the ecosystem and facilitating actor's value creation.

Value is co-created by the actors across the ecosystem through the value of use. In the case of online digital music, digital technologies are not working solely as passive tools; technology itself (e.g., digital music, music platforms, social media) also has agency and abilities in forming human behavior and social structures, shaping people's actions and decisions in complex and unpredictable ways. As discussed in the case of Gufeng, the music sharing platform 5Sing allows any user to upload their own songs and make covers from other existing works on 5Sing, facilitating the formation of its user community and their behaviors on the platform as a grassroots, lively community based on cover songs. Through the early development of Gufeng, it further defined the nature of the music genre represented by its alt-lyric Gufeng covers and community interactions. In the case of WeSing, the emergence of mobile-based karaoke services enables users to create music with extremely low hardware and technical requirements, creating opportunities for elderly users to engage in music and creating their participatory cultures. Unlike WeSing's predecessors, PC-based karaoke services and karaoke software, which offered the same basic function but failed to be popularized due to their complexity and inconvenience.

Digital music technologies are playing a key role as mediators in the digital music value ecosystem. Online digital music platforms, for example, mediate the value proposition at both individual and organizational levels to achieve the co-creation and negotiation of prosumer's value in use and firm's commercial value. Users are willing to spend time and effort on the platform for their own
personal benefits, while firms can attract and aggregate user-generated content in a standardized format for datafication and commercialization.

Rather than being a neutral tool, music technology is a socially constructed entity that reflects the values of its creators and users. Through their interactions, actors can create new meanings, resulting in the network being redefined and transformed from one to another. At the early age of digitization in China, as seen in the early Gufeng development, digital music platforms were often associated with liberation and freedom, as users could bypass traditional distribution channels to create and consume a large amount of music without any obstacles through file sharing and piracy. However, this was exclusive to a limited user base of young, tech-savvy, urban-based individuals. After the entry and business engagement of large tech companies (e.g., Baidu, Alibaba, Tencent) in the online music sector, as well as the increasing copyright enforcement by policymakers, digital music platforms became tools to serve the economic value in the form of platform capitalism. In one way, this recreated barriers for users to engage, such as financial barriers or limitations for the distribution of unauthorized content. In another way, it brought more resources into the development of online music technology and more support and additional functions to the user, driven by the logic of firms' market expansion strategies. In the case of WeSing, for example, the platform is not merely a singing tool designed for karaoke enthusiasts; instead, it positions itself as an inclusive music platform and community with many features, such as tone fixing and scoring systems, designed to encourage regular users to use the music service, which enables mass participation on the platform.

As mediators in the network, digital music technologies continuously interact with the value co-creation/negotiation of human actors, embodied in the process of developing online music platforms. Since actors have distinct (and sometimes conflicting) value propositions, they are constantly negotiating with
other actors and take agency to shift the technology to align with their interests. For example, in the case of WeSing, instead of creating a pure karaoke platform, WeSing reinterpreted the nature of karaoke by adding additional designs with the intention to keep the active user base and maximize profits through the process of translation (Callon, 1984). WeSing added gamification features such as the AI scoring system and the chart system to create user viscosity, and utilized its acquaintance-based social network and social features to boost virtual gift sales. However, through using the app, users also have the ability to adapt to the system and put their own translation into the network. Many young users only use the app as a singing tool, ignoring the additional features, while elderly users have found educational value through the use of these gamification features by treating the AI scoring as feedback for their singing. Moreover, many elderly users have started the "resisting movement" spontaneously, by announcing they only share free gifts on the platform and reject receiving and sending monetary gifts. Also, in terms of policymakers, they also reinterpret digital platforms as tools for closing the digital gap rather than merely digital commodity, which they use policies such as the elderly-oriented reform to shift WeSing’s focus from target users to serving marginalized communities of elderly users and the disabled, by putting out an elderly and accessible version of the app.

7.3.3. The Development Process and Digital Music Value Ecosystem in the Chinese Context

Apart from human actors at the individual, organizational, and governance levels, as well as the mediation of various digital music technologies, China’s digital music value ecosystem is also shaped by its Chinese historical, cultural, and socio-political context, which constitutes a unique trajectory of development in the ecosystem.

As discussed in the contextualization chapter, China has a historic past of
a low intellectual property environment, even before digitization, marked by its weak physical market and piracy. This history has created a distinctive environment that influences digital music consumption and innovative business models (Shen et al., 2019). On one hand, users are more reluctant to pay for digital music and other forms of intangible digital content due to the widespread availability of online piracy and file sharing. On the other hand, major digital music service providers have to offer services that can survive in the free music market by engaging in piracy practices or offering free content to attract users and seek profit from elsewhere, such as advertising (e.g., Baidu MP3, Dong & Jayakar, 2013).

In terms of licensed music distribution, digital music services with conventional business models aligned with the West, such as the digital downloading website Top100.cn (2005), could not adapt to the environment and went out of business. In contrast, unique business models that rely on value-added services could emerge, such as Ringback Tone subscriptions, where mobile phone users set their favorite song to replace the repeat cadence when someone calls. This became the most profitable legal model of digital music in the early 21st century (Tang & Lyons, 2016).

The strict anti-piracy enforcement led by the government since 2015 has resulted in legal online music sectors and business practices. However, the majority of users in China are still not accustomed to switching their behavior towards a paid model, as shown by the low penetration rate of subscribers in digital music services (Tang & Lyons, 2016). Hence, music service providers still have to adapt to the environment by relying on the "freemium" model, which offers the majority of content entirely free to users to compete for market share.

To adapt to this legalized and low pay environment, the majority of digital music service providers have switched their focus into building a vibrant online user community to diversify income streams from user participation and social
interactions, rather than merely being a music distribution service with passive consumers. In the Gufeng case, music platform NetEase goes beyond the business model of traditional streaming platforms and encourages artist-user interaction, creating the fan-economy and making profit from merchandise sales and live performance ticket sales. Also, by utilizing user-generated content (UGC), NetEase can cut the cost of licensing fees and even gain further control of copyright by signing licensing contracts directly with independent Gufeng artists on their musician platform. In the case of WeSing, the platform heavily promotes its social media features, encouraging users to build a community and boost sales of virtual gifts. By providing free services to its users and encouraging them to engage in the online community, the firm can also generate profit from the mass data created in the community through its datafication strategy such as targeted advertisement.

Due to the unique trajectory of China's digital music sector development, its historic past of online piracy, and the adaptive strategy by firms focusing on free service, user-generated content, and user community, various mass participatory cultures have emerged across the network and shaped its current form. This inclusive online environment empowers most regular users as they can freely engage in online digital music, supported and encouraged by the digital music service providers. In terms of Gufeng, the genre was originally considered a derivative art for games, with creators mostly being amateur singers and songwriters. However, through the process of constantly putting out new content, improving, and interacting with other Gufeng lovers, more meaning has been added to the genre, enabling online Gufeng music culture to mature. In the case of WeSing, many elderly users have a strong demand for cheap entertainment and a means for expression. Since the platform is freely available to all users, it is becoming popular in the elderly community and becoming an integral part of their everyday lives.
In the socio-political context, where the state plays a dominant role in terms of economic policies and business regulations, it has also deeply influenced the development of the digital music value ecosystem, resulting in a constantly changing environment and a state-business relationships. Compared to the free-market system in the West, a stronger presence of policymakers can be seen in China's digital music sector, constantly shaping and reshaping the sector from the top-down level. The sector undergoes three distinctive stages shaped by China’s socio-political context of state-led governance: the *emergence* stage of a liberal environment nurturing domestic digital music development with minimal government intervention, the *expansion* stage driven by market-dominant logic through state copyright enforcement, and the *regulatory* stage marked by direct state intervention in the entrenched digital music sector, including anti-monopoly measures and state-led initiatives.

First, during the early stages of digital music development, the Chinese government adopted a relatively lenient approach towards copyright control and piracy, while simultaneously limiting foreign competitors from entering the Chinese market to support the growth of the domestic digital music sector. This loose control on piracy and business development provided room for innovative services to emerge (Shen et al., 2019). New music services had the freedom to experiment and develop without facing strict copyright restrictions. Conversely, the Chinese government imposed stringent rules on foreign companies operating in the online music sector, restricting the presence of international players in the market (Montgomery, 2009).

Furthermore, as homegrown digital music services flourished in a low intellectual property environment with limited foreign competition, the government introduced strict anti-piracy enforcement in 2015, leading to China becoming the fastest-growing legitimate market for digital music, supported by the government's enforcement efforts. Consequently, major technology
companies with deeper pockets for purchasing exclusive copyrights gained dominance within the ecosystem. In this environment, a distinctive state-business collaboration and interdependence emerged, with the state relying on large domestic technology companies to achieve national economic goals. An example of this collaboration is the government's strategic relationship with BAT (Baidu, Alibaba, and Tencent) in establishing the digital infrastructure of the "Belt and Road" Initiative (Su & Flew, 2020). Simultaneously, businesses like BAT comply with government initiatives to support the legitimate domestic market while blocking foreign competitors (e.g., Spotify) and new entrants with limited copyright leverage.

As the digital music sector continues to expand, the state-business collaboration faces challenges due to growing concerns about technology companies' overcapitalization and their potential control over the digital music sector and the overall digital economy, which could potentially impact the state's political power and socialist ideologies. As a result, the political context has shifted again, prompting policymakers to implement strict anti-monopoly measures, including penalties on Tencent's merger with China Music Corporation to control the streaming market and distinctive policies to ban exclusive licensing deals. This led to cross-licensing between major streaming platforms (Bai, 2018), fostering a more competitive market that benefits innovative non-BAT players with fewer exclusive rights, such as NetEase and Bytedance (parent company of TikTok). The state also leverages its political power to initiate initiatives directly shaping the development of the digital service sector, as evident in the "Elderly-Oriented and Accessibility Reform" in the WeSing case, aimed at transforming commercial digital services into digital infrastructures to serve the masses in a more inclusive and accessible manner.

The Chinese government's active role in shaping digital music policies and regulations has led to a unique state-led approach, influencing the development
of the ecosystem and resulting a complex state-business relationship marked by collaborative alliance and underlying tension. While the state relies on firms' support to achieve socio-economic goals, it remains cautious of firms consolidating too much power. In turn, businesses must navigate strict regulations but can also leverage their close relationship with the state to gain a dominant position in the market. The strategies employed, such as loose control of copyright, blocking foreign competitors, anti-piracy enforcement, collaboration with tech giants, anti-monopoly measures, and initiatives such as the elderly-oriented reform, all illustrate the significant impact of the socio-political context in shaping and reshaping China's evolving digital music ecosystem.

7.4. Discussion of Conceptual Findings: The Nature of Value in China’s Digital Music Value Ecosystem

7.4.1. The Variable Nature of Value

In the literature review chapter, three different views on value were reviewed. In the value chain studies in the business and management discipline, value is purely viewed in its monetary term, represented by the amount buyers are willing to pay for a product/service, and firms gain a competitive advantage by providing value surplus exceeding the cost of the value (Porter, 1985; Bockstedt et al., 2005). However, the traditional view on value based on exchange cannot reflect the value creation in the digital music sector today, where value can also be created without any monetary exchange, as shown by the increasing number of free digital music services such as WeSing. Additionally, the firm-centric view cannot reflect the increasing emphasis on the role of users in value creation of user-generated content in the digital music sector. Instead of firms being the value creators, the value is created by consumers through their participation.
The value co-creation studies in the field of marketing have also criticized the firm-centric view of value creation, emphasizing the value being jointly created by the firm and consumer (Prahalad & Ramaswamy, 2004) and focusing on the consumer-driven process of value co-creation (Burgess & Green, 2009; Chaney, 2012). Value in their view is not only represented by the exchange value of products/services but also by the consumer's value creation in the form of value-in-use (Vargo et al., 2008, Grönroos, 2011). Despite value co-creation scholars moving away from the firm-centric view of value creation, they are still "firm-oriented" in the sense that they only consider how the firm would change strategies to collaborate and utilize value co-creation with consumers that could eventually benefit the firms. The value that is co-created by users within their communities, such as the collaborative interactions and co-creation of value in the online Gufeng circle, and the participatory culture of the elderly community in WeSing, is being neglected.

In the field of cultural value research, scholars have defined the value of culture and art beyond the single measurement of economic impact. They focus on the broader sense of cultural values that benefit communities, industries, and society as a whole by identifying the various components that constitute cultural value (Holden, 2004; Crossick & Kaszynska, 2016). Researchers in this field have focused on the multiplicity of values, ranging from economic vs. social (Throsby, 2001); intrinsic vs. instrumental (Holden, 2006); artistic vs. practical (Levinson, 2015), and so on. However, instead of viewing value as an object or an abstract concept, value can only be realized by people through the process of experience and valuing (Behr et al., 2014). In this sense, music participation can create various experiences based on individuals, their backgrounds, how they engage in music, and how they value such experiences and processes.

Three areas of research have conceptualized value and value creation based on their research focus: firm-based value creation in the business
discipline, firm-consumer co-creation in marketing, and community or society-based value creation in cultural value research. Due to the specific focus of each discipline, the value often has specific properties that depend on the target actor seen as the value creator in a particular level of value creation in a phenomenon, and the underlying theoretical foundations are built on the findings of that particular level. However, from a networked and ecosystem point of view, as shown in the last section of China's digital music value ecosystem, value is created and captured in a variety of forms that encompass the monetary and non-monetary, the economic and cultural, and has a variable nature that depends on different actors' perspectives within the same cultural phenomenon.

In both cases, the phenomenon of Gufeng music and WeSing has reflected multi-leveled value creation based on the engagement of actors in the individual, organizational, and governance levels, representing the complexity of the value of music captured by people, firms, policymakers, and society as a whole. Thus, rather than focusing on either component of the monetary and non-monetary, individual or institutional, this research treats them as equally important parts. The key to identifying value depends on identifying the key actors participating in digital music. Apart from social consensus, value also exists in the eye of the beholder, and each actor, has their interpretation of value based on their value propositions; hence, multiple levels of value could coexist and be co-created through their interaction within the network.

Value not only varies depending on actors' specific perspectives and value propositions, but it is also unstable and can evolve over time, making it unpredictable and difficult to anticipate or measure. Value has a contingent nature (Lepak et al., 2007) that varies among actors and their specific activities, and it is constantly shifting and developing with the development process of the ecosystem and the actors involved. Also, not only can actors engage in value
activities based on their existing value propositions, but new opportunities and values can also arise through the process of their engagement. For example, an elderly WeSing user may initially use the app to fulfill the need for accessible entertainment, but through the use of the app, they may capture the educational value of the app and become a singing hobbyist or reconnect with old friends, capturing the social value of the app. Therefore, the various values discussed in the last section only offer a snapshot of the analyzed perceived value in two particular case studies at a given time; through the engagement of actors, the value could also develop into something new. There is no universal value that remains constant in any given case; rather, value could evolve over the process of network development and unpredictable activities of actors within the network.

7.4.2. The Relational Nature of Value

The nature of value is both variable and contingent, as it is valued by various actors across the entire ecosystem in different forms. Value is also constantly evolving and unpredictable, as it arises from the process of actors’ experience and engagement at different times. Additionally, value has a relational nature, meaning that it is co-created and captured through the interaction of actors within the network, rather than being created solely by a single actor.

From a marketing perspective, value is always co-created and only takes place when there is an interaction between the firm and the consumer (Vargo and Lusch, 2008; Grönroos, 2011). Value is created and perceived by users through the process of value-in-use, rather than at the endpoint of exchange value, making consumers co-producers of value with the firms. Furthermore, firms have the opportunity to influence and interact with the consumer’s value-creating process, such as in the co-creation between digital music platforms and the participation of prosumers in the digital music sector (Waldron, 2013;
However, moving away from the firm-oriented view of value co-creation, the interaction between firms and consumers is not always mutually beneficial, and not all value is co-created in a collaborative manner. Instead, value often resulted by the process of constant negotiation between actors in the network. Through interaction, the entity or factor that generates value may not necessarily be able to retain or capture it by itself. Value created by one source or level may be obtained by another, which Lapek et al. (2007) referred to as "value slippage". Although they identified that value created by one actor can be captured by actors at another level, they view value slippage as a "ripple effect," ignoring the process in which the value capturer at another level actively shapes the value as well as the entire network through their engagement. However, instead of being slipped to another level, value is actively constructed and rearranged by actors in the process of translation (Callon, 1984). They can take agency and shape the network based on their own value proposition, and value is co-created with the interaction of actors in the network with underlying tension and negotiation.

As discussed in previous section, actors could either co-create, negotiate, or appropriate value that benefits their own interests and shapes the network to their favor, or the value being diminished or destroyed during conflict. Therefore, a new perspective on value co-creation could be seen as actors actively seeking to utilize and manipulate resources and interact with other actors in various ways to capture value within the network. For example, in the case of Gufeng, early Gufeng artists adopted the 5Sing’s cover song feature, originally designed for covering original songs on the platform, and used it to create alt-lyric Gufeng covers using unauthorized soundtracks, which were then distributed for free on the music platform. The music platform then used users’ artistic creations as user-generated content, which became the resource for
capitalization and further commercialization. Eventually, policymakers also used the genre's popularity and reconstructed Gufeng to suit their ideology and narratives, despite losing its original essence according to early fans.

The relational nature of value based on interaction and negotiation could offer another perspective on the issue of the digital music sector, such as digital music prosumption. Based on the value co-creation research, consumers play an ever-increasing role in value creation, as users are empowered to become prosumers in co-creating value with digital music services (Winter, 2013; Choi & Burnes, 2013), and this could mutually benefit both parties in the relationship. However, in popular music studies, many scholars debate the exploitation of free labor (Ritzer & Jurgenson, 2010; Hesmondhalgh, 2015) in platformization, where digital music platforms extract the value created by users with less return. On one hand, the co-creation research tends to embellish the relationship between firms and consumers by only focusing on the positive partnership between the two parties. On the other hand, the exploitation view on presumption could not justify the mass users who are content with their online participation and willing to be "exploited".

However, the findings from the case of WeSing show that the relationship between users and the platform is not collaborative nor exploitative; instead, it is a process of constant negotiation and compromise to align the interests of each actor based on their needs. Initially, WeSing had to adapt to the market by providing free services to users while generating revenue through subscriptions and virtual gifting. This attracted a large number of elderly users who used the app for free, and not only did they not contribute to WeSing's business models, but they also resisted against the over-commercialization and paid virtual gift culture on the platform. However, despite not paying for the app monetarily, users are willing to spend a lot of time on the app singing, socializing, and participating in various features such as competing to chart and completing
daily login tasks in exchange for free virtual gifts, which in turn contributes to the platform's datafication strategy. In this relationship, both sides have their own pursuit of value - free karaoke for elderly users and profits for the platform. Through the process of negotiation, they were able to align their interests with compromises and trade-offs to achieve value co-creation for both parties.

7.4.3. The Contextual Nature of Value

The actor-network theory emphasizes that a network is constructed by the interaction of interconnected actors (Law, 1992), such as people, organizations, and technologies that have the ability to act or exert influence in a social context. However, the theory does not take into account the influence of context on the network. Since value is not only perceived differently by actors and is co-created through their relationships and interactions within a network, but the interactions are also influenced by the underlying historical, political, social, and cultural contexts in which actors exist. In business ecosystem theories, this context is regarded as external forces that influence the co-evolution of economic organisms (e.g., firms, suppliers, customers) within the ecosystem, such as government agencies and stakeholders affecting the development of the economic community (Moore, 1993). However, it could not explain how a specific environment has shaped the value co-creation process of actors and, more importantly, the actors themselves.

It is crucial to mention that the actors themselves are conditioned by the specific context that influences their perspective on value, as well as their actions and interactions within the network. Two cases that took place in China have shown how the country’s contextual distinctiveness has contributed to unique cultural phenomena and value co-creation. Unlike the Western music sector, which has long been entrenched by industrial players in the recording industry (Shen et al., 2019), China’s popular music development was relatively late. It involved a process of absorbing and adopting Western (and East Asian)
musical culture and mixing it with Chinese culture, as discussed in the contextualization chapter. However, this has also created a huge opportunity for China's music development in the digital age, not only to keep up with the West but also to evolve in its own trajectories.

At the individual level, the new generation of artists in the Gufeng circle can use digital technology to learn music production from scratch and utilize abundant resources to create new kinds of music. They can distribute their music online to the mass user, bypassing the traditional gatekeepers in the elite system, as well as any copyright restrictions. They can go through the process of trial and error, to build the genre by copying and learning from existing music styles and songs, and gradually create the uniqueness of the genre and the musical culture with direct support and interaction with peers and fans in the Gufeng circle, and eventually create a mature, commercially viable online music genre. Similarly, in the case of WeSing, mobile-based digital technology offers the possibility of music engagement on a large scale for the elderly user community. As a developing country with a huge population of non-musical and elderly individuals, platforms such as WeSing can play a crucial role in bridging this gap by providing an easy and accessible way for them to create and consume music as well as interact with their peers. This, in turn, enables music participation for people who may not have had the opportunity to do so before, potentially enhancing their quality of life and providing them with a sense of community and connection through music.

At the organizational level, internet companies such as Tencent, Alibaba, and NetEase have entered the online music sector in the underdeveloped music market and the absence of industrial players, which contributes to a unique ecosystem around digital music services. These internet companies have put out innovative services with business models tailored to the Chinese market's low paid user penetration and diverse needs. Chinese digital music
platforms provide a wide range of music-entertainment services for free to mass users, from short-form videos, live streaming, music education, to mobile Karaoke. In order to generate income from the Chinese market apart from subscriptions, they have diversified their income streams to gain a majority of profit from other channels such as virtual gifting, personal advertisements, and merchandise sales. They also put more effort into building social networking features on top of their music features to add social value to their services and retain active users on their platforms. They also utilize user participation in the form of user-generated content, taking on the record label's role in the digital age by signing direct licensing deals with independent artists and providing tools and technical support for regular users, such as the elderly users in WeSing to engage in the music creation process.

Also, one of the most notable features in China's context is its strong top-down political influence of policymakers in the musical culture. China's authority has been deeply involved in the country's consumption and production of music. Historically, the Communist Party has used music as a way of promoting socialist and nationalist ideology since its birth, as well as censorship of content that is not in line with socialist values when the party took leadership of the nation (Clark et al., 2016). However, in the digital age, politics have become more subtle and merged with music and the everyday lives of Chinese people. In this context, the involvement of propaganda and ideology in digital music is often not viewed as negative, as music in the digital age has a mediated relationship between people and politics and blends in with the values perceived by individuals. Most of the people in the Gufeng circle interviewed are happy about how the state endorses the new Gufeng music as a big achievement of Gufeng's development, which is finally being "incorporated" by the state, which also means more opportunity for Gufeng artists and the genre to grow. Also, instead of feeling suppressed in their past, many elderly WeSing users enjoy singing red revolutionary songs from the revolution era. It helps
them remember their precious youth and be grateful for today's abundance, even during the "down to the countryside" movement when these educated youths were demanded to reside and work in the farmland.

The top-down governance of policymakers is also evident in the relationship between the state and digital music platforms, with state organizations directly involved in the digital music business and economic development process. As discussed in the precious section, the digital music sector undergoes three distinctive stages of emergence, expansion, and regulation as a result of this socio-politico context. From the liberal environment in the early 2000s with loose intellectual property control and tight regulation of foreign music services (Montgomery, 2009), which enabled a large number of domestic digital music services to emerge, to the strict IP enforcement after 2015 that created an environment to support the legitimate online music sector with dominant players, and further to the anti-monopoly regulations after 2017 that sanctioned large tech companies in merger and exclusive content for fair competition, policymakers play a crucial role in balancing the need for economic prosperity and maintaining socialist values and political control. Hence, the context is constantly shifting due to this top-down governance, resulting in the entire digital music ecosystem constantly evolving in the process.

7.5. Summary

This chapter provided empirical and theoretical contributions to understanding the complexity of value co-creation in China's digital music sector. It began by analyzing case studies of Gufeng and WeSing, exploring the underlying values created by actors at individual (empowerment, diversity and inclusivity, community and identity), organizational (free creative labor, commercial value of mass participation), and governance levels (economic value and industry prosperity, political value and ideology promotion) in China's digital music sector, as well as their dynamic relationships and interactions. The
chapter proposed a multi-level framework for China's digital music value ecosystem to comprehend the structural relationships among actors and examined their value-based interactions through value co-creation analysis. Finally, the chapter conceptualized the findings of the two cases by arguing for the *variability*, *relational*, and *contextual* nature of value.

In Section 7.2, a multiplicity of values in digital music development captured by the actors in the three-level framework were identified. At the individual level, the rise of digital music technology and online platforms empowered individuals to become active participants in the music industry, leading to a rise in "prosumers," the merged role of producer and consumer. This created a diverse and inclusive online musical environment, enabled independent music production and distribution, and facilitated the creation of online music communities. At the organizational level, digital music services exploited prosumers' free creative labor and mass participation to reduce production costs and capture commercial value through various business models, which built on the datafication strategies of user engagement. Finally, at the governance level, Chinese policymakers played a significant role in the development of the digital music sector, utilizing political tools to achieve commercial prosperity and contributing to domestic economic growth and employment, as well as promoting nationalist and socialist ideology through digital music.

Then, section 7.3 proposed the model of China's digital music value ecosystem to understand the actor relationships and interactions within the China's digital music sector, as well as the mediating role to technology and Chinese context shaping the development process of the ecosystem. It discussed the dynamic relationships and value-based interactions between actors within the ecosystem, categorizing these value co-creation activities (*value co-creation, value negotiation, value appropriation, and value dissolution*)
through the notion of value co-creation analysis based on their levels of interactions and mechanisms. This section also highlighted the role of technology as a mediator of this value co-creation, where these technologies acted as non-human actors influencing the digital music value ecosystem, shaping people's actions and decisions, and reflecting the values of their designers and users. Finally, the development process and distinctiveness of the digital music value ecosystem in the Chinese context were discussed. This includes its historical past of piracy influencing consumer behaviors, the adaptive strategies employed by firms that focus on free services, user-generated content, and user communities. Moreover, the state's dominant role in shaping economic policies and business regulations leads to a constantly changing environment, characterized by its emergence, expansion, and regulatory stages. This creates a complex and changing state-business relationship marked by collaboration with underlying tension, which the state relies on businesses for economic support while regulating them to ensure a fair marketplace, and businesses must follow regulations and utilize state connections to gain market advantages.

The last section focused on the theoretical contribution of the research to discuss and conceptualize the nature of value based on the case findings. Three different views on value were proposed to explore the complex nature of value. First, the variable nature of value was discussed, suggesting that value is not limited to monetary or non-monetary aspects, but is a complex phenomenon shared by people, firms, policymakers, and society as a whole. The key to finding value is to identify the key actors and their value co-creation process, and as it depends on actors' perspectives, it carries different meanings and can evolve over time, making it unpredictable and difficult to anticipate or measure. Value also has a relational nature, where it is co-created and captured through the interaction and negotiation of actors within the network. Additionally, not all value is co-created in a collaborative manner, and value is constantly
negotiated and rearranged by actors in the process of translation, which challenges the view that the relationship between firms and prosumers is either collaborative or exploitative, and instead shows that it is a process of constant negotiation and compromise to align the interests of each actor based on their needs. The last part of the section discussed the contextual nature of value, using the digital music sector in China as a case, highlighting how the country’s unique cultural and political context shaped the development of the sector, the actors themselves, and how value is co-created.
8.1. Revisiting Research Objectives and Questions

The main goal of this research is to explore the diverse values created in China's digital music sector beyond economic impact by creating a model to examine the different actors involved, their relationships and interactions, and how value is created through the value co-creation activates among actors. Following this aim, two research questions were formulated in the methodology chapter (RQ1: How have historical, ideological, and market factors shaped the evolution of China's mass-line music development in the digital age? What are the diverse values in China's digital music ecosystem, and how have interactions and negotiations between users, digital music platforms, and the state led to the co-creation of values amidst changing dynamics?; and RQ2: Considering the diverse forms of value creation, how can we conceptualize and understand the intricate relationship between users, platforms and the state and dynamic value ecosystem in the digital era? How shall we contextualize and interpret China’s distinctive characteristics in the era of digital music development?).

To achieve this goal, four specific objectives being raised need to be assessed: 1) exploring the development process of China's digital music sector within its distinct context, 2) identifying the different value(s) created for actors at each level in China's digital music sector, 3) analyzing the relationships and interactions between actors that constitute value co-creation, and 4) gaining theoretical insights into the nature of value by conceptualizing it.

First, the development process of China's digital music sector is being examined in Chapter 2, which by exploring the evolution of China's recorded music sector with cultural, economic, and political contexts spanning from the
early 20th century to the present digital era. It sheds light on the diverse forces and tensions (e.g., foreign vs. the traditional, elites vs. the grassroots, capitalism vs. socialism, economy growth vs. communist ideology) that have shaped the development process of China's music sector, and the challenges in the current digitized music sector resulted from this context including the individuals' needs of digital music engagement and firms' platformization strategy to capitalize on their mass participation; the firm's market expansion to capture cross-level value propositions and policymaker's policies and regulations against market control, and the policymakers' political ideology promotion in the digital age and the bottom-up participatory culture of individuals. In Chapter 7, China's unique historical context is further being analyzed in the model of China's digital music value ecosystem as an external force shaping the evolution of the ecosystem, which highlighting the distinctive trajectory of mass-scale systematic piracy resulting the low paid environment of users and the prevalence of firms to use freemium models and (UGC user-generated content) platforms adapting this environment, which constitute the mass platform-based music participatory culture; and the how the role of the state in the socio-political context could exert its power to influence the development of digital music economy in a top-down level, resulting the unique state-business relationships that constantly shifting to balance the policymakers need on economic growth and political influences.

Second, by analyzing the findings in the two cases of Gufeng and WeSing (Chapter 6 & 7), the multiplicity of values created by actors at individual, organizational, and governance level in China's digital music sector is discussed in Chapter 7. At the individual level, value is created in the form of empowerment, diversity and inclusivity, and community and identity. User-oriented digital music technology's progression has empowered individuals, enabling them to create, record, and distribute music, nurturing musical cultures at the bottom-up level such as Gufeng and facilitating the platform-based
prosumption like the participatory culture of elderly users on WeSing. Moreover, digitization has expanded the participation and sharing culture of mass users across diverse backgrounds, enriching digital music's diversity, fostering inclusivity, and providing a platform for underrepresented individuals to showcase their talents. With the emergence of various decentralized online communities, it also fostering identity formation and community bonding through independent genre development, offering marginalized individuals a way for community-based music creation and self-expression.

At the organizational level, the value is shown in the form of free creative labor, and commercial value of mass participation. Despite the empowerment of users and artists at the individual level, the online intermediaries are able to harness the potential of user-generated content (UGC) to develop innovative business models and digital music platforms, appropriate their users' free creative labor to broadening their contents offering and reducing production costs. Datafication plays a pivotal role by capturing user data, enabling personalized recommendations, and facilitating targeted advertising. This approach allows for a more diverse range of content that caters to distinct user preferences, fostering engagement and loyalty. Platforms also capitalize on users' mass participation and socialization, transitioning from commodifying content consumption to monetizing user engagement through features like virtual gifts and e-commerce sales. The cultivation of online fandom further diversifies revenue streams, highlighting the interplay between user interactions, community building, and commercial value generation facilitated by the firms at the organizational level.

At the governance level, the value in China's digital music sector can be observed in the form of economic value and industry prosperity, as well as political value and ideology promotion. Being a socialist state with a centralized governance structure positions policymakers as key actors in guiding the
ecosystem's development. In contrast to the more restrained government intervention seen in Western recording industries, China's policymakers employ a combination of laws, policies, and propaganda to strategically shape and re-shape the environment in the digital music sector, facilitate its economic growth, safeguard the domestic market, while maintain their power. This includes efforts to curb copyright infringement and block foreign competitors during the digital music sector's initial growth, enforcing copyright laws to foster legal online markets and protect the interests of major players, and implementing anti-trust penalties to prevent overly dominant firms from stifling competition and thereby creating a thriving digital music industry. In addition to nurturing and overseeing the digital music sector, policymakers also actively engage in online digital music development by utilizing online platforms as a means to directly connect with diverse groups and achieve their political objectives, including the promotion of socialist ideologies, fostering patriotism, and reshaping the nation's image. Through their direct involvement via officially promoted events, seminars, and online promotions, policymakers are able to appropriate and transform grassroots genres like Gufeng into a "politically correct" youth culture that aligns with nationalist narratives, thus amplifying the nation's global influence through soft power. Furthermore, the state plays a leading role in bridging the digital divide by implementing elderly-oriented reforms that shape digital online services to serve the marginalized communities, thereby enhancing social equality and contributing to the state's image as a caring and welfare-oriented governance.

Thirdly, building upon the findings of both the Gufeng and WeSing cases, the relationships and value-based interactions among actors across the three levels are diversified and structured within the value co-creation analysis outlined in Chapter 7. This analysis identifies and categorizes four main types of value co-creation activities among actors based on the level of interaction and value co-creation mechanisms. In situations that are optimal, robust
interactions among actors and effective mechanisms result in mutually beneficial *value co-creation*, as demonstrated by Gufeng artists and fans collaborating with the 5Sing platform. When less effective mechanisms are coupled with strong interaction, *value negotiation* emerges, exemplified by WeSing’s gamification strategies that balance firm’s commercial interests and users’ demand for free entertainment. *Value appropriation* takes place when actors leverage power dynamics to extract value from one another, as highlighted by the "Guofeng" ("Guo" as national) movement, where firms and policymakers collaboratively translated and transformed Gufeng ("Gu" as ancient) culture into a commercially viable genre aligned with national ideological interests. Lastly, *value dissolution* occurs when conflicts of interests and limited interactions hinder value co-creation, as illustrated by the unsuccessful 'care mode' of WeSing, hastily developed under the government’s elderly-oriented reform initiative, which was eventually abandoned by the elderly community.

The findings of the two cases and the cross-case analysis contribute to conceptualizing the nature of value in digital music through three intertwined perspectives: its variable, relational, and contextual aspects. Firstly, the variable nature emphasizes the diverse and evolving nature of value within the sector. Distinct viewpoints on value – firm-based exchange value (e.g., Porter, 1985), firm-consumer co-created value (e.g., Prahalad & Ramaswamy, 2004), and society-based cultural value (e.g., Crossick & Kaszynska, 2016) – demonstrate that value is not confined to a singular definition but varies based on different actors’ perspectives. The cases of Gufeng and WeSing reveal the multifaceted nature of value being created in both individuals, organizations, and governance levels. Furthermore, value is shown to be not a universal and fixed but also contingent and subject to evolution over time which aligns with the dynamic nature of actors’ engagements and evolving environment dependent on actors’ changing viewpoints and value propositions, evolving
actors and their activities, and the ongoing development of the ecosystem itself. Additionally, the relational dimension shows value is co-created within the networks rather than from individual entities, which actors’ joint interactions lead to the co-creation, negotiation, appropriation, or dissolution of the value. This challenges traditional firm-centric views on value, while also contrasting both the idealized co-creation notions (e.g., Winter, 2013) and the pessimistic views on prosumer exploitation (e.g., Hesmondhalgh, 2019). Finally, analyzing the contextual nature of value reveals despite the various values are created by actors' interactions and negotiation, their interactions and perceptions of value are shaped by the influence of historical, political, social, and cultural contexts within the network. The contextual distinctiveness of the China’s case (e.g., historic past on piracy, top-down socialist governance, state-business relationships, mass online participatory culture) has contributed to the unique cultural phenomena observed in the two case studies and the overall structure of the ecosystem, enabling China’s music sector to develop in its own trajectories with unique value co-creation dynamics.

Overall, through the assessment of the first three objectives, this research responds to research question one (How have historical, ideological, and market factors shaped the evolution of China’s mass-line music development in the digital age? What are the diverse values in China’s digital music ecosystem, and how have interactions and negotiations between users, digital music platforms, and the state led to the co-creation of values amidst changing dynamics?) by examining various contextual factors (e.g., historical, political, economic, cultural, societal) in China’s case that shape the evolution of the entire ecosystem, resulting in the unique trajectory of China’s digital music development. Under this context, by constructing a three-level framework of China’s digital music value ecosystem across individual, organizational, and governance levels, the model encapsulates the multiplicity of values created across various entities: Chinese mass online users and artists (empowerment,
diversity and inclusivity, and community and identity), digital music platforms (free creative labor, and commercial value of mass participation), and the state (economic value and industry prosperity, as well as political value and ideology promotion). The multiplicity of value goes beyond monetary and firm-centric perspectives, while considering the distinct interactions and value co-creation process of these actors framed through the notion of value co-creation analysis.

Addressing the fourth objective, research question two (Considering the diverse forms of value creation, how can we conceptualize and understand the intricate relationship between users, platforms and the state and dynamic value ecosystem in the digital era? How shall we contextualize and interpret China’s distinctive characteristics in the era of digital music development?) is responded through the conceptualizing value's variable, relational, and contextual nature. The Variable nature of value highlights that the concept of value is not fixed but rather fluid and adaptable, with value taking on different forms, dimensions, and meanings depending on the actors involved, their perspectives, and their specific value activities within a network. The Relational nature further emphasizes that value is not created in isolation by a single actor but is the result of multi-actor's value co-creation, which the value co-creation in this context is not always mutually beneficial and often involves negotiation and compromise, demonstrating the complex nature of value relationships among users, platforms and the state in China's digital music value ecosystem. Lastly, the Contextual nature of value discusses how the contextual distinctiveness of China has contributed to unique cultural phenomena and value co-creation in its digital music sector. It points out that the involvement of politics and ideology in digital music is seen differently in China compared to Western contexts, highlighting the influence of historical, cultural, economic, and political factors in shaping the nature of value.

8.2. Research Implications
This research examines the diverse values of digital music beyond economic and monetary impact through two distinct case studies in China: Gufeng and WeSing. It explores the value creation of mass online users, digital music platforms, and the state using a multi-level lens across individual, organizational, and governance levels within China's digital music sector. The interdisciplinary nature of this research provides an integrated perspective that comprehends value across disciplines, yielding implications for various existing research fields.

Firstly, supported by the findings of both cases, this study examines the diversity of values beyond direct monetary ones created within China's digital music sector. This challenge traditional GDP-based measurements and underlying valuations based on exchange value rooted in value chain theory (Porter, 1985) and music business-related studies (Dubosson-Torbay et al., 2004; Bockstedt et al., 2005). These variable "non-monetary" values, encompassing economic, cultural, societal, and political benefits created by various actors in the digital music sector through the act of valuing (Behr et al., 2014), or value-in-use in the service-dominant logic (Vargo et al., 2008) as shown in Chapter 7, broaden the perspective on the valuation of digital music, especially those that are freely provided in UGC platforms, which could be overlooked based on traditional monetary metrics.

Furthermore, the analysis of multifaceted value across different levels facilitates the comprehension of value creation from a multi-dimensional and networked viewpoint. The proposed model of China's digital music value ecosystem moves beyond "actor-centric" approaches, which attribute different characteristics to value in different disciplines depending on their research subjects as sole value creators. For instance, the firm-centric view in traditional business and management studies (Porter, 1985; Moore, 1993), and the community and society-centric view in cultural value studies (Crossick &
The research also moves away from the dyadic relationship in value co-creation (Prahalad & Ramaswamy, 2004; Burgess & Green, 2009; Chaney, 2012) between consumers and firms. This research argues that this could potentially lead to a "firm-oriented" view, focusing solely on strategies to form collaborative co-creation that benefits firms while neglecting the value co-creation led by the user community or the value co-creation involving other actors, such as policymakers in China's case. The networked ecosystem perspective offers a holistic view to examine the structure of the network, its variety of values, actors' diverse viewpoints, and actors' relationships, interactions, value co-creation, and power dynamics.

Thirdly, the value interactions of actors were framed by the value-co-creation analysis, bridging the divisive "empowerment-exploitation" narratives. The opposing narratives of the phenomenon of "prosumerism," either as a bottom-up participatory culture empowered by digitization challenging the existing media system as seen in business-oriented co-creation studies (Winter, 2013; Choi & Burnes, 2013), or the same culture but representing a new form of exploitation of free labor in platform capitalism as seen in cultural and society-oriented studies (Hesmondhalgh, 2010, 2015; Srnicek, 2017; Van Dijck et al., 2018), are constantly intertwined. Based on the findings of the two cases, the interaction between firms and users is neither purely collaborative nor exploitative but rather a constant interaction and negotiation driven by actors with distinct interests aiming to capture their own value propositions in the ecosystem. Under different circumstances, they may engage in collaboration to achieve mutual value co-creation, negotiate and co-create value through compromises, utilize their power to appropriate values from others, or even dissolve or disrupt value due to conflicting interests. This intricate interplay is influenced by each actor's distinctive value proposition and power within the ecosystem.
Lastly, in addition to the interaction of interconnected actors co-creating values, the study examines the role of context in shaping and reshaping networks, often overlooked by research in actor-network theory (Law, 1992). This research explains how various historical, cultural, economic, and political contexts are able to shape and transform the development of China’s digital music sector in both Chapter 3 and 7. This understanding sheds light on the distinctiveness of China’s case and the underlying causes of its developmental trajectories. Moreover, it offers theoretical generalizability applicable to researching other cultural contexts.

8.3. Limitations

While this research provides valuable insights into the complex dynamics of China’s digital music sector and its value creation processes, certain limitations should be acknowledged.

Firstly, considering the scope and generalizability of the research, it primarily focuses on the Chinese digital music sector, taking into account its unique historical, political, economic, and cultural context. As a result, the findings may not be directly applicable to other countries or regions with different socio-economic conditions and governance structures. The contextual specificity of the study may limit its generalizability to a broader global context. However, as discussed in the previous subsection, theoretical generalizability could be achieved.

Secondly, the findings are contingent upon the selected cases and may not fully represent the entirety of China’s digital music landscape. The research heavily relies on two case studies, Gufeng and WeSing, to illustrate and analyze the dynamics of China’s digital music sector within a three-level framework. While these case studies provide rich insights into mass music prosumption by Chinese users, the platformization of digital music platforms, and the
governance and politicization of policymakers in the digital age, they may not capture the full spectrum of diversity and complexity of value co-creation within the entire sector.

Thirdly, since the research primarily relies on qualitative data, including semi-structured interviews and publicly-available secondary data, data availability, particularly for primary data from actors at the governance and organizational levels, as well as behind-the-scenes interactions and unavailable data, may present limitations. This might lead to gaps in further understanding of values and value co-creation mechanisms. Also, despite efforts to ensure balanced analysis, the researcher's subjective interpretations and potential biases may influence the findings and conclusions. The complex nature of value and the diverse viewpoints of stakeholders may lead to differing interpretations of the data, potentially affecting the results.

Fourthly, due to time limitations, certain nuances and recent changes might not be fully captured or thoroughly analyzed. The digital music sector is constantly evolving, and there might be emerging trends that were not explored in the research. Rapid technological innovations and changing user behaviors heavily influence the digital music sector. As the ecosystem evolves, new actors, platforms, and value creation processes may emerge, potentially impacting the validity and relevance of the research findings over time.

Lastly, the study adopts an interdisciplinary approach by integrating elements of business and management, marketing, media and popular music studies, and sociology. While this interdisciplinary perspective enriches the analysis and provides insights into developing a new model, it also presents challenges in terms of navigating complex theoretical frameworks and effectively integrating diverse viewpoints.

8.4. Future Research
As this research has delved into the diverse values and value co-creation of actors in China's digital music sector, there are several opportunities for future research that can build upon the existing findings and expand the understanding. First, while the research has discussed the development of China's digital music sector by analyzing the interactions of individuals, firms, and policymakers in a holistic manner beyond the actor-centric view, future research could focus on each of these actors and thoroughly examine their particular value proposition and value co-creation to gain a deeper understanding of their specific roles in the digital music sector. Future studies could explore user motivations, behaviors, and preferences more deeply, understanding how users perceive and create value from engaging in digital music platforms, and how these perceptions may vary across various demographics, thus providing a more nuanced understanding of value creation. As for digital music firms, it will be fruitful to examine their value proposition and co-creation through the lenses of technology innovation, market dynamics of competition and collaboration, strategy developments, corporate ethics, and so on. Further research into the dynamic interplay between policy, regulation, and value creation in the digital music sector could involve building models to examine the effectiveness of different policy approaches and their impact on diverse stakeholder interests, to provide insights into how policymakers shape industry development and value co-creation.

Additionally, although the research covers the value co-creation in the digital music sector through the three-level framework of individual, organizational, and governance levels, it could offer further understanding for future research to analyze the distinct features and value co-creation of additional actors at the meso-levels, such as the various forms of large and small online user communities, parent companies and cooperative firms of digital music platforms, and the regional policymakers and administrative organizations, to create a more thorough understanding of China's digital music
ecosystem.

Furthermore, collaborative initiatives that bring together academia, industry, and government stakeholders could potentially enable larger-scale research and ample data availability. Collaborative research projects involving researchers, industrial players, policymakers, users, and artists can potentially pool resources, share insights, and provide a more holistic view of the digital music sector, which could lead to more comprehensive studies that integrate diverse perspectives and expertise. By engaging with a wide range of actors, researchers can access valuable data sources, conduct more robust analyses, gain primary insights into industry dynamics, solve challenges, and ultimately contribute to a richer understanding of value co-creation in China's digital music landscape.

Lastly, cross-cultural comparative studies could expand the knowledge of the diverse values of digital music. While this research has primarily focused on China, conducting cross-cultural comparative studies in other geographic settings would allow for a broader understanding of value creation processes in digital music sectors across different countries and regions. Comparing China's approach to value co-creation with other contexts could highlight generalized trends as well as context-specific factors.


Bai, J. (2018, February 10). 腾讯音乐与网易云音乐最终相互授权 99%以上独家作品 [Tencent Music and NetEase Cloud Music finally cross-license...


International Conference on Information Systems, Orlando.  


doi:10.1177/053901883022002003


Colding, & C. Folke (Eds.), *Navigating Social-Ecological Systems: Building Resilience for Complexity and Change* (pp. 53-82). Cambridge University Press. doi:10.1017/CBO9780511541957.006


https://www.jstor.org/stable/48615728


Klamer, A. (2004). Cultural goods are good for more than their economic value. In V. Rao & M. Walton (Eds.), *Culture and public action* (pp. 138-162), Stanford University Press.


http://www.jstor.org/stable/20192511
Kozinets, & A. Shankar (Eds.), Consumer tribes (pp. 194-211).
for beginners. SAGE Publications.
Larsen, G., Lawson, R., & Todd, S. (2013). The symbolic consumption of
music. In R. Bennett, F. Kerrigan, & D. O'Reilly (Eds.), New horizons in
arts, heritage, nonprofit and social marketing (pp. 89-104). Routledge.
Monograph, 38(1), 103-131. doi:10.5040/9781474282901.0013
doi:10.1007/bf01059830
studies in the accounting, management and organizational disciplines.
Qualitative Research in Organizations and Management: An
capture: A multilevel perspective. Academy of Management Review,
32(1), 180-194. doi:10.5465/amr.2007.23464011
University Press
Li, C. (2021). 文史 满庭芳：百代唱片公司旧址 [Historical culture of
Mantingfang: Old site of Pathe record company]. Retrieved from
https://www.thepaper.cn/newsDetail_forward_10702241


Ma, Z., & Ren, X. (2020). Division and dialogue of national aesthetics and community aesthetics – Taking “CCTV's Spring Festival Gala” and “Pay New Year’s Call on Bilibili” as examples. *Exploration and Free Views, 1*(8), 90-98.


MOC. (2009, September 4). Notice of the Ministry of Culture on strengthening and improving the review of online music content. *Ministry of Culture of


Retrieved from https://ir.tencentmusic.com/2022-03-21-Tencent-Music-
Entertainment-Group-Announces-Fourth-Quarter-and-Full-Year-2021-Unaudited-Financial-Result


Appendix 1. Example Interview Guides for Gufeng and WeSing Case

A. Gufeng Interview Guide (Individual Level)

Part 1: General questions about Gufeng music
Q1. Could you introduce what Gufeng music means to you?
Q2. What made you become a fan of Gufeng music?
Q3. Please introduce the Gufeng artists you like the most and explain why you like them.

Part 2: Gufeng-related consumption in the digital age
Q4. Can you describe how you consume Gufeng music?
Q5. Where and how do you obtain information about Gufeng music?
Q6. What are the differences in your music consumption in the digital era compared to the past?

Part 3: Gufeng-related "prosumption" and interaction in the digital age
Q7. Please introduce the main online communities for Gufeng music and explain how these communities contribute to the development of Gufeng music.
Q8. How do you engage and participate in Gufeng-related online communities?
Q9. What types of content do you generate and share in these online communities, and do you know of other users who do the same?
Q10. What motivates your participation in these communities?
Q11. What is your opinion on the interaction between fans, artists, and labels (promoters) on social media? What are the advantages or disadvantages?

Part 4: Interaction and value co-creation with other actors in the ecosystem
Q12. What is your opinion on the role of music companies, including labels (e.g., Momingqimiao), and music services (e.g., 5Sing), in the development of Gufeng Music?
Q13. What is your opinion on the state's role (e.g., Communist Youth League) in supporting the development of Gufeng Music?
Q14. What characteristics do you think Gufeng music has that have led to increasing public attention over the years?
Q15. How do you and the Gufeng community respond to the state's support for the development of Gufeng music?

B. WeSing Interview Guide (Individual Level)

Part 1: General questions about WeSing
Q1. Could you introduce what WeSing, and mobile karaoke are?
Q2. What made you become a user of WeSing?
Q3. Please introduce the WeSing artists you like the most and explain why you like them.
Part 2: Individual music consumption and "Prosumption" in the digital age
Q4. Can you describe how you consume music in the digital age?
Q5. Where and how do you obtain information about music in the digital age?
Q6. What are the differences in your music consumption in the digital era compared to the past?
Q7. Based on your experience, what are the differences between listening to music passively online and singing karaoke online? What are the advantages and disadvantages?
Q8. Based on your experience, what are the differences between singing karaoke on WeSing and singing karaoke in karaoke bars? What are the advantages and disadvantages?
Q9. Please describe how the development of WeSing's services has affected your musical experience on the platform, such as its functions and various "gamification features" including competitions and events.

Part 3: Social interactions with other users in WeSing
Q10. How do you engage and participate in online communities on WeSing?
Q11. What types of content do you generate and share in the online communities, and are there other users who do the same?
Q12. What motivates your participation in these communities?

Part 4: Interaction and value co-creation with other actors in the ecosystem
Q13. What contributions has WeSing made that have improved your well-being?
Q14. In your opinion, why has WeSing become so popular over the years, especially among older demographics and people from smaller cities and rural areas?
Q15. What is your perception of WeSing's nonprofit practices in pursuing social goals, such as hosting charity events across the country or the "Guardian Project" that regulates minors on excessive in-app purchases?
Appendix 2. Overview of the Coding Layout for the Case of Gufeng and WeSing