

THE EFFECT OF DIGITALIZATION ON SUPPLY CHAIN COMPLEXITY OF  
THE MUSIC INDUSTRY: AN EMPIRICAL STUDY FOR TURKEY

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Approval of the Graduate School of Social Sciences

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## **ABSTRACT**

### **THE EFFECT OF DIGITALIZATION ON SUPPLY CHAIN COMPLEXITY OF THE MUSIC INDUSTRY: AN EMPIRICAL STUDY FOR TURKEY**

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The business of music is one of the most creative, innovative, and profitable businesses in the world in general, with a value more than 18 billion USD in total. In today's global world, the music industry is in an era where the digital service providers or digital channels have a critical role and digital sales are on the front burner. Digitalization is also changing music supply chains all over the world. In this dynamic environment new actors emerge to meet the online needs of customers better and existing relationships between key actors are challenged. This thesis examines the effect of digitalization on the current Turkish music supply chain structure from a supply chain complexity perspective. Supply chain complexity is investigated by distinguishing between detail (i.e., number of actors, variety of actors, and interaction between actors) and dynamic complexity. Furthermore, in order to generate further insights in relation to relationships between actors, power (i.e., type and balance) characteristics are investigated. Adopting a single case study approach, 23 semi-structured interviews were conducted with the executives of several key actors in the Turkish music supply chain. The results provide rich

insights regarding how the supply chain complexity of the Turkish music industry increased with increasing number of actors, interactions, and dynamism in relation to digitalization and how the structure became more decentralized with increased alternative channels.

**Keywords:** Supply chain, supply chain complexity, music industry, power

## ÖZ

### DİJİTALLEŞMENİN MÜZİK ENDÜSTRİSİNDE TEDARİK ZİNCİRİ KARMAŞIKLIĞINA ETKİSİ: TÜRKİYE’DE DENEYSEL BİR ÇALIŞMA

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Müzik endüstrisi toplamda 18 milyar dolardan fazla getiriyle dünyanın en yaratıcı, yenilikçi ve kârlı iş sahalarından biridir. Bugünün global dünyasında, müzik endüstrisi dijital hizmet sağlayıcılarının veya dijital kanalların önemli role sahip olduğu ve dijital satışların ön planda olduğu bir dönemin içindedir. Dijitalleşme aynı zamanda tüm dünyada müzik tedarik zincirlerini değiştirmektedir. Böylesine dinamik bir ortamda, müşterilerin dijital ihtiyaçlarını daha iyi karşılayabilmek için yeni aktörler ortaya çıkmakta ve ana aktörler arasındaki ilişkiler değişime zorlanmaktadır. Bu tez tedarik zincirinde karmaşıklık perspektifinden dijitalleşmenin günümüz Türk müzik tedarik zinciri yapısına etkisini incelemektedir. Tedarik zincirinde karmaşıklık, yapısal karmaşıklık (aktörlerin sayısı, çeşitliliği ve birbirleriyle etkileşimi) ve dinamik karmaşıklık olarak ele alınmıştır. Ayrıca, aktörler arası ilişkileri daha iyi kavrayabilmek amacıyla güç özellikleri (tip ve denge) incelenmiştir. Tekli vaka çalışması yöntemi benimsenerek Türk müzik tedarik zincirindeki çeşitli ana aktörlerin yöneticileriyle 23 yarı yapılandırılmış görüşme gerçekleştirilmiştir. Sonuçlar dijitalleşmenin artan aktör sayısı, etkileşimler ve dinamizm ile nasıl Türk müzik tedarik zincirinde karmaşıklığı arttırdığına ve yapının



artan alternatif kanallar ile nasıl daha ayrışmış bir hâle geldiğine ışık tutmak adına bulguları gözler önüne sermektedir.

**Anahtar Kelimeler:** Tedarik Zinciri, Tedarik Zincirinde Karmaşıklık, Müzik Endüstrisi, Güç, Türkiye

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## LIST OF ABBREVIATIONS

B2B	Business-to Business
CD	Compact Disc
DMCA	Digital Millennium Copyright Act
DJ	Disk Jockey
ICT	Information and Communication Technology
IFPI	International Federation of the Phonographic Industry
ICT	Information and Communication Technology
MESAM	Musical Work Owners' Society of Turkey
MP3	MPEG-1 Audio Layer 3 File
MSC	Music Supply Chain
MSG	Musiki Eseri Sahipleri Grubu Meslek Birliđi
MÜ-YAP	Turkish Phonographic Industry Society
MÜYORBİR	Müzik Yorumcuları Meslek Birliđi
RIAA	The Recording Industry Association of America
SCC	Supply Chain Complexity
SCM	Supply Chain Managements
TV	Television



## CHAPTER 1

### INTRODUCTION

The music industry is a business which is worth 19.1 billion USD considering the digital revenues generated in 2018 (International Federation of the Phonographic Industry, 2019). Within this revenue, streaming services, which are the services provided to customers based on subscriptions, account for nearly half and the revenue generated from the digital side accounted for more than half of the total revenues for the first time in the history (Abu Seman and Putri, 2018; IFPI, 2018). These numbers demonstrate the increased importance of digitalization in music in this today's era. There are numerous digital platforms and service companies with distinctive business models in music industry nowadays (Lin, Shih, Tzeng, and Yu, 2016). Digital platforms affect all of the actors like record companies, digital distributors, consumers and performers considering the supply chain of music industry as a whole (Leenders, Farrell, Zwaan, and ter Bogt, 2015; Lee, Choi, Cho, and Lee, 2016; Puerta, 2017).

The supply chain is a structure where the actors are connected to each other with ties through which the sharing of information and materials is ensured (Graham, Burnes, Lewis, and Langer, 2004). There are various studies in the literature about supply chain since there is an increasing trend with technological changes and developments in the world (Quinn, 2017). The majority of studies in supply chain management focus on manufacturing industries and there are only a few studies that focus on other economical areas such as services, non-profit, and fine-arts (Handal, 2017; Mashiloane, Mafini, and Pooe, 2018; Duong, Wood, Wang, and Wang, 2017). However, there is increasing evidence that supply chain management plays a big role in service industries as well (Tseng, Lim, Wong, Chen, and Zhan, 2018). One of

these less examined contexts is music supply chains. Between the few studies examining music industry supply chain, some approach the music industry and the supply chain in a global sense (Graham and Hardaker, 2003; Graham, 2006) while some focus more on specific sides of it, such as concentrating on some specific actors and the related topics about these actors in the chain (Renard, Goodrich, and Fellman, 2012). Graham and Hardaker (2003) examined the change in the music industry supply chain with the advent of the internet in a general sense and they also addressed how the power of the big record companies is threatened as well as the risk of piracy in this new emerging structure. Graham (2006) brought a more holistic approach by analyzing the change in the music supply chain by considering the several factors like activities, relationships, coordination and control in the structure. Renard et al. (2012), on the other hand, focused on the change in the situation of the artists and big record companies in the new music supply chain (shaped by digitalization). In a similar vein, some studies are from the era before digitalization, some are from the beginning of digitalization, namely from the MP3 era, and some of them are from the last of fifteen years covering the era that we live in (Shemel and Krasilovsky, 1985; Premkumar, 2003; Yang, Jingjing, and Xu, 2011).

Considering the most recent studies, the focus varies. For instance, some studies are more focused on the piracy in digitalization age (Jeong, Khouja, and Zhao, 2018); some are only about digital platforms and distribution channels, while some are about the configuration of the global music industry supply chain as a whole (Premkumar, 2003; Nakano and Fleury, 2017). Given the change in the music industry supply chain, Graham et al. (2004) studied the topic from a macro angle. In his dissertation Renard (2010) concentrated on the global music supply chain by utilizing a social network analysis. Nakano and Fleury (2017) analyzed the effects digitalization on the supply chain's network structure. They emphasized the change in governance as well as power dynamics between the actors in the music supply chain due to the emergence of alternative distribution channels and they approached the transformation in the music supply chain in a global sense by not adopting a specific perspective. Different concepts were also studied regarding the music

industry supply chain. To exemplify, Bustinza, Parry, and Vendrell-Herrero (2013) broadened the concept of servitization in the context of music industry. In addition, Burnes and Choi (2015) worked on the importance of social communities and networks in the music industry taking South Korea as an example. Arditi (2014) investigated the relationship between employment and digitalization in music industry, not necessarily having a supply chain perspective.

This thesis differs from the previous literature for a number of reasons. First of all, taking into account the increased number of digital channels and their importance in revenue generation in today's music industry, this thesis elaborates mainly on the effect of digitalization on the supply chain complexity of Turkish music industry. A supply chain complexity perspective was adopted as this concept encompasses both the structural characteristics (i.e., number of actors, variety of actors) and dynamic characteristics (i.e., change in customer requirements) of the supply chain, which grasps better the complexities associated with the dynamic nature of the music industry. So far, there have not been any studies examining music supply chains by adopting a supply chain complexity perspective. As the literature is rather scant on this topic, an exploratory approach via a single case study is adopted by focusing on a developing country, namely, Turkey.

Digitalization has effects on the music industry supply chains globally and locally (Graham, 2006). However, this thesis is country-specific, where Turkey is selected as the area of concern to be able to do analysis in the context of a developing country. Currently, Turkey is in a transformation process from traditional to digital, and was not ranked between the biggest twenty music industries in the world in terms of market shares in the last ten years (IFPI, 2018). In Turkey, digitalization has started to get more importance with an increased number of digital sales in the country within the last five years ("MÜ-YAP/Türkiye", 2018). Instead of focusing on the independent parts and actors of the supply chain specifically, this thesis takes the whole supply chain as the unit of analysis in a country-specific context and analyzes the effect of digitalization from a supply chain complexity perspective. In that sense,

the sub-question is related with the concept of power in order to be able to better understand the relationships between main actors as well as the inter-play between complexity dimensions.

### **1.1. Research Objective and Research Questions**

The main aim of this thesis is to investigate the effect of digitalization on the supply chain complexity of the Turkish music industry. As supply chain structure is a rather broad concept, a “supply chain complexity” perspective is adopted. Supply chain complexity has been first coined as a term by Wilding in 1998 and since then has attracted a lot of attention in the literature (Bode and Wagner, 2015). Supply chains are getting increasingly complex due to the increases in both the number and variety of actors, increased rate of globalization, and the pace of change in customer requirements (Bozarth, Warsing, Flynn, and Flynn, 2009; De Leeuw, Grotenhuis, and van Goor, 2013). So far, the emphasis has been on manufacturing sectors rather than service supply chains. The music industry, going through a major transformation due to increased digitalization, is another area where supply chains are changing rapidly. Considering the gaps in service supply chains, in this thesis the aim is to answer the following research question.

*“What is the effect of digitalization on the supply chain complexity of the Turkish music industry?”*

Supply chain complexity is examined by investigating two sub-dimensions: Detail complexity and dynamic complexity (Bozarth et al., 2009; Lu and Shang, 2017). Detail complexity is further distinguished as the number of actors, variety of actors, and interaction between actors. In order to generate further insights regarding the relationships between actors, also power types and balances between actors are examined. Although business-to-business (B2B) relationships can be investigated

with several relationship characteristics, previous studies highlight that among those power is one of the most important relationship characteristics affecting how parties interact and exchange products/services and information (Takashima and Kim, 2016; Malik, Ngo, and Kingshott, 2018). Therefore, the following sub-question is also formulated to better investigate the relationship between actors:

*“What is the effect of digitalization on the power characteristics of the Turkish music industry?”*

## **1.2. Research Strategy**

In this thesis, a single-case study was adopted as the research strategy, which is suitable for the exploratory approach. Depending upon the research objective and questions, the study was conducted in Turkey. The unit of analysis is the supply chain in the Turkish digital music industry in general.

Interviews were conducted with key executives of the actors in the unit of analysis and the interview results were combined with secondary data where possible (e.g., sales figures and graphs from past years). Details about secondary data are provided in Methodological Approach section. Due to the exploratory nature of the research questions, a qualitative analysis rather than a quantitative analysis was deemed more appropriate.

## **1.3. Theoretical and Managerial Relevance**

Although how the digital distribution channels change the structure of the supply chain in the music industry as well as the emerging business models and alternative schemes for production and consumption were investigated to some extent in the

literature (i.e., Leyshon, 2005; Liebowitz and Watt, 2006; Nakano and Fluery, 2017), most of these studies are related to the digital tools of a decade ago. Furthermore, often the focus has been on developed countries rather than developing ones (Poel and Rutten, 2005; Naveed, Watanabe, and Neittaanmäki, 2017). Considering these, this master thesis tries to fill the gap in the literature by studying the music supply chain of a developing country, Turkey, and collecting data from a more recent period. The study has practical or managerial relevance because it aims to add value by giving insights to the actors about the supply chain complexity of the Turkish music industry and how to position themselves in this structure in order to cope with the changing requirements in relation to digitalization.

## CHAPTER 2

### LITERATURE REVIEW

In this section, first, the role of digitalization in the Turkish music industry is discussed. Second, the concept of “supply chain management” and supply chain actors in the Turkish music industry are examined. Third, “supply chain complexity”, its sub-dimensions, and performance implications are elaborated. Finally, “power and dependence” are discussed to examine the relationship between music supply chain actors.

#### 2.1. Music Industry and Digitalization

Together with commercialization of music, the recorded music market came to the scene (Öztürk, 2015). The emergence of recorded music was with the innovation of the 78rpm (revolutions per minute) in 1906 after the innovation of the phonograph (cylinder) or gramophone between the years of 1877 and 1887 (Rasmussen, 2017). Then, the innovation of radio was a turning point in 1920. Radio was an efficient way of promoting recorded music (Huygens, Baden-Fuller, Van Den Bosch, and Volberda, 2000). Vinyl discs (331/3rpm, 45rpm) came later in 1948. After that, came the audiocassettes in 1962, Walkman in 1979, and CD in 1982 where audiocassettes, CDs and Walkman made the portability of music available (Coleman, 2005). Although the distribution and promotion of the music were not affected, the outlook of the product changed. As a result, the position of the majors was not threatened (Moreau, 2013).

It was not until the 1990s that the internet and ICT (Information and Communication Technology) impacted the distribution and promotion stages of the supply chain in the global music industry (Bourreau and Labarthe-Piol, 2004). This posed a threat for the majors because the control of the distribution and promotion phases of traditional supply chain in the music industry pertained to the majors or big traditional record companies, creating entry barriers for the newcomers (Leyshon, 2001). These significant technological developments or innovations were in the same chronological order for Turkey similar to the trend in the world in spite of the fact that there was slight time lag for them to be common country-wide relative to the speed of the developed countries when introduction dates were analyzed (Işıkhan, 2013).

Piracy cannot be disregarded in this context. Although it is not the main concern anymore, as Dechsakda (2012) notes that *“The battle with piracy will be an ongoing process that will be hard to end anytime soon.”* Piracy in music industry is an ongoing issue even today. Peer-to-peer networks, for instance, enable free file-sharing (David, 2009). The good news is that piracy is in its declining stage with the help of streaming services since streaming paved the way for listening to high quality music with minimum costs and consumers were encouraged to use streaming services rather than the option of free music (IFPI, 2017). According to the Nielsen report (2017), audio streaming set a record with 7 billion audio data flow in one month in the United States. Other than streaming’s contribution, prior endeavors of industry actors to protect online content since the beginning of digitization era gave good results. In conjunction with statutory acts like the Digital Millennium Copyright Act of 1998 (DMCA) and with collaborations of online intermediaries, various search engines, hosting providers, payment providers, advertisers were banned from engaging in illegal online activities infringing copyright protection (IFPI, 2012).

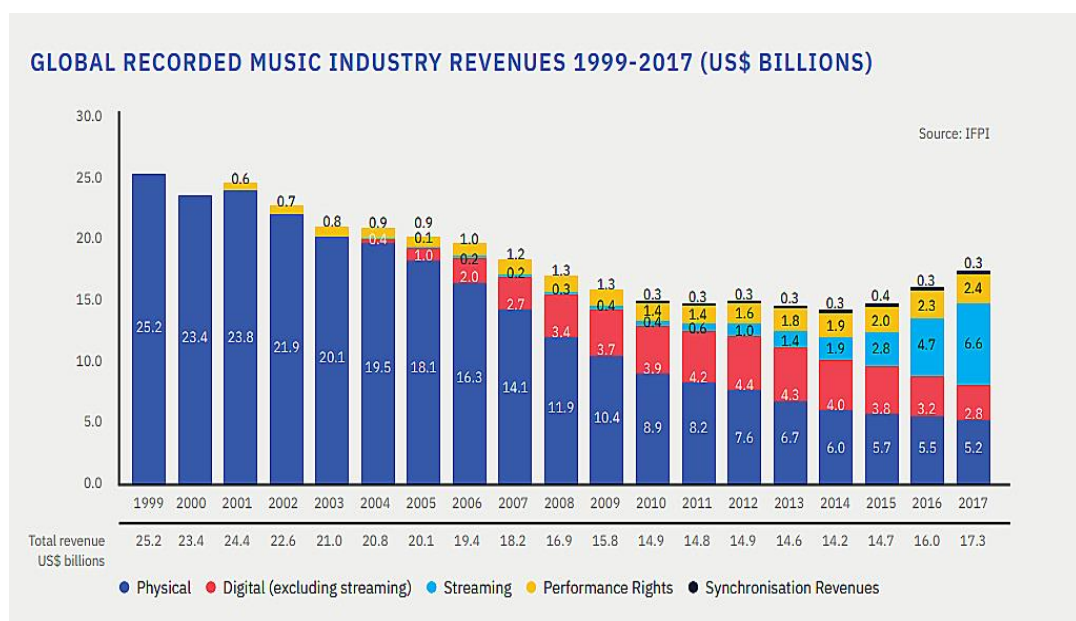
One of the recent reports of IFPI (2017) depicts the revenue streams coming from different areas in the world. According to Figure 1, the share of physical sales as well



as downloading (excluding streaming services) are shrinking while the share of streaming services in terms of revenues is in an increasing trend. From Figure 1, the global revenues generated can be classified as:

- Physical sales (CDs and vinyl sales): 30%
- Digital sales (downloading and streaming): 54%
- Performance rights (covering places open to the public): 14%
- Synchronization (using the music in TVs, radios etc.): 2%

According to this recent report of IFPI (2017), the biggest markets are the United States, Japan, Germany, England, France, South Korea, Canada, Australia, Brazil and China in the global music industry.



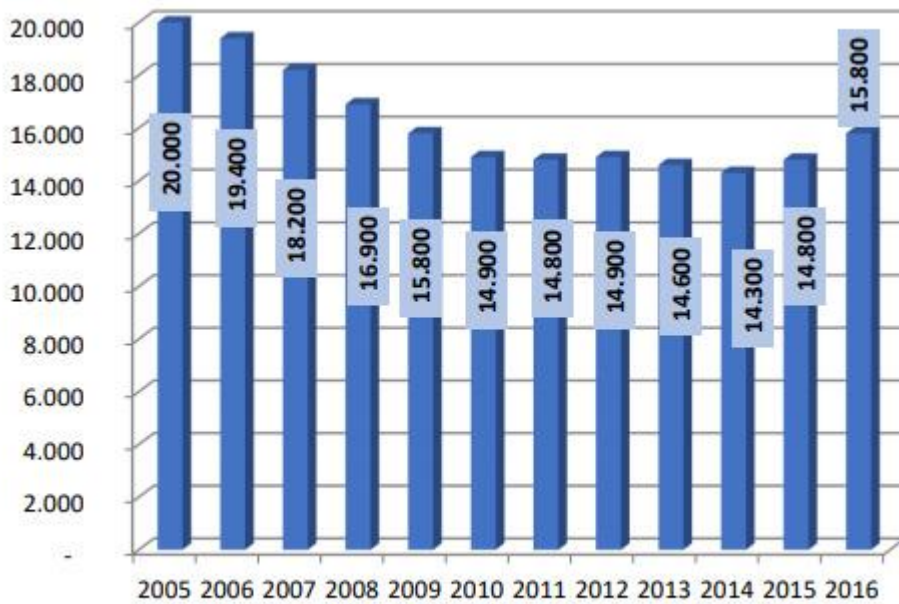
**Figure 1 – Global Music Industry Revenues between 1997 and 2017**

**Source: IFPI**

In Figure 1, the revenues in the global music industry can be reviewed in detail with respect to their distribution in the areas of physical, digital, streaming, performance rights, and synchronization in 2007. As it can be seen from the figure, the share of

the physical revenues is decreasing while the share of total digital revenue is increasing throughout the years between 2004 and 2017. However, the share of the revenue generated from streaming is increasing starting from 2005 within the digital sales. Performance rights also show in an increasing trend within the last years till 2017.

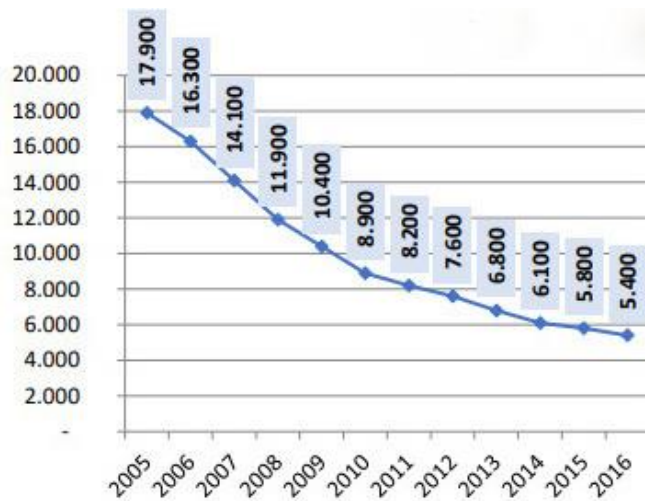
What is more, the trend in total revenues in the world music industry during the years starting from 2005 can be seen in Figure 2 according to information taken from MÜ-YAP (“MÜ-YAP”, 2018). Values in y-axis in Figure 2 represent total global revenues in million USD. As it can be seen, the total revenues generated tend to increase over the last years. The increase is much more between 2014 and 2016 compared to the the previous years.



**Figure 2 – Total Global Revenues between 2005 and 2016**

**Source: MÜ-YAP**

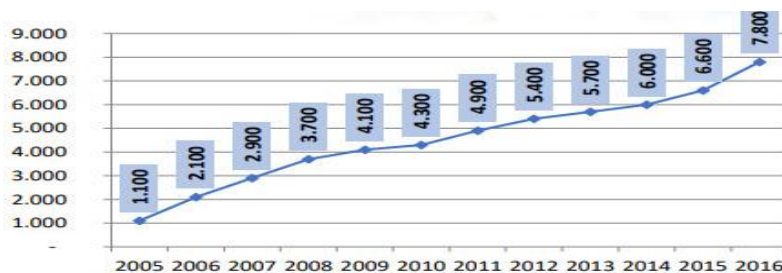
Figure 3, on the other hand, depicts the declining trend in the physical sales in the world between 2005 and 2016 (in million USD). In accordance with that, there is a gradual decline in the physical sales from 2005 to 2016.



**Figure 3 – Global Physical Sales between 2005 and 2016**

Source: MÜ-YAP

Figure 4 depicts the increasing trend in the digital sales in the world between 2013 and 2017 (in million USD). As can be seen from the figure, after 2015 there is a huge increase in the digital sales. Comparing Figure 3 and Figure 4, it can be inferred that the decline in the physical sales is in the same fashion with the increase in the digital sales for the same years starting from 2005 till 2016.



**Figure 4 – Global Digital Sales between 2005 and 2016**

Source: MÜ-YAP

As a result, it can be understood that while the physical sales are declining the digital sales are increasing at the same time for the last five years in the world in general and the revenues generated from digital sales are also in an increasing trend especially for the last three years. Streaming's importance specifically within the increased digital revenue streams is continuing to increase for the last years globally.

To conclude, digitalization seems inevitable and the increasing trend of it parallel with the decline in the physical sales is expected in the coming years. In addition, significant steps have been taken by the major actors for impeding piracy with legal arrangements in the world in global digitalized music industry within the last years and piracy has started to decline accordingly.

It is observed that the digital revolution of the Web 2.0 influenced the distribution of music in Turkey as well as the case in Europe and the world (Ergüney, 2017). The distribution channels emphasize the nature and future of the music industry (Nakano and Fleury, 2017). Therefore, it is strategically important to focus on the optimal distribution channel (Sander, 2013). A variety of digital platforms (both for streaming and downloading) like Spotify, iTunes, fizy, and YouTube have spread in a very short period of time in Turkey ("Legal Music Services", 2018).

In terms of concerns like monopolization and fraud as well as piracy, much attention will be given to YouTube and netd, which is an online publishing channel that operates on YouTube in this study (Özkul, 2015; "Müzik sektörü mahşer yeri gibi"; 2017). Among these digital platforms, netd's share is high in terms of reaching the end customer by nearly ten million subscribers to this platform since it operates via YouTube which is the most popular channel featuring top tracks worldwide (The Recording Industry Association of America, 2017; "Top 250 YouTubers Channels in Turkey", 2019). IFPI's report of 2016 also reveals that YouTube is used by 82% of the users for listening to music only (IFPI, 2016).

Netd plays the role of a catalyst or mediator in the chain with representing more than one party's stakes ("Netd", 2018). Accordingly, based on the agreements with various record companies, it takes the right to publish video clips under its own name via YouTube. In that sense, it is like an umbrella platform covering all those popular tracks and it works on a highly broad-base benefitting from various record companies' catalogues. The majority of the popular tracks are published on this publishing platform (netd) and it is observed that digital click rates and revenues at the end are increasing thanks to this catalyst platform together with advertisements taken ("İnternette paranın patronu olmaya var mıyız?", 2018). Therefore, netd is getting bigger and bigger as the number of producers willing to work with netd increase. Producers coupled with netd and YouTube officials are enjoying increased number of click rates and revenues since such a blanket or generic platform creates a subconscious brand image in the minds of customers ("netd' müzik YouTube zirvesinde", 2018). That is why more and more consumers are attracted by just the name of netd. This attraction and monopolized power also change the definition of musical success. There is this mantra nowadays that "*More clicks mean more success!*" (Tezel, 2015). In fact, more clicks may be evaluated as a sign of success, but it may result from something else other than the music produced. The visual content or the images shown on clips may be the factor as well. Not surprisingly, payments for third parties for more clicks create anxiety and it remains an ethically debatable issue (Ergin, 2018). It is likely that for more clicks, the quality is sacrificed.

The problem is two-fold. First, it is about revenue sharing or royalty which is a necessity in modern music industry (McCubbin, 2012). According to IFPI (2017), the fundamental flaw in today's music market is the "value gap" which implies that fair revenues are not returned to those parties contributing to the creation and investment in music. Services such as YouTube are highly criticized by the authorities that they use their on-demand digital platforms as a safe harbour or shelter to avoid licensing music (IFPI, 2018). According to the report of IFPI (2018), YouTube claims that they are not financially responsible for the music that they

distribute. It is a huge problem because this means that the revenue that could have been generated through other fairly licensed platforms is stolen. That is where the gap occurs in the value creation. For fixing the value gap, all the parties involved in the production process (artists, performers, record companies, publishers, songwriters etc.) want legislative action worldwide (IFPI, 2018).

Secondly, netd-types of platforms on YouTube are not based on payments like any other kind of digital platforms present in the industry for customers and they pay less than streaming services to the industry (Sweeney, 2017). They benefit from the revenue-enhancing effect of being a digital catalyst in the supply chain. Since they are not based on payments and pay little to the industry, some value gap is present in the chain. This seems another problematic side which raises manipulation concerns in Turkey (Tez, 2013; IFPI, 2018).

Additionally, the digital platforms do not contribute to the workforce much as they do not employ workers on a large scale (Arditi, 2014). The company which netd is dependent upon is the market leader in Turkish music market in both physical (25%) and digital sales (45%) and at the center of the manipulation concerns as mentioned before (“Yatırımcı Sunumu”, 2018). For that reason, legislation with respect to competition, remuneration and taxation are to be enforced and controlled.

Apart from that, educational anti-piracy campaigns are continuing to be supported in different regions of the world to combat piracy. Like in the world, in Turkey the piracy’s threat is not as detrimental as compared to the before with similar reasons (Sönmez, 2017).

To sum up, there is not yet a consensus regarding how digitalization impacts Turkey’s music industry. In this thesis, a “supply chain complexity” perspective is adopted to examine the changes that digitalization brings to the Turkish music industry. Furthermore, in order to examine how the actors interact, a “power/dependence” perspective is adopted. In the next sections, first the key actors

in the music supply chain are discussed, then supply chain complexity and its sub-dimensions are explained, and finally the power/dependence is elaborated.

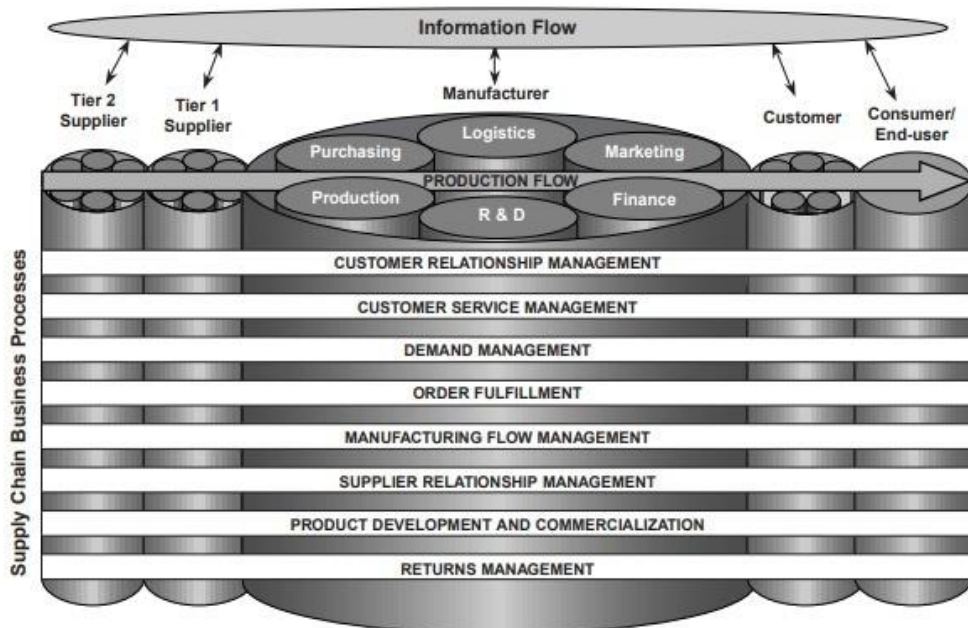
## 2.2. Music Supply Chain

Before examining supply chain complexity, there is a need to first briefly discuss supply chain management and understand the key actors in a supply chain. Whilst there are several definitions of supply chain in the literature, it can be defined as a series of linked actors and activities in the process of production of products or services (Graham et al., 2004). Supply chains are traditionally viewed as series encompassing the linear flow of information and materials from the suppliers (upstream) to the end consumers (downstream) (Ketchen and Hult, 2007). In a supply chain, suppliers render the inputs in the upstream part, the company adds value to these inputs, and it is passed to the downstream actors (Porter, 1985). In line with this, supply chain management (SCM) is about coordinating the supply chain activities from the suppliers to the end users for the purpose of maximizing customer value, achieving overall efficiency and reaching a competitive advantage in a sustainable way (SCRC SME, 2017).

The key activities in supply chains are production, warehousing, inventory management, scheduling, planning, logistics and maintenance related to the flow of materials and information. In line with these activities, the main actors are *manufacturers, suppliers, wholesalers, distributors, retailers, facilitators* and *end users* (Larson and Rogers, 1998; Gibson, Hanna, Defee, and Chen, 2013). According to this, manufacturers are the starters of the production process with the transformation of raw materials into final products and services. Suppliers provide the necessary inputs such as parts or components in the process beforehand. Wholesalers are intermediaries between manufacturers and retailers as distributors ensure the distribution of the products and services between these actors. Facilitators are the actors who help the healthy flow of materials and information in the chain.

They include technology and consultancy companies, government agencies, financial institutions, and other service providers. End users, the last actors of the chain, are the ones whose demand is satisfied in the chain.

Consequently, supply chain management requires collaborative and synergistic efforts of all related actors to create value added and to achieve efficiency at the end (Mueller, Buergelt, and Seidel-Lass, 2008). The management of complex relationships between the actors where intra- and inter-firm links matters highlights the importance of supply chain management (Lambert and Cooper, 2000). Supply chain management is such a concept where the main aim is ensuring the integration and controlling the sourcing and flow of materials across numerous functions and tiers of suppliers (Monczka, Trent, and Handfield, 1998). The related figure depicting this linear flow in a typical supply chain or value chain is illustrated below (Figure 5).



**Figure 5 – General Supply Chain Structure**

**Source: Lambert, Cooper, and Pagh (1998)**

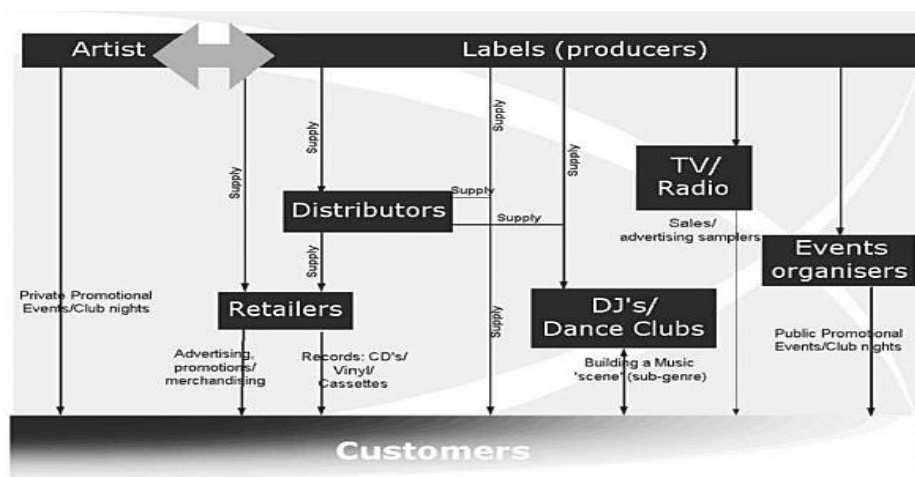


Previous research mostly focuses on manufacturing supply chains (Naylor, Naim, and Berry, 1999; Zhu and Sarkins, 2004; Vachon and Klassen, 2008); however, there are also studies suggesting that supply chain management is equally important for service firms (Ellram, Tate, and Billington, 2004; Sengupta, Heiser, and Cook, 2006). In this thesis, the focus is on the music industry, where there has been little research about supply chains. Being among those few studies, Graham et al. (2004) investigated the effect of the internet on the global music supply chain, especially its effect on the big record companies' dominance. They concluded that the internet transforms the traditional music supply chain which is static and vertically integrated into a more dynamic and flexible structure with increased number of choices for the actors and increased communication channels. Likewise, Premkumar (2003) studied digitalization in the music industry and argued that it may pave the way for increased efficiency in the music supply chain with proliferated digital distribution strategies emerging in the new structure. Hence, he showed the existence of opportunities to reshape the music supply chain. Renard (2010), on the other hand, focused on the changing position of the majors which are classified as the dominant record companies in the music industry by Moreau (2013) and artists in the music supply chain and the alternatives replacing them. He demonstrated the disintegration of the music supply chain with digitalization compared to the past. Nakano and Fleury (2017) showed that digitalization changed the music supply network structure and governance mechanism such that the structure becomes vertically unbundled and this leads to the growth of the service companies while the power of the incumbent companies declines.

Although there are a few studies discussing the change in the music supply chain with digitalization, they adopt a broad perspective to examine supply chains and draw general conclusions. Also, there is limited number of studies on local music supply chains other than the global music supply chain (Poel and Rutten, 2000). That is why in this study the Turkish music supply chain is investigated specifically by adopting the supply chain complexity perspective. For the purpose of the study, in this section the key actors in music supply chain are discussed broadly.

The key actors in the music supply chain are *artist*, *record company*, *distributor*, *retailer* and *consumer* in the most general sense (Graham, 2006). The traditional music supply chain is depicted in Figure 6 (The arrows show the direction of the material/information flow which can be in one-way or reciprocal). Considering the traditional music supply chain, it matches the general linear view of supply chain demonstrated above (Graham et al., 2004). In this context, this traditional structure enables the linear flow of materials and information between the actors of the chain starting from the artists and ending with the consumers/customers. The intermediaries between the artists and the customers are the record companies, distributors, and retailers, though there are direct alternatives of the record companies such as TV/Radio, events organizers, and DJs/dance clubs to reach the customers.

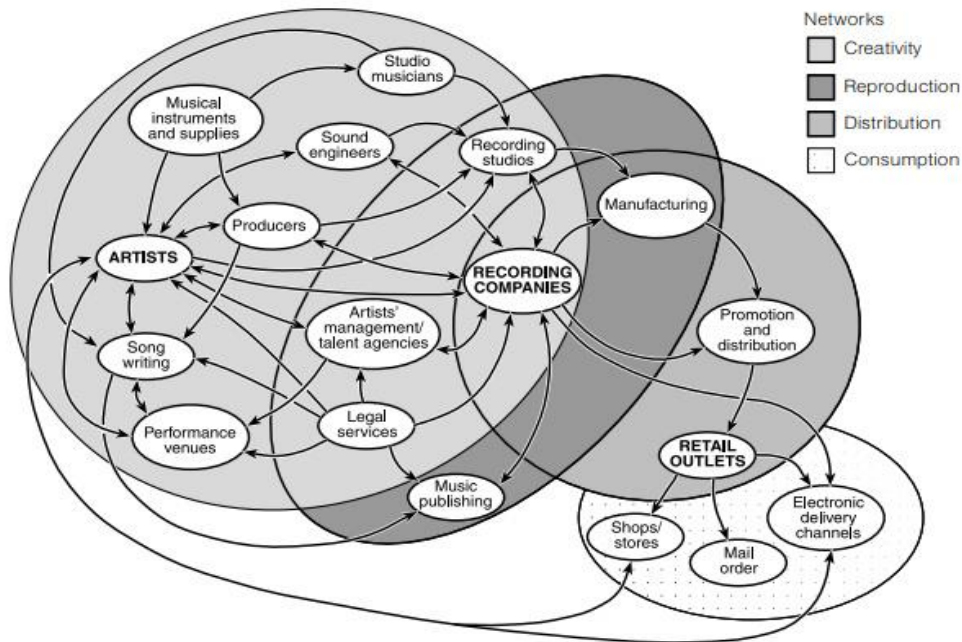
The record companies, also named labels or producers, can be evaluated as the *focal actors* in this structure, given their expertise and mass resources, and mostly being involved in vertical integration relationship owning some other actors, gives them power over governance and physical distribution (Hill and Johns, 2012; Nakano and Fleury, 2017).



**Figure 6: Traditional Music Supply Chain**

**Source: Parikh (1999)**

However, today's music supply chain structure is very different from the structure of the past together with the advent of the internet and the proliferation of internet-related platforms (Bockstedt, Kauffman, and Riggins, 2006). The traditional vertically integrated music supply chain where a dominant actor controls other actors is dissolved by the repositioning of the actors and this emerging structure is more like a network structure where the linear flow does not exist anymore (Renard, 2010). The traditional retailer has transformed into a digital one as the distribution channels are diversified (Premkumar, 2003). Figure 7 exemplifies more of this network typed structure. More specifically, in that figure, Leyshon (2001) distinguishes between four types of networks in the music industry with distinct features: *creativity*, *reproduction*, *distribution*, and *consumption* networks. He discusses that the effect of the software formats as well as new digital distribution reshape these networks and the authority of the record companies is challenged where power dynamics are changed. However, his research concerned the very early start of digitalization at the start of 2000s. There is a need for reconsidering how music supply chains are changing due to recent applications of digitalization such as digital platforms and social media networks. There are arguments suggesting that such applications offer more flexibility and dynamism (Dechsakda, 2012; Csiba; 2017), as well as creating a more complex network of a variety of actors (Bockstedt et al., 2006, Anderson, 2011). In order to examine the effect of digitalization, we specifically adopt a complexity perspective (Choi and Krause, 2006) to examine music supply chain, which is discussed in more detail in the following section.



**Figure 7: Emerging Music Supply Chain Structure**

**Source: Leyshon (2001)**

### 2.3. Supply Chain Complexity

Complexity has been examined in several disciplines (Choi, Dooley, and Rungtusanatham, 2001; Bozarth et al., 2009) and a variety of definitions have been proposed. In a general sense, complexity can be defined as “a state composed of elements with their multiplicity, diversity, and functional interrelatedness (Jacobs and Swink, 2013). Other definitions also include characteristics such as uncertainty and ambiguity (Jacobs, 2013). Complexity is a composed measure; hence, an increase in one of these dimensions means the increase in complexity.

Complexity in the supply chain is examined at several levels such as supply base (the part of the supply network which is managed by the focal company), supply network (network of companies positioned upstream to a company in the value system), and supply chain covering all the parties which upstream and downstream to the focal

company (Choi and Krause, 2006; Lu and Shang, 2017). Since the majority of the studies have focused on supply chain complexity (SCC) as the key construct (Aitken, Bozarth, and Garn, 2016; Birkie, Trucco, and Campos, 2017; Turner, Aitken, and Bozarth, 2018), supply chain level of analysis is adopted in this thesis. It also enables to focus on a focal firm (i.e., record companies) and examine complexity related to them rather than examining complexity in a whole industry without a benchmark point.

### **2.3.1. Supply Chain Complexity Dimensions**

Distinctive dimensions of SCC exist in the literature (De Leeuw et al., 2013; Serdarasan, 2013). For instance, Bode and Wagner (2015) have only focused on *upstream* SCC with its vertical, horizontal, and spatial dimensions where vertical complexity refers to the number of tiers of suppliers, horizontal complexity refers to the number of direct suppliers in the supply base, and spatial complexity refers to the geographical dispersion of the supply base. Yet in most of the studies the dimensions determined by Choi and Krause (2006) have been used as basis. In that direction, Bozarth et al. (2009) have characterized SCC as the level of *detail* and *dynamic* complexity regarding products, processes, and relationships. *Detail complexity* corresponds to the varied number of parts that constitute a system and their interactions and *dynamic complexity* is related with the unpredictability of that system in general terms. Structural (static) and operational complexity can be used instead of detail and dynamic complexity respectively (De Leeuw et al., 2013; Turner et al., 2018).

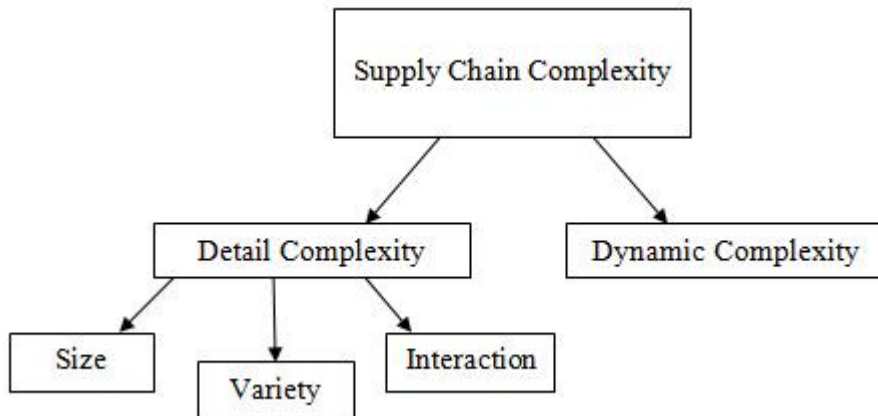
Dynamic complexity has been examined together with detail complexity in some studies in the literature (Kavilal, Venkatesan, and Kumar, 2017; Kavilal, Venkatesan, and Sanket, 2018; Dittfeld, Scholten, and Van Donk, 2018). Nevertheless, there are also studies that have focused solely on detail complexity (Cheng, Chen, and Chen, 2014; Ateş, Wynstra, and van Raaij, 2015; Birkie et al.,

2017; Giannoccaro, Nair, and Choi,2018). In this study, detail complexity as well as dynamic complexity will be elaboratedfrom a broader angle.

Table 1 illustrates the key SCC studies reviewed in this thesis, illustrating the sub-dimensions examined in a chronological manner. As it can be seen from the table, size and variety are most commonly touched upon dimensions under detail complexity. What is also observed is that dynamic complexity has been studied more frequently in recent years. In the following sections, detail (i.e., size, variety, interaction) and dynamic complexity are elaborated (Figure 8).

**Table 1: A Review of the Studies with respect to SCC Types/Dimensions**

Studies	Authors (year)	Key Construct(s)	Key Dimensions (Detail)			Dynamic
			Size	Variety	Interaction	
S1	Choi et al. (2001)	Supply network as a complex adaptive system	x	x	x	x
S2	Choi & Krause (2006)	Supply base complexity	x	x	x	
S3	Bozarth et al. (2009)	Supply chain complexity	x	x	x	x
S4	Awayesh & Klassen (2010)	Supply chain structure		x	x	
S5	Manuj & Şahin (2011)	Supply chain complexity and supply chain decision-making complexity	x	x	x	x
S6	Serdarasan (2013)	Static complexity, dynamic complexity, decision-making complexity	x	x	x	x
S7	De Leeuw et al. (2013)	Structural supply chain complexity and operational supply chain complexity	x	x		x
S8	Marc A. Jacobs (2013)	Generalized Complexity Index	x	x	x	
S9	Cheng et al. (2014)	Structural complexity of supply chain networks	x	x	x	
S10	Ateş et al. (2015)	Supply base structure	x	x	x	x
S11	Bode & Wagner (2015)	Upstream supply chain complexity	x	x		
S12	Brandon-Jones et al. (2015)	Supply base complexity	x	x		x
S13	Tachizawa & Wong (2015)	Supply network complexity	x	x	x	
S14	Aitken et al. (2016)	Supply chain complexity	x		x (dynamic)	
S15	Kavilal et al. (2017)	Supply base complexity, internal manufacturing complexity, customer base complexity and external complexity	x	x		x
S16	Birkie et al. (2017)	Supply chain structural complexity	x	x	x	
S17	Lu & Shang (2017)	Supply base structural complexity	x	x	x	
S18	Turner et al. (2018)	Supply chain complexity	x	x	x	x
S19	Kavilal et al. (2018)	Supply chain complexity	x	x		x
S20	Dittfeld et al. (2018)	Supply chain complexity	x	x		x
S21	Giannoccaro et al. (2018)	Supply network complexity	x		x	



**Figure 8: SCC Dimensions**

**Source: Bozarth et al. (2009)**

### **2.3.1.1. Detail Complexity**

Three common dimensions which consist in the majority of the definitions of detail complexity can be named as *size*, *variety*, and *interaction* (Choi and Krause, 2006; Bozarth et al., 2009; Serdarasan, 2013; Jacobs, 2013; Ateş et al., 2015).

#### **2.3.1.1.1. Size**

Size within the scope of detail complexity denotes the number of a specific element, like the number of suppliers or the number of agents if supply networks are evaluated as complex adaptive systems which concentrate on the interplay between the system and its environment (Choi, Dooley, and Rungtusanatham, 2001; Choi and Krause, 2006). However, size can be defined as the volume of interrelated elements in a supply chain from a more comprehensive angle (Cheng et al., 2014). In fact, complex systems are made up of unique parts connected to each other in a non-linear fashion



and grasping the operation of one part does not guarantee the understanding of this complex system as a whole (Perona and Miragliotta, 2004).

In this connection, the elements or parts may vary. These may also include customers, components, or products existing in a business unit in the supply chain other than just the suppliers (Aitken et al., 2016). The number of business processes and functions in a supply chain implicating the volume of information can also be counted as size (Serdarasan, 2013). Even the number of employees and their turnover or the number of production facilities, product lines and brands at production side can constitute the size (Birkie et al., 2017). From a similar point, given a supply network, all participants in the network can be embraced within the dimension of size (Tachizawa and Wong, 2015). The number of ties in a network is associated with size and as the number of ties increases, the density of the network increases (Tachizawa and Wong, 2015).

Further, size may be diversified under different classifications of complexity. While horizontal complexity refers to the number of suppliers that directly supply to the focal company, vertical complexity refers to the number of tiers in the supply base (Lu and Shang, 2017). Similarly, in a supply network, the number of tiers in the network hierarchically and the number of suppliers in each of these tiers refer to different scales in terms of size (Giannoccaro et al., 2018).

Overall, size can be examined in terms of internal, external, and supply/demand specific factors, and in a general sense the increase in the number of supply chain actors and supply chain tiers increases complexity due to more flows of information and physical materials to be handled (Serdarasan, 2013; Brandon-Jones, Squire, and Van Rossenberg, 2015). In that sense, the number of actors, customers, and employees, as well as the volume of products and processes, refer to size in the music supply chain.

### 2.3.1.1.2. Variety

Variety which can be named as diversity or differentiation as well reflects the distinctiveness of the elements in the supply chain (Jacobs, 2013). It encapsulates the differences in suppliers, customers, product lines, processes, services, and brands since different cultures, practices and technologies are to be adapted by managers (Birkie et al., 2017; Leeuw, Grotenhuis, and van Goor, 2013). It is a core dimension of product portfolio complexity by concentrating on products (Kavilal et al., 2018). Focusing on upstream complexity, one can define variety in suppliers in terms of their differentiation in technology, geography, organization, and size (Ateş et al., 2015).

Specific sub-dimensions which connote variety can be scrutinized separately. To exemplify, distance is a specific concept associated with variety (Awayesh and Klassen, 2010). Geographic distance or separation of the agents/elements geographically can be interpreted as a factor reflecting variety (Brandon-Jones et al., 2015). The more the distance between the agents or the elements, the harder the management of these becomes due to the dissimilar cultures and practices of distinctive regions, hence complexity increases (Choy and Lee, 2003). In addition, Awayesh and Klassen (2010) suggest that distance can be cultural and organizational as well, where cultural distance is about cultural differences of the societies of the agents and organizational distance is about the dispersion of the focal firm from the suppliers or customers in the supply chain.

The key point is that the more diversified types of elements are found in a supply chain, the more it will turn into a more complex structure with many potential combinations (Cheng et al., 2014). Increased variety forces firms and managers to adopt disparate practices and take necessary steps. For instance, customization and simplification alternatives in system design are applied by firms strategically in order to manage variety (Perona and Miragliotta, 2004; Hamta, Shirazi, Behdad, and

Ghomi, 2018). In line with these, different organizational practices, capabilities, and cultures of the actors as well as their differentiation by size and geography refer to the variety in music supply chain.

#### **2.3.1.1.3. Interaction**

Interaction means interactive relationships or linkage of elements in the supply chain (Jacobs, 2013). This interaction could be between people or tasks, which paves the way for interdependence of them on each other (Turner et al., 2018). Interaction, though generally analyzed as a key dimension of detail complexity, has been discussed as a dimension of dynamic complexity in a limited number of studies (Giannoccaro et al., 2018). Recognizing supply networks as complex adaptive systems where the interaction of the system with its environment is significant for co-evolution, the behavior of that system is the result of concurrent activities of the firms who are in connection with each other (Choi et al., 2001). Interaction can also be stated as the degree of order which implies the tie between a unique member of the supply chain and other members of the chain (Cheng et al., 2014). From this point, high disorder is a factor of increased complexity.

The members usually indicate the suppliers or firms in the chain which are dependent on each other on resources, materials, and capabilities (Awayesh and Klassen, 2010). In that sense, interaction is a kind of supplier-supplier relationship although the relationship between the buyer and the supplier is observed more and has been touched upon prevalently in studies in the literature (Helper, 1991; Wu and Choi, 2005). At this point, “*the type of the relationship*” and “*the intensity of the relationship*” are distinguished as two important aspects in association with interaction (Choi and Krause, 2006). As for the type of the relationship, it can be competitive or cooperative (Choi et al., 2001; Ateş et al., 2015). While cooperation indicates clarity and solidarity, competition stresses non-shared information and

distance in relationships (Wu and Choi, 2015). However, the relationship does not have to be dyadic all the time. It can be dyadic as well as triadic according to the situation (Smith and Laage-Hellman, 1992; Choi and Krause, 2006). Supplier firms may supply missing parts to each other reciprocally in a dyadic context. In a triadic context, on the other hand, supplier firms may compete against each other to better serve the focal firm. However, a cooperative relationship between the suppliers may be desired by the focal firm to ensure coordination in a triadic context (Stuart, Deckert, McCutcheon, and Kunst, 1998). There is also the risk that the collaborative relationships may be collusive (Branderburger and Nalebuff, 1996). As for the intensity of the relationships, the frequency of the transactions captures both the physical goods and information exchange between the members (Choi and Krause, 2006). Since information in cooperative relationships is richer in context, transaction costs are reduced more, which leads to more investments in transaction-specific assets and the exchange of transaction-specific assets promotes commitment and increase the frequency of transactions (Dwyer, Schurr, and Oh, 1987; Carr and Pearson, 1999).

In sum, two main characteristics of interaction can be distinguished: type (i.e., competitive vs. collaborative) and intensity. As supported also by the studies quantifying complexity as a measure, interaction together with its formation of relationships is one of the critical dimensions that determine the level of complexity (Jacobs, 2013; Cheng et al., 2014). Based on all these arguments, an increase in interaction is reflected as an increase in complexity. Regarding music supply chains, competition has been between the record companies with respect to their efforts to work with the best artists (Belinfante and Johnson, 1982). However, the music supply chain is now more like an evolving ecosystem with digitalization where the actors depend on each other and because of the interplay between them they may both compete and cooperate with each other at the same time (Huygens, Baden-Fuller, Van Den Bosch, and Volberda, 2002; Nakano and Fleury, 2017). Hence, there is not a clear-cut point to determine the type of relationships between the actors in

this evolving music supply chain structure and the number of studies examining these relationships are limited.

#### **2.3.1.2. Dynamic Complexity**

Dynamic or operational complexity is associated with uncertainty and randomness in the supply chain in the widest sense (Dittfeld et al., 2018). This implies that the acts of the agents or the activities and processes are not predictable easily because of the dynamic nature of the supply chain. Thus, variability is an issue concerning dynamic complexity because unexpected changes may occur at any time, which can then have a huge impact on the performance of the supply chain (De Leeuw et al., 2013).

Dynamic complexity can be observed in every part of the supply chain such as upstream and downstream (Milgate, 2001). For instance, in the upstream part, the poor delivery performance of the suppliers with non-qualified parts supplied may cause uncertainty, while the obscurity in determining the forecast of demand is the problematic side of the downstream supply chain provoking dynamic complexity since the expectations of the customers may change (Davis, 1993; Fisher, Hammond, Obermeyer, and Raman, 1997; Manuj and Şahin, 2011). These show that speed and reliability are some other facets related to dynamic complexity. Brandon-Jones et al. (2015) argue that unreliable and late deliveries increase complexity and induce managers to conduct more collaborative relationships with suppliers. The classification may be internal, external, and customer based as well (Kavilal et al., 2017). In this classification, false forecasts and lack of information sharing are part of internal dynamic complexity while customers' changing needs are part of customer based dynamic complexity, and uncertainties regarding the suppliers, market, technology, and competitors are part of external dynamic complexity.

Serdarasan (2013) notes that missing controls in processes, missing synchronization, ambiguity in employee-related issues, and future-oriented improvements are all drivers of dynamic complexity and all of them give rise to decision-making complexity which pertains to the difficulty in making decisions related with the supply chain. Dynamic complexity illustrates that a supply chain is not a static system all the time, but it is more like a living organism which is open to spontaneous or unpredictable changes. The more the uncertainty, randomness, and ambiguity are, the more the dynamic complexity. Examining dynamic complexity in the music supply chain is relevant because the whole industry is in a transformation process with digitalization. The ease and speed of digitalization change the requirement of customers and it also entails a change in actors regarding whether they adapt to or refuse it (Pinna, 2017). However, unpredictability issues and how to ensure sustainability in such a dynamic industry have not yet been investigated. Likewise, there is not a clear understanding about what type of dynamic complexity can be beneficial or detrimental for music supply chains.

### **2.3.1.3. Conclusion**

Based on the above arguments, it is concluded that SCC can be examined in terms of detail and dynamic complexity (Bozarth et al., 2009). The main dimensions of detail complexity are accepted as size, variety, and interaction, and dynamic complexity is mostly related with unpredictability in the supply chain as a whole. This means an increase (decrease) in detail or dynamic complexity will be reflected as an increase (decrease) in supply chain complexity. Supply chain management in a broadest sense, and supply chain structure/complexity more specifically, has not been examined to a high extent in relation to the music industry (Tilson, Sorensen, and Lyytinen, 2013). In this thesis, a complexity perspective is adopted to examine music supply chains in relation to increased digitalization. The number and variety of actors, and products/processes as well as the intensity and type of the interaction

between the actors refer to detail complexity while the uncertainties and changes stemming from the dynamic nature of the supply chain are relevant for dynamic complexity to be examined in the music supply chain.

#### **2.4. Business-to-Business Relationships: A Power/Dependence Perspective**

Supply chains comprise the flow of materials, information, and decisions and when managing supply chains, inter-organizational as well as intra-organizational relationships become important considering the effectiveness and efficiency of these flows (Wang, Childerhouse, Kang, Huo, and Mathrani, 2016). While interpersonal relationships cannot be ignored in the processes of supply chains, particularly inter-organizational relationships, the relationships between the firms based on shared values in the most generic terms, are deemed as essential factors for the perfect mechanism of supply chains (Zhao, Huo, Flynn, and Yeung, 2008; Cuevas, Julnuken, and Gabrielsson, 2015). Inter-organizational relationships can also be understood as business-to-business (B2B) relationships in supply chain context since firms in the supply chain are in a buyer-supplier relationship in the production of products and services and all the firms are within their own business processes (Lacity, Khan, Yan, and Willcocks, 2010).

In B2B relationships, among other dimensions like trust and commitment, power stands out as a key dimension (Gulati and Sytch, 2007; Nyaga, Lynch, Marshall, and Ambrose, 2013; Cao, Huo, Li, and Zhao, 2015; Cuevas et al., 2015; Gölgeci, Murphy, and Johnston, 2018). Power can be defined as the “superiority of one party to the other based on their dependence on each other” (Emerson, 1962, p. 32). Therefore, dependence is a major concern here related with power, and from the interrelationship perspective dependence is between the parties and thus can be named as interdependence (Gulati and Sytch, 2007). In this conjuncture, interdependence refers to the state where conditions for an achievement cannot be

controlled by one party without the involvement of other parties (Pfeffer and Salancik, 1978). It is the power concentration that shapes relationships. When one party depends more on the other party in an exchange relationship, it can be said that it has an advantage over the other party and is in a more powerful situation.

In earlier studies, interdependence has been associated with the resources the parties have (Turnbull, Ford, and Cunningham, 1996; Ford and Mcdowell, 1999). By resources, what is meant is the tangible or intangible assets possessed by firms which may give strength or weakness to them (Caves, 1980; Wernerfelt, 1984). According to the resource dependence theory (Pfeffer, 1972), parties' existence in the system is on the condition that they exchange their resources voluntarily with other parties like suppliers, buyers, and various stakeholders. The aim of exchanging resources is to reduce uncertainty while at the same time to exert power and control, and this system becomes really dynamic by making all the parties vulnerable to changes to some extent.

In parallel with the resource dependence theory, the resource-based view perspective posits the way to achieve competitive advantage is to own distinctive and valuable resources that cannot be substituted (Vanpoucke, Vereecke, and Wetzels, 2014). These resources can be tangible or intangible, but most of the time they refer to tangible ones such as financial and informational resources and capability is about the ability to use these resources in direction with one's purpose (Teece, 2007). In sum, tangible and intangible resources are seen as one of the main determinants of power. In addition, investment in transaction-specific assets which are specific to one kind of relationship and may lose their value for other kinds of relationships when they are redeployed renders the investor party more powerful by making it non-substitutable and further fostering partner-specific value in the relationship (De Vita, Tekaya, and Wang, 2011; Takashima and Kim, 2015).

The balance of power changes between the actors in the supply chain on the basis of the possession of resources. Considering the differentiation of actors in a typical



supply chain, power asymmetries of actors are expected (Belaya, Gagalyuk, and Hanf, 2009). The weaker actor is assumed vulnerable and is exposed to opportunism where the powerful one exerts power over it (Shervani, Frazier, and Challagalla, 2007). Asymmetrical power, therefore, may indicate decreased trust between the actors while the symmetrical power indicates increased trust, indicating positive views about the partner's actions on the whole (Anderson and Weitz, 1989; McEvily, Perrone, and Zaheer, 2003).

However, in a more recent study Cuevas et al. (2015) have showed that drawing such a simple conclusion is not easy and the congruence of the goal between the actors is a significant factor in fact in the development of trust. Therefore, even though the asymmetrical power seems detrimental or not favorable for the quality of the relationships, in fact, some other mediating factors are becoming in the foreground as the main drivers giving direction to the relationships and making the power symmetry or asymmetry insignificant. Having a common goal between the partners is one of them (Cuevas et al., 2015), which then increases trust and the quality of the relationships. Jointly dependent relationships seem more advantageous to increase trust and the quality of the relationships (Lawler and Yoon, 1996). Whether the power is symmetrical or asymmetrical does not matter. In a similar vein, reciprocity contingency of inter-organizational relationships which is based on partners' pursuing common goals suggests that the scarcity of resources may entail collaboration (Oliver, 1990). Jointly dependent relationships contribute to the development of a common goal and the establishment of trust between the partners. Trust makes the supply chain more integrated, which then improves firm performance (Zhang and Huo, 2013).

Although power is argued to be one of the most important characteristics of B2B relationships affecting other relationship dimensions, as the above studies suggest, the role of power and dependence in shaping the B2B relationships and performance has not reached conclusive results in the literature (Cuevas et al., 2015). First of all, types of power need to be taken into account. French and Raven (1959) defined five

types of power: *expert*, *referent*, *reward*, *coercive* and *legitimate* power. These power types are categorized in two groups: mediated and non-mediated (Zhao et al., 2018). On that classification, while for the non-mediated power types the target determines when it will be influenced by the powerful party, for the mediated power types the powerful party determines when and how to exert power over the target. In the next section, the different types of power are discussed.

#### **2.4.1. Mediated and Non-mediated Power Types**

Nyaga et al. (2013) have shown that non-mediated power sources trigger the adaptive and collaborative behaviors of partners. *Non-mediated power* types are more intimate and affirmative (Benton and Maloni, 2015). *Expert power* and *referent power* are two types non-mediated power (Chae, Choi, and Hur, 2017). Expert power exists when one party or firm has more expertise and knowledge than the other (Palmatier, Dant, Grewal, and Evans, 2006; Nyaga et al., 2013). Referent power exists when one party identifies itself and its values with the other party because of the notion that the other party holds operations better than itself (French and Raven, 1959). Earlier studies confirm that expert and referent power prepare an environment where trust and commitment are built (Crook and Combs, 2007).

Another main type of power sources are mediated power sources. These power sources entail the external motivation of the powerful party to force the target to act in the way it is desired on contrary to non-mediated power sources which rely on the internal motivation of the target for the exertion of power (Brown, Lusch, and Nicholson, 1995; Benton and Maloni, 2005). Mediated power sources include *reward power*, *coercive power* and *legal legitimate power* (Nyaga et al., 2013). Reward power occurs when the powerful party presents a reward to the other (target) with the aim of influencing it (French and Raven, 1959). Coercive power is like the opposite form of reward power in the sense that it is the power holder's ability to

punish the target with the aim of influencing it (Molm, 1988). Legal legitimate power is about the influencing attempts of one party over the other by depending on legal contracts or agreements (Nyaga et al., 2013).

Firms utilize their power to benefit from the relationship exchanges (Pfeffer and Salancik, 1978). However, the effects of non-mediated and mediated power types on relationships differ (Benton and Maloni, 2005). In this respect, mediated power types like reward, legal, and coercive are found to have a negative effect on performance while non-mediated power types like expert and referent have a positive effect since they promote cooperation (Maloni and Benton, 2000; Jonsson and Zineldin; 2003, Zhao et al., 2008). Therefore, although the use of power excessively causes the holder to act opportunistically, power types used at the moderate level can in some cases be a strategic tool to enhance relationships, solve conflicts and increase firm performance (Frazier and Rody; 1991, Belaya et al., 2009). The table below (Table 2) gives the definitions of different power types classified as non-mediated and mediated.

**Table 2: Types of Power and Definitions**

<b>Classification</b>	<b>Power Type</b>	<b>Definition</b>
Mediated	Reward	Reward power depends on the situation when the powerful party presents a reward to the other (target) with the aim of influencing it (French and Raven, 1959, p. 156)
	Coercive	Coercive power is the power holder's ability to punish the target with the aim of influencing it (Molm, 1988, p. 110).
	Legal Legitimate	Legal legitimate power stems from the influencing attempts of one party over the other by depending on

**Table 2: ( continued )**

		legal contracts or agreements (Nyaga et al., 2013, p. 110).
Non-mediated	Expert	Expert power has its basis that one party or firm has expertise and knowledge that the other one emulates (Nyaga et al., 2013, p. 47).
	Referent	Referent power exists when one party identifies itself and its values with the other party because of the notion that the other party operates better than itself (French and Raven, 1959, p. 161).

In the music industry, B2B relationships occur between the actors based on their having the knowledge about the future of the music, trust, and capabilities in the development of music and artists (Gander and Rieple, 2004). According to Gander and Rieple's (2004) argument, two types of actors shape the industry, which are the big record companies and small-scale independent record companies. Hence, given their resources, the actors may have different power types and the dependencies between them are a result of these different power types. Competitive or collaborative types of structures in the industry like the hybrid structures or joint ventures are framed by these power types as well (Lin, 2014).

#### **2.4.2. Factors Counteracting Power**

Among the factors that affect power, the ones counteracting power are worth-emphasizing. Trust, collaboration, and balance of power stand out as the critical factors in association with this issue in the literature (Hamel, 1991; Gulati and Sytch, 2007; Capaldo and Giannoccaro, 2015). Trust is the essential factor for the health and sustainability of relationships (Corsten and Kumar, 2005). In this respect, Nyaga et al. (2013) have discussed that increased trust means increased quality in relationships and the partner's collaborative and adaptive behaviors are greater when

the perception of the relationship quality is higher although adaptive behaviors exist where the partners are dependent on each others' resources and these adaptive behaviors may cause opportunism.

Through adaptation and collaboration, the commitment of the partners to the relationships is increased (Dyer and Singh, 1998). It seems that the negative effects of power asymmetry are reversed by the increased relationship quality. Social sides of the organizational environment such as culture, joint dependence, and partners' belonging may foster trust reducing opportunism (Williamson, 1975). Gulati and Sytch (2007) argue that joint dependence occurs if the dependencies are balanced at some level where the embeddedness of each actor to the relationship becomes the key issue, and this highlights the quality of the relationship more by boosting the value creation more. Gulati and Sytch (2007) also argue that when social governance mechanisms applied, uncertainty is reduced and the performance of the jointly dependent firms increases.

Collaboration is the major property of hybrid structures where there is no authority to decide the roles and responsibilities of the actors as opposed to hierarchical management styles (Phillips, Lawrence, and Hardy, 2000). Joint ventures and strategic alliances are some forms of hybrid structures and for the industries that are not in stability but in a cycle of dynamic innovations hybrid structures are more suitable as governance mechanisms (Gander and Rieple, 2004).

Firms may pool their divergent resources to increase synergy. However, there is the risk that the transfer of the resources to unsuitable settings may erode the value of the resources by making them detrimental damaging the power (Gander, Haberberg, and Rieple, 2007).

In the music industry, assets are context-specific and trust is an essential factor to form powerful relationships between the actors (Gander and Rieple, 2007). Regarding trust, if there is lack of trust stemming from the asymmetry of knowledge

in favor of the record company in the relationship between the record company and the artist, for instance, then the powerful party which is the record company may exploit the artist (Hesmondhalgh, 1998). Moreover, the fact that assets are specific to the relationships increases the costs of protecting them since in different situations where the assets do not belong to these certain relationships they will be harmed (Williamson, 1985). Power dynamics matter in the control of these specific assets (Phillips et al., 2000). Thus, considering the innovativeness and dynamism in the music industry, partnerships or joint ventures based on trust are emerging as suitable structures as argued by Gander and Rieple (2007).

### **2.4.3. Conclusion**

To conclude, in the B2B relationship structure of supply chains, power, which stems from the dependence of actors on each other is a key factor to investigate how the relationships (interaction between the actors) are shaped and the related effects on firm performance. For that purpose, there seems to be a need for power/dependence perspective to grasp these fully.

The source of power is mainly the resources possessed by the actors in the supply chain according to resource based view and the exchange of these resources between the parties is essential to exert power according to resource dependence theory while the balance of power determines the direction of the relationship between the parties (Pfeffer and Salancik, 1978; Belaya et al., 2009; Vanpoucke et al., 2014). Therefore, power types and balance of power are two critical sub-dimensions of power. While the non-mediated power types lead to more intimate relationships where the target determines how it will be influenced, mediated power types promote more formal relationships where the party who exert the power controls the situation (Benton and Maloni, 2015). In a creative industry like music industry where the assets are context-specific and the relationships are transaction-specific, different power types of the

actors depend on their having capabilities and knowledge in their field. Trust and power dynamics between the actors are determining factors for the formation of structures in the music industry. Considering these and the dynamism in the music industry, a structure based on trust between the actors is needed more. This is because mistrust, missing or decreased relationship commitment, missing goal congruence as well as power imbalance/asymmetry between the actors are the most critical factors which harm the effective implementation of power by the actors in B2B relationships. In the next section, performance implications are elaborated.

### **2.5. Supply Chain Complexity Performance Implications**

To be able to better manage a supply chain, it is vital to know the performance implications of SCC. Nevertheless, there is not a clearcut standpoint regarding the effect of SCC on performance because supply chains are systems that go hand in hand with their environment and multiple factors make the picture more complicated than it seems (Gottinger, 1983). Likewise, different contexts may result in different implications (Estampe, Lamouri, Paris, and Brahim-Djelloul, 2013).

To exemplify, Choi and Krause (2006) have shown that decreased complexity decreases transaction costs and increases supplier responsiveness; however, decreased complexity may also mean an increased supply risk and decreased supplier innovation. In the context of green supply chain management, effectiveness is directly affected by supply network complexity, but this effectiveness depends on whether the governance mechanisms are informal or formal (Tachizawa and Wong, 2015). While supply network complexity positively moderates the relationship between formal governance mechanisms and environmental performance, it negatively moderates the relationship for informal governance mechanisms and environmental performance. Along these lines, Lu and Shang (2017) have demonstrated that a single dimension of complexity may have both positive and negative effects on performance where the total effect becomes non-linear when they

have analyzed how financial performance is affected by supply base structural complexity. This study also has revealed that the effect of different SCC dimensions on performance may vary. Some dimensions may have a significant impact on performance while the others may not.

Given the dimension of size, Lemke et al. (2000) propose that reducing the number of suppliers in the supply base is cost effective and makes the control of the supply base easier. For products, it was shown that the increase in their number has a negative impact on manufacturing performance with increased costs and therefore the number of the products has to be at an optimal size (Salvador et al., 2002). The increase in the number of customers will also affect performance negatively since the management of customer relationships will become more difficult (Vollman et al., 2015).

Considering variety or heterogeneity, Choi and Krause (2006) assert that heterogeneity puts much more burden on firms operationally considering the problems faced by them with respect to control and coordination; however, heterogeneity also contributes to innovation and creativity. Parallel with the negative effect of the increase in the number of products/processes and customers on performance, Kavilal et al. (2017) state that the increase in the variety of products, processes, and customers has a negative impact on performance because the variety of products and processes will entail extra investment in production, design and operations while the increased variety of customers will increase the number of orders and cause a conflict in meeting these orders on time. It may cause increased cost, decreased quality, poor delivery performance and less flexibility (Brandon-Jones et al., 2014).

In case of interaction, Choi et al. (2001) mention the difficulty of managing a supply network as the behavior of the network shaped by interactions is not very predictable. Besides, a negative curvilinear relationship with supply risk and interaction was suggested when the number of suppliers is kept fixed (Choi and Krause, 2006).



Although this does not draw a clear picture, in recent years Giannoccaro et al. (2018) have demonstrated that higher levels of interactions as well as size hurts performance. In terms of control of complexity, they have shown that the scope of control should be moderate (not too much or too limited) for the optimality of performance.

For dynamic complexity, any factor that intensifies uncertainty and risk are detrimental to performance since the management efforts cause a decrease in profit margin (Gottfredson and Aspinall, 2005). Still, if dynamic complexity is necessary for competitive advantage, trying to manage dynamic complexity drivers other than reducing or eliminating them is more effective (Serdarasan, 2013). In that manner, especially for detail complexity firms prefer to reduce complexity. For dynamic complexity, on the contrary, they prefer to manage or modify their operations if it is deemed necessary. The distinction between strategic (beneficial) and dysfunctional (detrimental) complexity can be made at this juncture before giving a response to complexity (Aitken et al., 2016; Turner et al., 2018). In terms of control of complexity, Giannoccaro et al. (2018) have shown that the scope of control should be moderate (not too much or too limited) for the optimality of performance. Their study also has supported that size and interaction as two dimensions of complexity have a negative effect on performance.

Despite the nuances about the positive and negative effects of supply chain complexity on performance, there seems to be a general view that SCC in general has a negative effect on performance. It has been found that upstream, internal, and downstream complexities have negative effect on manufacturing plant performance separately. What is more, supply chain characteristics related with dynamic complexity have been found to have more effect on performance than the effect of dimensions of detail complexity (Bozarth et al., 2009). A positive relationship has been found between SCC and undesirable implications like unfavorable conditions stemming from the environment (Manuj and Şahin, 2011). These may be increase in costs, changes in technology, or natural disasters. As another undesirable outcome,

the frequency of disruptions tends to increase with increase in upstream supply chain complexity dimensions (horizontal, vertical, and spatial) and the combined effect of these dimensions intensify this effect (Bode and Wagner, 2015). The main initiators of the frequency of disruptions are the number of suppliers and complexities of delivery which then hurt the firm performance. Slack resources and visibility may moderate this negative effect of complexity on performance (Brandon-Jones et al., 2015). On the other hand, complexity enhances the recovery of performance after disruptions and positively moderates the relationship between resilience capabilities and performance (Birkie et al., 2017).

Taken all these together based on the general view of SCC's negative effect on performance, the table below summarizes the effects of SCC dimensions on performance (Table 3). As can be seen from the review, the literature about SCC and its performance implications focuses on the manufacturing industry, and more specifically on the music supply chain.

**Table 3: Summary of the SCC's Effect on Performance**

<b>Direction</b>	<b>Study</b>	<b>Effect</b>
<b>Positive</b>	Awayesh & Klassen (2010)	Supplier socially responsible practices
	Birkie et al. (2017)	Performance recovery after disruption
	Choi & Krause (2006)	Supplier responsiveness
<b>Negative</b>	Bozarth et al. (2009)	Manufacturing plant performance
	Manuj & Şahin (2011)	Financial and operational performance
	Serdarasan (2013)	Overall performance decline if there are not solution approaches
	Bode & Wagner (2015)	Increased frequency of supply chain disruptions
	Brandon-Jones et al. (2015)	Plant performance
	Choi & Krause (2006)	Financial performance
	Kavilal et al. (2017)	Increase in frequent changes and total cost
<b>Neutral</b>	Choi & Krause (2006)	Supply risk and supplier innovation
	Choi et al. (2001)	Management of supply networks
	Lu & Shang (2017)	Buyer firm's financial performance
	Tachizawa & Wong (2015)	Green supply chain management effectiveness

Bearing in mind that the varying effects of supply chain complexity on performance, managers need to take correct actions and interpret the effect of related complexity. For the impact of supply chain complexity on performance there have been controversial outputs and managers' response to complexity depends on sound analysis of complexity on the basis of its antecedents, origin, and type.

The performance implications of supply chain complexity was examined for manufacturing sector most of the time in the past studies (Bozarth et al., 2009; Kavilal et al., 2017; Hamta et al., 2018). Considering the music industry as one of the service industries, the analysis of the music supply chain under the title of supply chain complexity is missing in the literature. Digitalization is a milestone that altered the structure of the music supply chain in the world (Graham et al., 2004). Hosoi, Joseph, Stainken, and Caro (2015) argue that some actors disappeared along with the digitalization in the music supply chain and this process is called disintermediation. However, disintermediation seems to evolve into a reintermediation with new actors' emergence by adopting online business models (Brabazon, Winter, and Gandy, 2014). Plus, revenue streams have been diversified for the existing actors other than the traditional revenue channels (Marshall, 2013). All of these imply more intense relationships in such a new and dynamic structure.

All in all, supply chain complexity analysis of the music industry entails a careful effort by taking cognizance of size, variety, interaction, and dynamism of the chain.

## **CHAPTER 3**

### **METHODOLOGICAL APPROACH**

In this section, first the research strategy (i.e., single case study) is stated. Then, the empirical setting and case selection is discussed. Afterwards, the data collection is elaborated by illustrating the interviewee details and interview questions. Furthermore, the data analysis approach is discussed by stating the coding scheme for key constructs and also illustrating how one of the interviewee's answers were coded and analyzed. Finally, measures taken to ensure reliability and validity are explained.

#### **3.1. In-Depth Single Case Study Approach**

This thesis adopts a single-case study approach to examine supply chain complexity in the evolving Turkish digital music industry in depth. Single case studies are suitable if the phenomenon is investigated in a unique and complex environment (Yin, 2003) and exploratory single case studies serve for exploring the phenomenon where drawing simple conclusions is not easy by taking into account the effect of the context on it (Baxter and Jack, 2008). Furthermore, this thesis elaborates on current circumstances and there is no requirement for the control of the behaviors of the actors and related situations in the study. Considering the exploratory nature of the research questions about the effects of digitalization on supply chain complexity and B2B relationships in Turkish music supply chain, the case study as a method seems more suitable than the other methods (Yin, 1994).

Turkey is selected for the research context as it is one of the countries which is still in the transformation phase of digitalization in music according to the numbers published by IFPI (IFPI, 2018). From this angle, Turkey lags behind other developed countries in Europe and the world in this transformation process (Turhan, 2017). In its market, traditional and digital music companies continue to exist at the same time (“MÜ-YAP/Türkiye”, 2018). Studying Turkey, in that sense, is expected to reveal insights about the complex structure of the music supply chain. Furthermore, examining supply chain complexity also necessitates investigating the relationship characteristics of the key actors. Therefore, this thesis aims to investigate the following research questions:

*“What is the effect of digitalization on the supply chain complexity of the Turkish music industry?”*

*“What is the effect of digitalization on power characteristics of the Turkish music industry?”*

### **3.2. Empirical Setting and Case Selection**

For the purpose of determining the limits of the study, a sampling process or selecting the case is vital (Voss, 2009). Contrary to the traditional process of sampling which starts from determining the population first and then deriving the sample from that population, in case studies the criteria for selection of the sample differ (Eisenhardt, 1989; Yin, 1994). The aim is to select the sample such that the results generated from the sample are almost similar and they also could produce conflicting data in an understandable sense empirically (Yin, 2000). Since the research question in this thesis focuses on the complexity in the digital music industry supply chain in general encapsulating the dimensions of complexity and the related factors to it, the sampling unit of the research is the whole Turkish digital music industry supply chain.

In the current Turkish digital music industry supply chain, there are traditional record companies from Unkapanı in particular, the major record companies of the industry who are successful at transforming themselves in the digital era, digital distribution companies, digital platforms, independent or small-scale labels and collecting societies which function to protect the rights of the musical work owners, performers and producers as the main actors of the “*production side*” of the chain.

Considering the production and distribution as the most critical functions performed in the music industry supply chain, the actors related with these activities are selected in the sample within the scope of the single-case study. Therefore, in the sampling process, the sampling unit was determined as the whole Turkish digital music supply chain which encapsulates various actors from record companies to collecting societies in it.

### **3.2.1. Main Actors in Music Supply Chain**

While some of the main actors in the music supply chain before digitalization still exist in the new digitalized music supply chain structure, like the record companies and the collecting societies, the main actors in this new structure are varied, with newly added ones like the digital platforms and digital distributors or aggregators (Renard, Faulk, and Goodrich, 2013). Although the key actors in a music industry supply chain are known in the literature, players can vary depending on the country as well (Nakano and Fleury, 2017). The final list of the main actors was completed after the initial interviews with the key respondents. The explanations were given in accordance with the answers of the respondents. For reasons of clarity, we present here the list of the main actors briefly before discussing the supply chain structure in detail in the Results section (Table 4). In order to point the actors who were existent

in the traditional Turkish music supply chain (before digitalization) as well, the letter “T” was put next to the names of the related actors.

**Table 4: Main Actors in the Turkish Music Supply Chain**

<b>Music Owners (T)</b>	Starters of the music production process since they produce the music and its components.	<b>Radio and TV Channels (T)</b>	Broadcast channels that make the publishing of music with visual and audio technologies.
<b>Performers (T)</b>	The artists who perform the music and have strong ties with three types of production companies.	<b>Governmental Authorities (T)</b>	The actors who have legal power regarding regulations (especially the Ministry of Culture and Tourism and the Government).
<b>Big Record Companies (T)</b>	Production companies who lead to the transformation process during digitalization and work in large-scale producing pop music in general.	<b>Management Agents (T)</b>	The actors who work for the performers by guiding them in their business.
<b>Indies (T)</b>	Small-scale independent production companies transforming themselves in digitalized era and most of them are from new generation producing alternative music.	<b>Performance Venues (T)</b>	The physical place (especially night clubs) where live music is performed.
<b>Traditional Record Companies (T)</b>	Production companies working with local artists in small-scale.	<b>Sound Engineers and Arrangers (T)</b>	Actors who deal with the technical arrangement of the songs produced.
<b>Studio Musicians (T)</b>	Musicians who perform in the studio for recording.	<b>Physical Distributors (T)</b>	Intermediaries between the record companies and retailers who make the distribution of the physical product.
<b>Digital Distributors</b>	Intermediaries between the production companies and digital platforms. They transfer the music of producers to the digital platforms and get commissions from the total revenue generated.	<b>Retailers (T)</b>	Stores where the physical products are sold.
<b>Digital Platforms</b>	Platforms where the music is listened to by the consumers in the digital era. They publish the music that was sent to them by the digital distributors.	<b>Social Media</b>	Digital channels or websites where the users share content and connect to/communicate with each other.
<b>Collecting Societies (T)</b>	Actors who are responsible for collecting royalties on behalf of their members from revenue channels in publishing music. They distribute the royalties they collected to the related parties (i.e., performers, record companies, and music owners).	<b>Consumers (T)</b>	Those for whom music is produced. They have strong ties with digital platforms directly and also with the performers via live performances.

In Table 4, the roles of the main actors in the sampling unit are demonstrated taking into account the trends and the significance of the actors in the new digital music supply chain.

### 3.2.2. Sampling Process

For the record companies, checking the membership of the record companies to MÜ-YAP in Turkey, it was found that the main actors who are the members of MÜ-YAP are located in İstanbul to a large extent, while some of them are in Ankara and in other provinces (“Üye Listesi – MÜ-YAP”, 2019). Therefore, the sample of this research is selected mainly from the record companies in İstanbul and Ankara. Some of these companies have membership in MÜ-YAP but some of them do not have any relationship with MÜ-YAP (especially the ones in Ankara). As for the record companies in Ankara, some of them are dependent on the big or major record companies in İstanbul (based on the agreements between them) while some others are working directly through digital distribution companies.

Of the two main digital distribution companies dominant in the Turkish digital music industry, which are “The Orchard” and “Believe”, one of them was included in our sample (“Müziğin ‘elma’lı pastasını artık şirketler yiyor”, 2013). Nearly all of the record companies (both the ones in small-scale and big-scale) are dependent on these two main digital distribution companies. In essence, The Orchard and Believe are giant international digital distribution companies operating worldwide (“Believe”, 2018; “The Orchard”, 2018). However, in this thesis the focus is on the Turkish branches of these two companies. These companies are intermediaries between the producers and the digital platforms in the digital music industry supply chain both in the world and in Turkey (“Believe”, 2018; “The Orchard”, 2018). In detail, after music is produced by the producers, the tracks or albums are sent to these digital distribution companies by the producers and then these digital distributors send the



music produced to the specified active digital platforms. They are called “digital aggregators” and will be called digital distributors in this thesis. They prepare the infrastructure for the tracks to be transferred to the digital platforms and they give local and international codes for the tracks while they transfer them (Galuszka, 2015). Digital platforms, on the other hand, are the highly preferred touch points between the end customers and the producers from the upstream (Im, Song, and Jung, 2018). Digital platforms as unique actors are the part of the sample of the research.

The most preferred one of these digital platforms between young people described as “Z generation” is YouTube in Turkey (Hadımlı, 2017). In recent years, YouTube’s first ranked position in terms of the preference of the listeners in Turkey in general is still valid (Hiçsönmez, 2017). Together with YouTube, other digital platforms for the listeners are numerous. *Spotify, fizy, Muud, iTunes, Apple Music, Google Play Music, SoundCloud* or digital radio channels are a few examples of the digital platforms that are active in Turkey (Türk insanının müzik dinleme alışkanlıkları ve dijital müziğin yükselişi, 2018). Nevertheless, as institutional entities they are positioned differently in terms of dependencies. Some of the digital platforms are offered by the telecommunication services as mobile applications for the customers and have ties with some big record companies while some are independent (“Fizy”, 2018; “Muud”, 2018). Similarly, some of the digital platforms are used worldwide but some are local in Turkey and especially the Turkish customers are targeted by them for that reason.

Finally, the Turkish digital music industry supply chain cannot be analyzed well without considering the position of the collecting societies. There are four main collecting societies active in Turkey. They are MÜ-YAP for producers, MESAM and MSG for the music owners and MÜYORBİR for the performers (“MÜ-YAP”, 2018; “MESAM”, 2018, “MSG”, 2018; “MÜYORBİR”, 2018). Particularly the relationships of these collecting societies with other actors in the chain have the potential to shape the power dynamics taking into account the royalties paid to the actors. The principle for these collecting societies is to collect the royalties on behalf

of their members and to distribute them (Kretschmer, Klimis, and Wallis, 1999). For an efficient digital supply chain structure, the payment of the royalties is expected to be distributed fairly and if there is not fair distribution, huge problems of value gaps in the chain seem inevitable (Dimont, 2018). That is why in this case study existing collecting societies were made part of the sample as well to better understand the structure of the supply chain.

To conclude, considering their significance in the new digital music supply chain in Turkey, the record companies in general, digital distributors, digital platforms, and collecting societies were focused more in the sampling unit of the whole music supply chain in Turkish context.

### **3.3. Data Collection**

For this in-depth exploratory single-case study, the main source of data collection was the semi-structured interviews conducted with the executives and top executives of the *big record companies, small-scale record companies called 'indies', digital distribution companies, digital platforms*, as well as *collecting societies*. Before conducting the interviews, the approval of the Ethics Committee of Middle East Technical University was taken. Interviews were from executive level positions who have deep knowledge about the production process of Turkish music industry. Additionally, secondary data were collected via relevant websites regarding the Turkish music industry in general.

The data for the first round of interviews were collected between May-August in 2018. As a first step for the interview process, e-mails were sent to the informants or telephone calls were made to give information about the research. Some of the informants requested from the researcher to see the questions before the interview to be better prepared for giving answers to these questions. E-mails were sent to these parties who are eager to see the questions before the conduction of the interview. For

others, the informants were given information about the general outlook and sub-headings of the interview questions via e-mail, telephone, or just at the beginning of the interview. They were not prepared beforehand and the interview went in a more spontaneous process for these informants.

In total, 20 semi-structured interviews were conducted in the first round with the informants from İstanbul and Ankara. For convenience reasons, the number of interviews conducted in Ankara is more than the number of interviews conducted in İstanbul. The informants were selected according to their position. While some of the executives gave a common company answers to the questions, for some of the others the interview was conducted with more than one executive from the same company. The interviews ranged between 45-85 minutes in the first round.

Between May-June 2019, a second round of interviews were held as it was realized that the first round of interviews were not enough to delineate the complexity of Turkish digital music supply chain. In total, three detailed interviews with indies located in Ankara were held in the second round. These indies were the same indies with whom the interviews were conducted in the first round. The second round interviews were in more detail regarding supply chain complexity and their duration ranged between 60-105 minutes. In total, 23 interviews were done. The reason why 23 interviews were done is that especially after the detailed second round of interviews, similar data were obtained from the respondents which were parallel with the answers obtained from first round interviews. At that point, it was decided that no more interviews were needed and the interviews were stopped.

Since most of the interviewees are from Ankara where only the small-scale indies are located, most informants are the actors called "*indies*". Except the convenience reasons related with ease to reach, another reason for choosing these companies is that they are gaining much more importance together with the rise of digitization. It becomes easier for them to transform themselves into the digitalized era and form relationships and networks or with various parties in the chain.

Other informants are from some of the big major labels from İstanbul, one of the main digital distribution companies, some digital platforms, and the collecting societies active in the chain. All of the interviews were recorded in audio format and then the answers of the interview questions were transcribed. To be able to ensure the correct translation of the answers of the respondents from Turkish to English, backtranslation of the answers were made with the help of a third party (an academician). Finally, the answers were coded for the analysis of data.

The abbreviations used for the actors in the Turkish digital music supply chain (MSC) indicate their role to differentiate them from each other together with the numbers attached to them. The explanations for the abbreviations are also provided in Figure 9 below.

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MusOwn: Music owners
Perf: Performers
BigRec: Big record companies
Indie: Small scale (new generation) producers
TradRec: Traditional (old generation) producers
StudMus: Studio musicians
DigDist: Digital distributors
DigPlat: Digital platforms
CollecSoc: Collecting societies
RadTV: Radio and TV channels
GovAuth: Governmental authorities
ManAg: Management agents
PerfVen: Performance venues
SEArr: Sound engineers and arrangers
PhysDist: Physical distributors
Ret: Retailers
SocMed: Social media
Cons: Consumers

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**Figure 9: Abbreviations Used for the Actors in the Turkish Digital MSC**

Table 5 below illustrates the list of the interviews conducted with the main actors selected from the sample unit. In the table, details of the 18 actors and 23 interviewees that the interviews were conducted with are listed. The title or position of the executives or authorities is given under the heading of “Position”. The names of the companies are not given due to confidentiality. Instead of real company names, abbreviations were used for the actors with whom the interviews were conducted. The interview length in minutes and the transcript length of the interviews in pages were provided for each of the interviewee. Table 5 illustrates the details of the interviews. When there are two respondents of the same actor, the symbol of “&” is used to differentiate between the two respondents’ duration and transcript length.

**Table 5: Interview Details**

<b>List of the Interviews Conducted</b>				
<b>Actor</b>	<b>Position</b>	<b>Duration (minutes)</b>	<b>Transcript Length (pages)</b>	<b>Data Collection Round</b>
DigDist1	Executive Officer	51	6	First
DigDist2	Executive Officer	55	7	First
DigPlat1	Creative Professional	58	8	First
BigRec1	Executive Officer	61	7	First
BigRec2	Executive Officer	53	7	First
Indie1	Executive Officer	75 + 60	7 + 17	First + Second
Indie2	Executive Officer	50	8	First
Indie3	Executive Officer	47 + 105	7 + 18	First + Second
Indie4	Executive Officer	45	8	First
Indie5 (2)	E. Officer & Co-manager	71 & 63 + 90 (second)	8 & 8 + 21 (second)	First + Second
Indie6 (2)	E. Officer & Co-manager	55 & 57	7 & 8	First
CollecSoc1	Director	85	9	First
CollecSoc2	Lawyer and Director	60	8	First
TradRec1	Executive Officer	45	7	First
TradRec2	Executive Officer	45	7	First
TradRec3	Executive Officer	45	7	First
TradRec4	Executive Officer	45	7	First
TradRec5	Executive Officer	46	7	First

Table 6 gives more details about the actors with whom the interviews were conducted. Employee numbers (either in exact number or the range given by the officials) are provided as an indicator for the size of these actors.

**Table 6: Details about the Actors of the Interviews**

<b>Actor</b>	<b>Number of Employees</b>	<b>Scope</b>
<b>DigDist1</b>	5 - 10	Independent global distributor founded in 1997. Turkish branch of it is one of the 25 local representatives. It deals with services like marketing, advertising, and performance rights as well.
<b>DigDist2</b>	10 - 15	The only digital distributor based in Turkey. It works with the performers, record companies, and for special projects of the companies. The crew is also specialized in marketing and organization as well as management of the performers.
<b>DigPlat1</b>	100+	Turkey-branch of a global digital platform providing service for listening to music to the consumers. It was launched in 2015.
<b>BigRec1</b>	10	It was founded in 1991 in İstanbul with the aim of collecting niche/alternative cultures and music genres as archives and forming a market for that in the local music sector.
<b>BigRec2</b>	22	It was founded in 1987 in İstanbul. It functions in both production and distribution.
<b>Indie1</b>	14	It was founded in 2000 in Ankara. It functions in the areas of production, recording, mixing, mastering, arrangement, music videos, and trailers.
<b>Indie2</b>	2 - 3	It was founded in 1997 in Ankara. It functions both as a recording studio and rehearsal studio.
<b>Indie3</b>	2 - 3	It functions in the areas of music production, voice recording, video production, mixing, mastering, jingle, film and documentary music. It produces alternative music.
<b>Indie4</b>	3	It provides mixing, mastering, editing and recording services. It works with well-known individual/independent producers as well.
<b>Indie5</b>	2	It provides production and recording services. It also functions in concert organization and publishing in media. It provides services for radio and TV corporations. It is a member of the collecting society of the record companies.
<b>Indie6</b>	2	It was founded in 2017 in Ankara. Its aim is to support new approaches and voices and make them part of the music sector.
<b>CollecSoc1</b>	30 - 35	It is the collecting society for the record companies and became a legal entity in 2000 with the permission of the Council of Ministers. It protects the rights of the record companies and distributes royalties to them.
<b>CollecSoc2</b>	15	It is the collecting society for the performers and became a legal entity in 2000 with the permission of the Ministry of Culture and Tourism. It protects the rights of the performers and distributes royalties to them.
<b>TradRec1</b>	1	A traditional record company working with local performers of Turkish folk music only. It is located in Ankara.
<b>TradRec2</b>	1	It was founded in 1989 in İstanbul (Unkapanı). It produces songs in Turkish arabesque music and works with the performers from that genre.
<b>TradRec3</b>	1	It has been in the music sector for 30 years and works with some well-known performers of Turkish folk music. It is located in İstanbul (Unkapanı).
<b>TradRec4</b>	1	A traditional record company working with folk music performers. It is located in İstanbul (Unkapanı).
<b>TradRec5</b>	1	It was founded in 1979 in İstanbul (Unkapanı). It has made albums for more than 300 performers until today.

Other than the primary data source of interviews, the secondary source of data for this research was the records and graphs of global and local sales from the past years as well as information from the websites of the record companies and other main actors in the chain. Most of the numeric data regarding the sales and revenues were reached through the reports of IFPI for the recent years especially (2016, 2017, 2018, and 2019) and MÜ-YAP. The yearly reports of Nielsen and RIAA were also utilized to get statistical data about music industry in general. The website of netd (“Netd”, 2019) gave useful information about this popular digital channel of YouTube. Furthermore, though not included in the interviews, the websites of some popular digital platforms like Spotify, fizy, and Muud were made use of. Likewise, the websites providing statistical data were made use of and mentioned in references.

### **3.3.1. Measurement (Interview Questions)**

The interview questions were in two parts with different topics. Namely, these parts of the interviews were:

- I. Supply Chain Complexity & Power
- II. Music Industry & Digitalization

While the concentration was on supply chain complexity and power, useful information related with our analysis of complexity and power was tried to be obtained by the questions of music industry and digitalization. The interviews were semi-structured, containing mostly open-ended questions and extra following questions could emerge during the interviews in a spontaneous fashion (Arsel, 2017).

The questions were formulated based on the articles related with supply chain complexity, music supply chains, as well as power and digitalization. To exemplify, the questions in the first part were for understanding the complexity of the structure of the music industry supply chain in Turkey with the dynamism of digitalization



(Surana, Kumara, Greaves, and Raghavan, 2005). Second, the trends and market conditions were taken into account to be able to understand the Turkish music sector's local and global position (IFPI, 2018; "MÜ-YAP/Türkiye", 2018). Third, the emphasis was put on digitalization and its effects in this new structure (Lewis, Graham, and Hardaker, 2005).

The funnel technique was used while preparing interview questions where the general questions are asked first, followed by more specific questions. However, sometimes the order of the questions in the interview was not followed. To be able to better guide the interview, the direction of the answers of the respondents was taken into consideration more and with that direction the order of questions to be asked changed.

The dimensions and topics related to supply chain complexity in the literature were explained to the respondents before asking the questions containing these supply chain related concepts according to the definitions. The definitions can be found in the Key Construct Table (Table 7).

In the "Interview Protocol", the aim of the study was explained to the respondents firstly with the researcher's introduction. For the potential questions that might be asked by the respondents, instructions were prepared about the interview and the recording process and these were also explained to the respondents. In addition, after the answers were obtained from first and second round interviews and transcripts were written, the written versions of the interviews were sent back to the respondents for their checking.

The details of the related semi-structured interviews with key executives of the main actors selected are provided below.

### 3.3.1.2. Questions for Interviews with Top Executives

#### Supply Chain Complexity

##### *Size:*

- How would you evaluate the complexity in Turkish music industry supply chain?
- How would you evaluate the integration in Turkish music industry supply chain?
- Did the number of products/processes increase or decrease after digitalization? Why? Could you give an example?

##### *Variety:*

- Do you think that the variety or types of actors changed after digitalization? Did the variety increase or decrease? To what extent is the change?
- Are the actors now geographically more diverse or not? Why? Could you give an example?
- Do you observe any cultural distinctiveness in actors? Why? Could you give an example?
- Are the actors now diverse in size or not? Why? Could you give an example?
- Are the actors now diverse in capabilities, technologies, and practices or not? Why? Could you give an example?

- Are the products now more diverse or not? Why? Could you give an example?

***Interaction:***

- Do you think that the type of interactions is competitive or cooperative? To what extent are the interactions competitive? To what extent are the relationships cooperative?
- Why do you think that the relationships are competitive/collaborative? Could you give an example?
- What is the intensity of the relationships? How frequently do transactions (physical goods and information exchange) occur between the actors?

***Dynamism:***

- When we consider the new music supply chain structure, to what extent is the uncertainty observed in this structure in general terms?
- What are the uncertainties regarding the products/processes in the new music supply chain structure? Why do you think that these uncertainties exist?
- What are the uncertainties regarding the main actors of the new music supply chain structure (big record companies, indies, traditional record companies, digital distributors, digital platforms etc.)? Why do you think that these uncertainties exist?

- What are the uncertainties regarding the customers or customer demand in the new music supply chain structure? Why do you think that these uncertainties exist?

- What are sudden/unexpected changes you observe in the new music supply chain in general terms? Why do you think that the system is open to these sudden changes?

### ***Power/Dependence***

- In your opinion, which actor(s) is/are the most powerful one(s) in the new music supply chain structure? Why? What might be the reason(s) for power of that actor(s)?

- Are there any power a/symmetries between the actors that you observe? If so, what might be the reason(s) for that and could you give an example?

- Given the main actors of the new music supply chain structure, could you briefly talk about dependencies of these actors and the possible reasons for these dependencies?

- Do you think that there are transaction-specific assets between the actors (assets specific to a certain type of relationship)? If so, could you give an example?

### ***Power types:***

- Which actor(s) do you think that has/have a particular expertise, knowledge, and capability that the others emulate? Why?

- Which actor(s) present(s) rewards to the other(s) (target) with the aim of influencing it/them)? Why?

- Which actor(s) has/have the ability to punish the target(s) with the aim of influencing it/them)? Why?

- Which actor(s) has/have attempts to influence the other(s) by depending on legal contracts or agreements? Why?

***Music industry and digitalization:***

- We are in an era in which music is consumed too fast compared to the past. In this context, how could sustainability be ensured in digital music industry?

- In the extant digital music supply chain structure of Turkey, what are the aspects that you consider favorable/unfavorable?

- How is the market share structure in Turkish music industry with respect to digital and physical sales? Could you please give percentages from Turkey and the world?

- According to your view, what is the importance of social networks in Turkish music industry supply chain?

- How would you evaluate information sharing (the visibility or transparency) in the Turkish music industry supply chain?

- Streaming services or platforms are at the forefront in terms of revenues generated both in Turkey and in the world. Do you think that this upward trend will continue like that in Turkey and in the world and why?

- Do you think that there are situations raising concerns with respect to unfair competition like monopolized settings formed in Turkish digital music industry? If so, could you please talk about those situations briefly?
  
- At the transformation stage from traditional to digital in music industry, do you think that record companies managed the process successfully?
  
- What are the present digital distribution strategies preferred by the actors in the Turkish digital music industry?

### **3.4. Analysis of Data**

In this part, the process of analyzing data is explained. First, a coding scheme for key constructs (see Table 7) was prepared with definitions of key constructs and keywords related to these constructs. Then, based on this coding template, the quotations of the respondents were coded, which is a highly adopted practice for analyzing qualitative data in the SCM field (e.g., Foerstl, Azadegan, Leppelt, and Hartmann, 2015; Busse, Meinschmidt, and Foerstl, 2017). Table 8 illustrates an example regarding how representative statements were coded noting the interviewee quotes, related actor(s) about the quote, and the context. This practice was adopted for all 23 interviews conducted. Finally, interview codings were accumulated for each construct, allowing the researcher to aggregate findings across interviewees and look for similarities and differences. While coding, special attention was paid to code for events/observations “before” and “after” digitalization. This process enabled the researcher to classify the empirical data and analyze critical dimensions and themes. While there was a pre-defined set of key constructs, the emergence of other related concepts was investigated as well.

**Table 7: Coding Scheme of the Key Constructs**

Key Constructs	Definitions	Keywords	References	
<b>Size</b>	Volume of interrelated elements in a supply chain (Choi et al., 2001)	Unique elements, number of actors, products, processes, customers, employees (for their own firm)	(Choi et al., 2001; Choi and Krause, 2006; Serdarasan, 2013; Birkie et al., 2017)	
<b>Variety</b>	Distinctiveness of the elements in the supply chain (Jacobs, 2013)	Diversity, differentiation, heterogeneity, different cultures, practices and technologies, differentiation in geography and size	(Awayesh and Klassen, 2010; De Leeuw, Grotenhuis, and van Goor, 2013; Jacobs, 2013; Brandon-Jones et al., 2015)	
<b>Interaction</b>	Interactive relationships or linkage of elements in the supply chain (Jacobs, 2013)	Competition, cooperation, collaboration, reciprocity, sharing of information and materials	(Choi et al., 2001; Choi and Krause, 2006; Awayesh and Klassen, 2010; Jacobs, 2013; Ateş et al., 2015; Turner et al., 2018)	
	<u>Cooperation</u> indicates clarity and solidarity.			
	<u>Competition</u> lays stress on non-shared information and distance in relationships.			
	<u>Intensity of interaction</u> captures both the frequency of the physical goods and information exchange between the members.			
<b>Power</b>	Superiority of one party to the other based on their dependence on each other (Emerson, 1962)	Dependence, exchange of resources, possession of distinctive and valuable resources, power asymmetries, balance, opportunism	(Pfeffer and Salancik, 1978; Gulati and Sych, 2007; Vanpoucke, Vereecke, and Wetzels, 2014; Cao, Huo, Li and Zhao, 2015)	
	<u>Power types</u> can be non-mediated like expert and referent power and mediated like reward, coercive, and legal legitimate power.			
	<u>The balance of power</u> changes between the actors in the supply chain on the basis of the possession of resources which can be tangible or intangible.			
<b>Non-mediated Power</b>	<b>Expert power</b> exists when one party or firm has expertise and knowledge that the other one emulates (Nyaga et al., 2013)	Having expertise, capability, capital and network	Adaptive and collaborative behaviors, more intimate power and affirmative, trust and commitment	(French and Raven: 1959, Benton and Maloni, 2015; Chae, Choi, and Hur, 2017)
	<b>Referent power</b> exists when one party identifies itself and its values with the other party on the notion that the other party holds operations better than itself (French and Raven, 1959)	Respect, value		
<b>Mediated Power</b>	<b>Reward power</b> depends on the situation when the powerful party presents rewards to the other (target) with the aim of influencing it (French and Raven, 1959)	Monetary and nonmonetary incentives given	External motivation, forcing the target to act in the desired way	(Molm, 1988; Brown et al., 1995; Benton and Maloni, 2005; Nyaga et al., 2013)
	<b>Coercive power (informal)</b> is the power holder's ability to punish the target with the aim of influencing it (Molm, 1988)	Monetary and nonmonetary sanctions applied, dismissing from the network		
	<b>Legal legitimate power (formal)</b> stems from the influencing attempts of one party over the other by depending on legal contracts or agreements (Nyaga et al., 2013)	Binding legal contracts or agreements		
<b>Dynamic Complexity</b>	Unpredictability of the system (supply chain) in general terms (Dittfeld et al., 2018)	Uncertainty, unpredictability, variability, changing requirements of customers, speed, change in employees and other actors, change in management	(Manuj and Şahin, 2011; De Leeuw et al., 2013; Serdarasan, 2013; Brandon-Jones et al., 2015; Dittfeld et al., 2018)	

**Table 8: Representative Table for the Analysis of Quotations**

Key Constructs	Representative Statements of the Respondent (R8)		Actors	Context
<b>Uncertainty</b>	"The number of actors is always changing. This may increase or decrease. It is volatile."		All actors in general	Volatility
	"Whether the songs will be popular or not is the major uncertainty regarding products in the chain. This uncertainty was relevant in the past though."		Record companies and performers (especially)	Products
<b>Power</b>	<b>Expert power</b>	"Some executives of some record companies may have expert power. ... This is somewhat because having capital at hand. This brings media power to them."	Record companies	Source of power
	"... the producers and the performers have the same power. This is because they have reciprocal relationships and they need each other at the same level."		Record companies and performers	Power symmetry
<b>Interaction</b>	"We can give the example of the shortened duration of producing a song. This process and sharing of information and materials throughout this process is really fast. By that way, communication, trust and network formation developed in fact."		Record companies	Production process
	<b>Cooperation</b>	"There is collaboration with the majors and the indies. ... Musicians from different record companies also collaborate with each other contrary to the situation in the past. There exists a network for them as well."	Big record companies, indies and performers	Collaboration
	<b>Competiton</b>	"As for competition, I think there is not much competition. In the past, for example, all producers were competing to work with Ümit Besen."	Big record companies (especially) and all actors in general	Degree of competition
<b>Size</b>	"The number of consumers increased considering the ones consuming the digital music. ... there are the indies emerging. ... The number of the majors has decreased together with the closing of some of them..."		Consumers, indies and big record companies	Number
	"There is less number of processes now. Now, the work that was done in 3 studios can be done in just one studio with the employees specialized in digitalization."		All actors in general	Processes



**Table 8: ( continued )**

<b>Variety</b>	"There are now digital platforms instead of physical retailers, but this is not a big diversification. You cannot diversify them by function much. Only there is classification of streaming and downloading on their side or the classification of music streaming or video streaming."	Digital platforms and physical retailers	Diversification of the actors
	"In fact, the work done, studios or the tools in the production are the same for us. However, the approaches to work are different. In that sense, capabilities and practices are diverse."	Record companies	Diversification by approaches

### **3.5. Reliability and Validity of the Research**

From among various tests used to judge whether the study is of high quality or not, four of them come into prominence in empirical research studies, which are construct validity, internal validity, external validity, and reliability (Yin, 2009). Single case studies can be evaluated as empirical research studies, and these tests can be applicable to this study as well.

As summarized by Kidder and Judd (1986), construct validity is determining the applicable measures for the concepts to be studied. Internal validity is searching for causal relationships when it is considered that one situation affects the other. External validity, on the other hand, is the generalization of the results of the study to other settings while reliability is about the repeatability of the study with same conclusions derived and it deals with trying to eliminate the possible mistakes or biases (Yin, 2009).

Different tactics were utilized to ensure construct, internal, and external validity, as well as reliability in certain parts of this study. In terms of construct validity, in order to avoid subjective judgments and choose the correct measures, key informants were shown the draft of the case study report. The key informants with whom the second-round of interviews were conducted saw the draft of case study. The research questions and key points of the study were shared with the respondents. The answers

of the interview questions were sent back to them for checking. This was necessary to further support the findings of the study as explained by Schatzman and Strauss (1973). Table 9 summarizes the tactics utilized to ensure reliability and validity in this study as well as in which part or parts of the study these were utilized.

**Table 9: Tactics for the Reliability and Validity**

<u>Tests used</u>	<u>Tactics</u>	<u>Part of the study that the tactic is utilized</u>
Construct validity	<ul style="list-style-type: none"> <li>• Make key informants see the draft of the case study report</li> </ul>	Data collection
Internal validity	<ul style="list-style-type: none"> <li>• Address rival explanations</li> </ul>	Data analysis
External validity	<ul style="list-style-type: none"> <li>• Utilizing theories</li> </ul>	Research design
Reliability	<ul style="list-style-type: none"> <li>• Interview protocol</li> <li>• List of the interviewees</li> </ul>	Data collection Data collection

Given internal validity in data analysis, in order not to draw wrong conclusions from the answers obtained from the interviews, rival explanations were utilized although they were not obtained for all findings in the study. To exemplify, there were contradictory answers about the type of the relationship between the main actors in the Turkish music supply chain. Some of the respondents stated that the relationships are competitive while some claimed that the relationships are cooperative. For the rival explanations, the view of majority of the respondents was taken into consideration while drawing conclusions.

As for external validity, in the research design part of the study, the theories related with power/dependence which is also in association with supply chain complexity in the literature were utilized. For instance, the resource dependence theory (Pfeffer, 1972) and resource-based view perspective (Vanpoucke et al., 2014) explain how the possession and exchange of resources determines the power dynamics between the actors, which affects supply chain complexity as a result. In the Discussion part, some associations were found between the constructs studied which are to be tested in different settings for further research to get support for them. The conclusions can only be accepted with other replications producing results with the same direction in line with the Yin's argument (2009). Due to the nature of a single case study, generalization is limited in this study.

To ensure that the same results would be produced if this case study were conducted again, in data collection part of the research, the interview protocol was formed. In the interview protocol, the instructions for the interview and the recording process were provided together with the interview questions to further increase the reliability. The list of the interviewees was provided in the case study as well. In this table, the positions of each interviewees, the interview length of each interviewee in minutes, the transcript length of each interviewee in pages and that whether the interview was conducted in first round or second round were provided in detail. The sample coding scheme and quotations of the respondents related with the key constructs were also provided in the study. In accordance with the coding scheme derived, the answers of the respondents were analyzed word by word and by sentences/quotations in a systematic and consistent way to avoid biases or misjudgements. In case studies, a formal coding procedure helps increase reliability when an agreement is ensured regarding the answers of the respondents (Foerstl et al., 2015).

## **CHAPTER 4**

### **RESULTS**

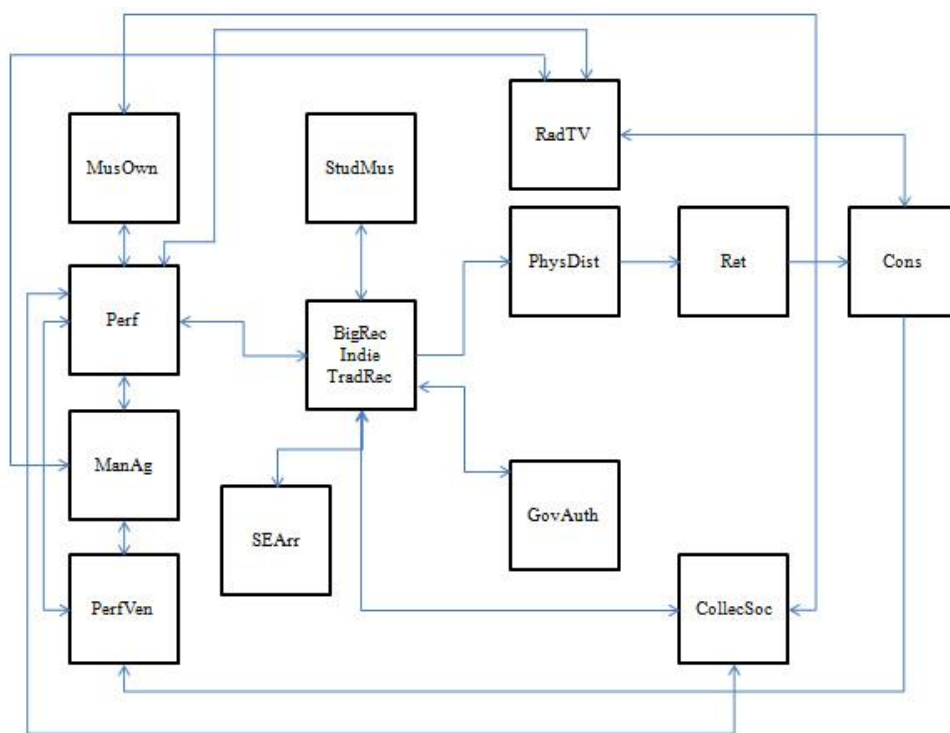
Based on data collected from 23 interviews conducted with the executives of the several main actors in Turkish digital music supply chain, the key findings were derived from the representative statements of the respondents regarding supply chain complexity dimensions and power. Supply chain complexity was examined both in terms of detail complexity (i.e., size, variety and interaction) and dynamic complexity. Additionally, power between actors was also analyzed in relation to complexity.

Below the findings for each variable are reported in each sub-section. First, a summary table with representative quotes, related actors, relevant context and key findings are provided, and then results are elaborated. The results illustrate that while there were similar findings across the respondents, there were also contradictory findings. Possible interactions between the analyzed dimensions and topics and their effects were tried to be investigated as well.

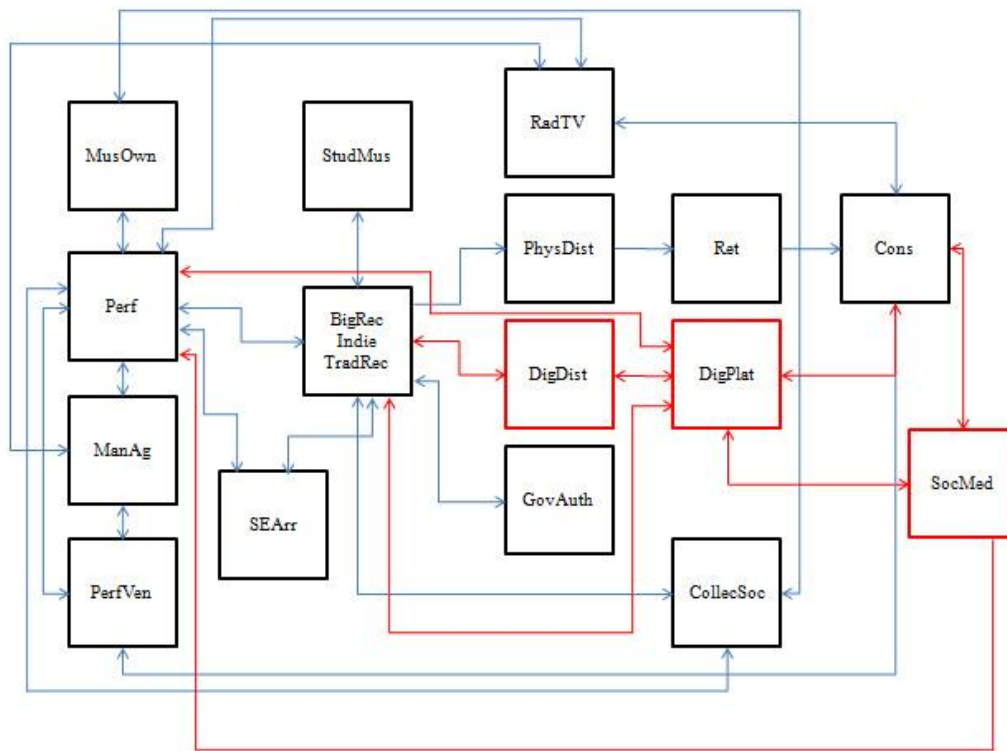
#### **4.1. Size**

To begin with size, one of the main dimensions of detail complexity, Figures 10 and Figure 11 depict the Turkish traditional and digital music supply chains with the main actors and most critical ties between these actors in light of the answers of the respondents with whom the interviews were conducted as well as secondary documents such as relevant websites. The drawings were also confirmed by the respondents with whom the second round of interviews was conducted.

The rectangles were used to portray the main actors in these figures. The lines reflect the flow of information and materials between the actors and the arrows show the direction of the flow between the actors. While the blue lines are for the interaction between the actors who exist both in the traditional and digital music supply chain, the red lines were used to highlight the new interaction formed between the actors by the emergence of new actors who exist only in the digital structure. These new actors are digital distributors, digital platforms and social media and their rectangles are in red color to emphasize their recent entrance to the structure. As it can be seen from the figures, the digital structure is more complex than the traditional one with new ties or interaction channels emerged by new actors.



**Figure 10: Turkish Traditional Music Supply Chain Structure**



**Figure 11: Turkish Digital Music Supply Chain Structure**

The number of actors was mentioned by nearly all of the respondents. There are actors whose number is decreasing and there are actors whose number is increasing. To exemplify, most of the respondents mentioned that there is less need for the actors who function on the physical production side. For instance, there is less need for studio musicians. It was found that this is related with the fact that there is only a small amount of physical production now and the new technology can function instead of studio musicians (CD printing only, even no cassette production). In parallel with that, it was found that the number of physical distributors and retailers are decreasing since the factories are closing. As Respondent 4 says *“There will be no need for old minded people, but there will be need for more creative and skilled personnel.”* Respondent 14 noted that *“There is still CD printing but almost no cassette printing. Employment seems to decrease if we consider declining CD sales”* while Respondent 7 remarked that *“Some firms disappeared in the industry,*

*especially the ones in Unkapanı” and he added that “Lower numbers of people are employed in the industry now.”*

As for the record companies, the general view is that the number of big record companies and traditional record companies decreased while the number of the indies increased. As Respondent 8 confirms “... *there are the indies emerging. ... The number of the majors has decreased after the closure of some of them...*” It was found that this is because the indies are making alternative music targeting the new generation, which is more compatible with the trend of digitalization. The number of big record companies is less than it was before. This is because only the most powerful, bigger ones can survive in this structure. According to the information taken from MÜ-YAP, there are 194 record companies as members of MÜ-YAP in Turkey. In total, there are at least 275 official record companies found in Turkey (“Türkiye Müzik Yapımcıları ve Kayıt Stüdyoları”, 2019).

The competition seems fiercer than before between the big record companies. Most of the respondents think that there is the trend of monopolization or they resemble the structure to an oligopoly given the decreased number of the big record companies. Their survival is associated with their vision and strategic steps taken at the beginning of digitalization. As Respondent 10 says

*The seven big record companies are the most powerful actors in the new music supply chain structure. They are powerful because of their foresight and their strategic movements at the beginning of the digitalization process together with this foresight.*

The decrease in the number of traditional record companies was associated with the fact that they are not adapted well to digitalization. It was found that they lagged behind the times by most of the respondents although these respondents alleged that the traditional record companies managed the adaptation process well. As Respondent 6 signifies that “*The number of traditional music companies decreased.*”

Performers, on the other hand, can be evaluated as two different types. These are popular performers who are known well by majority of the society and unpopular performers who are not known by majority of the society, but limited number of people. The general view is that the number of popular performers is limited, but there is an enormous increase in the number of unpopular performers since digitalization enables even ordinary users to upload their records freely on YouTube. Social media contributes to that increase with open digital communication channels as well. Unpopular performers can publish their work on their social media channels. Considering the performers as individuals or groups, it was found that the number of individual performers increased in total while the performers as groups are not much in number in the digital structure. In that sense, digitalization paves the way for individual work of performers more. Parallel with these, the number of music owners who have a chance to publish their work easily with digitalization increased. Digitalization increases the need for employees with special skills and qualifications with digital production. The need and the number of sound engineers and arrangers increased on the digital side. Respondent 8 states that

*... the number of performers has increased considering all the people putting their work on digital platforms. The number of music owners has increased since they have chance now to introduce themselves and publish their work to the whole country. The number of arrangers, sound engineers etc. also has increased.*

On the consumers' side, since digitalization makes the listening of music more available, easier and cheaper for the consumers, the number of consumers who consume the music via digital channels increased. Respondent 8 notes that *"The number of consumers increased in total considering the increase in the number of consumers who consume the digital music."*

Other than the actors, nearly all of the respondents agreed that the volume of production increased with digitalization. Respondent 7 points out *"On digital platforms, huge volume of work is published in the market with decreased costs."* This is because there is a huge increase in the volume of work produced today. A



huge number of songs are published on the digital platforms every day. Especially on YouTube there are countless uploads coming from official record companies and popular or unpopular performers. The need for hardware devices in production decreased. The production process is now faster, easier, and less costly than it was before thanks to digitalization. The increase in the volume of production means the number of the products in the digital format increased. In this line, the number of the products in the physical format decreased. Therefore, it can be inferred that the scale is increased in production in the digital music supply chain.

While there is an increase in the number of the products on the whole, the number of processes in production decreased. To exemplify, the duration of producing a song is shortened with the decreased number of processes in the digital structure due to the ease and speed that digitalization provides. As Respondent 8 exemplifies *“There is less number of processes. Now, the work that was done in 3 studios can be done in just one studio by the employees specialized in digitalization.”* Time consuming steps are eliminated. Likewise, distribution via the digital distributors and digital platforms is with just one click. Also, the music is sent to the whole world with one click. Distribution area is enlarged including nearly all countries in the world with digitalization.

To sum up, while the number of actors on the digital side is increased, the number of actors on the physical side decreased. It seems that only the actors who can adapt to the requirement of digitalization well can survive in the digital structure and the others go extinct. Moreover, the reason for the increase in the volume of production seems to be the ease, speed, and comfort that digitalization brings, which also leads to a decreased number of processes in critical functions like production and distribution in the digital music supply chain.

Table 10 demonstrates the representative statements of the respondents for size of the music supply chain together with the related actors and context.

**Table 10: Representative Statements of the Respondents for “Size”**

<b>Representative Statements of the Respondents</b>	<b>Actors</b>	<b>Context</b>
"There is no need for hardware devices and employees or musicians who work on the physical side anymore. (R10)	Studio musicians	Employment
"Those who have the paradigm of the past are not employed anymore. Among the employees, only the ones who can transform and renew themselves can survive. On the other hand, a new and young generation is becoming integrated to digitalization." (R12)	Employees	Change in the paradigm of employment
"The number of products has increased considering the production on the digital side. This is because total music production has increased." (R8)	All actors in general	Volume of production
"There is huge volume of works published each day. ... The number of printed products decreased but the number of products in digital form increased much. It is possible to spread digital products easily." (R10)	Record companies especially	Volume of production
"Streaming’s share is increasing and physical sales are declining. We print less CDs now than before because of that." (R4)	All actors in general	Volume of digital and physical sales
"If you take them by number of individuals who make music separately, the number of the performers increased with the increase in population. Yet, the number of groups (as musicians) decreased." (R6)	Performers	Number of performers
"When we think about the performers, there is an observable increase in their number since there is an increase in the use of social media and interactive communication channels where the performers publish their work." (R10)	Performers and social media	Number of performers
"The number of the majors decreased. ... The number of indies increased. The number of traditional music companies decreased." (R6)	Record companies	Number of record companies
"The number of consumers increased in total considering the increase in the number of consumers who consume the digital music. ... there are the indies emerging. ... The number of the majors has decreased together after the closure of some of them..." (R8)	Consumers, indies and big record companies	Number of consumers and record companies
"The number of the sound engineers and the related demand for such kinds of actors increased as well." (R6)	Sound engineers	Number of sound engineers

A summary table (Table 11) for the actors mentioned above is also provided below.

Table 11 depicts the change in the number of the actors.

**Table 11: Summary for the Change in the Number of Actors**

<b>Actors</b>	<b>Change in Number</b>
<b>Studio musicians</b>	Decrease (-)
<b>Physical distributors</b>	Decrease (-)
<b>Retailers</b>	Decrease (-)
<b>Big record companies</b>	Decrease (-)
<b>Indies</b>	Increase (+)
<b>Traditional record companies</b>	Decrease (-)
<b>Performers</b>	Increase (+)
<b>Sound engineers and arrangers</b>	Increase (+)
<b>Consumers</b>	Increase (+)

The key points, therefore, can be highlighted as:

- Increase in the number of actors on the digital side due to the increased availability of digital channels for the actors.
- Decrease in the number of actors on the physical side because of the decrease in the volume of physical production.
- Increase in the volume of production stemming from the huge increase in the volume of production on the digital side.
- Decreased number of processes in critical functions in the supply chain since digitalization eliminates most of them with ease and comfort it brings.

#### **4.2. Variety**

Variety, as another main dimension of the detail complexity, was analyzed considering both the actors and their practices in the digital music supply chain. Diversity of some of the actors was found as geographical, organizational, and cultural. For instance, the record companies except the majors are found geographically diverse. Especially the indies can now be in every province in the

country. Likewise, the traditional record companies function in some specific local areas. However, the big record companies were in İstanbul as before. Respondent 10 says that

*Absolutely, the actors, except the majors, are now more geographically diverse. It is relevant for distribution as well to some extent. In the past, the products were sent only within Turkey and to the people living in Germany. However, they are now distributed to the whole world.*

The performers as well as the consumers are geographically diverse since production and consumption can be done even at home for these actors. The geographical diversification is also valid for the areas of distribution. In the past, the distribution was done within the country mostly. However, the songs are distributed to the whole world within seconds in the digital structure. Regarding organizational differences, it was found that there are some organizational differences between the record companies. However, these are minor differences like different interfaces, substructures, systems, digital technologies used in production. In more detail, mostly their capabilities and approaches differ while the technology they use is somewhat the same. Their main function of production is also the same. The actors are not much different from each other by function on the production side. Function does not differ for the digital distributors either. As Respondent 8 expresses

*Indies are somewhat diversified by genres, sizes, and organizational approaches, but the majors are not much diversified since they all make pop music although their size economically may change. ... Digital distributors are not much diversified by function, again diversified by size economically. They make the same thing by function.*

Further, it was found that there is monopolization just considering the two main digital distributors and one of them dominates the whole industry.

Although the performance venues increased in number, they are not diversified by their function in the digital structure. Respondent 8 asserts that “*Performance venues are not diversified, too. All popular artists give concerts at the same performance venues. Their names change only.*” Likewise, digital platforms replace the function

of the retailers. They only offer two main services which are downloading and streaming. There is also one other service offered by YouTube, which is video watching. Respondent 8 continues by expressing that

*There are now digital platforms instead of retailers, but this is not a big change. You cannot diversify them by function much. There is only the classification of streaming and downloading or the classification of music streaming or video streaming.*

There is variety in the size of the actors. As for the record companies, if we take them as separate groups of producers, the majors, indies and traditional record companies are diverse in size. The diversification of the big record companies by size is more material than the diversification of the indies by size. There are multiple big record companies in different sizes while the indies are in similar size to a large extent. Respondent 6 says that *“As indies, we are dependent on the majors. We are also diverse in size, but that diversification does not matter much. ... The majors are diverse in size.”* In a similar way, digital distributors and digital platforms are diverse in size. The diversification of the actors by their size stems from the resources they have.

Performers, music owners, and consumers were found to be diverse due to the proliferation with digitalization. Different genres they prefer matters here. Respondent 17 touches upon that issue by saying that *“Turkish music is really one of a kind (distinctive). There are different genres in different regions in the country. There is not a common music.”* Digitalization enables the emergence of alternative genres like electronic music and rap music, which then increases diversifies the musicians or some other actors like sound engineers interested in digital music. Especially the indies are diversified by the genre of music they produce since they make alternative music, while the big record companies are not much diversified by genres as they usually make popular music.

Given the cultural variety, most of the actors were found culturally diverse. Different genres of the actors make them culturally different as well. These differences are especially valid for the music owners, performers, record companies, and consumers. However, it was found that digitalization enforces a common culture for all actors in the digital structure, which is the popular culture. Respondent 6 states that *“There are cultural differences, of course. However, these cultural differences are decreasing and the tendency is through one dominant culture. This is popular culture.”* Therefore, cultural differences are in a decreasing trend now with digitalization. In line with that, different genres together with increased number and variety of the performers explain the variety in the products in the digital structure. Interestingly, the consumers may also function like the producers or the performers at the same time in the digital structure due to production opportunities of digitalization. Musicians can increase the variety of the product by forming and producing in hybrid (mixed) genres. As Respondent 6 says *“Products are more diverse now. Some consumers are also the musicians and musicians have started to form hybrid music genres.”* Another type of variety regarding the products is about the format since both the products in the physical format and products in the digital format still exist. In case of the processes, it was found that the decrease in the number of processes contributes to the decrease in their variety as they become simpler and easier than before. Digitalization paves the way for simplification of the processes in this manner.

Furthermore, most of the respondents consider that there is not a focal firm which can be considered like a hub in the digital structure. Respondent 8 alleges that *“... there is no focal firm in this structure I think. There is no focal firm in the world, either.”* This reflects the unbundling of this new structure compared to the one in before, which can be taken another sign of variety.

To conclude, in accordance with the answers of the respondents it was found that the actors are diverse organizationally, geographically, and culturally in the digital music supply chain in Turkey. While the organizational differences are not substantial,

geographical and cultural differences are more evident. What is more, the diversity of the actors with size which stems from the resources they have determines the power balances between them. In addition, the actors are not varied by their function much. In that sense, it is inferred that the actors in the digital structure simply replaced the functions of the old actors in the past structure.

Table 12 demonstrates the representative statements of the respondents for variety together with the related actors and context respectively.

**Table 12: Representative Statements of the Respondents for “Variety”**

Representative Statements of the Respondents	Actors	Context
"The processes are now simpler, not diverse much. There is simplification. In the example that I have given before, color correction job was more diversified with different steps or processes in it. Now, it is easier and simpler." (R8)	All actors in general (especially record companies)	Diversity in processes
"Still, both the physical and digital format of the songs exist in the industry." (R10)	All actors in general	Diversity in products
"These models may be based on subscription (Spotify, Apple Music), advertising (some of the services of Spotify and Deezer), and video watching (YouTube and VEVO)." (R14)	Consumers and digital platforms	Variety in the services offered
"I think there is not much diversification regarding capabilities, technologies and practices of the record companies. The background of the production is similar and it is even getting more similar." (R6)	Record companies	Organizational differences
"In fact, the work done, studios or the tools in the production are the same for us. However, the approaches are different. In that sense, capabilities and practices are diverse." (R8)	Record companies	Diversification by approach
"Different interfaces, substructures, systems, digital technologies may be used by production companies." (R10)	Record companies	Diversity in technical resources
"Specific channels exist for different music genres and you can target your consumers specifically." (R7)	Digital platforms and consumers	Diversity in digital channels

**Table 12: ( continued )**

<p>"There is both increase and decrease. For instance, consumers are more diverse now, but on the digital side there is the trend of monopoly. DigDist1, as the most powerful actor, dominates the sector." (R10)</p>	<p>Consumers and new digital actors</p>	<p>Diversity of the actors</p>
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Key findings to be discoursed are:

- Organizational differences between the actors are not substantive.
- Geographic and cultural differences between the actors are evident.
- Diversification concerning the genre of music is more evident for the indies.
- Diversification by size is much more material for the big record companies.
- Record companies, digital distributors as well as performance venues are not varied by their function.
- Products are diversified while processes are less diversified.

Overall, while organizational differences are not material for the actors in general, geographic and cultural differences between them are material. For instance, the indies are diversified by the genre of music they produce or their music culture. Diversification by size is more likely for the big record companies. As for the products/processes, the increase in the volume of production on the digital side contributes to the diversification in products while the ease and speed of digitalization make the processes less diversified. Further, the function of the record companies, digital distributors, and performance venues are not diversified.

### **4.3. Interaction between Actors**

The main source of interaction in the digital music supply chain structure was found to be based on sharing of information and materials between the actors. Since the products are in digital formats, sharing of information and materials is done digitally. As Respondent 10 states *"The revenue is shared between the production companies,*



*digital distributors and the digital platforms and it is based on the information of sale numbers.*” Taking into account both materials (products mainly) and information sharing between these main actors, the interaction between them is critical. All of the respondents agreed that the duration for producing a song was shortened with the ease and speed of digitalization. Respondent 6 exemplifies the situation by saying that *“For instance, a song of a performer can be put on Spotify the next day or tomorrow.”* Digitalization made sharing of information and materials faster, which then fosters an environment where communication, trust and network develop. In that sense, most of the respondents mentioned about the effectiveness of networks in the current digital supply chain.

The actors that were also present in the past structure have now increased relationship channels with the other actors in the chain. New actors also have more than two channels since the relationships are not based on the linear flow of information and materials and there is more independency with increased alternatives for the actors. From this standpoint, Respondent 3 says that *“... the freedom options are much more and because of that reason I consider that the structure is less integrated when it is compared to the past.”* Therefore, the frequency and type of the relationships are affected by the changing nature of the relationships in the digital music supply chain.

#### **4.3.1. Intensity of Interaction**

All of the respondents were likeminded regarding high intensity of the interaction between the actors in the new structure. Increased frequency of interactions is an indicator for that. This increased frequency can be thought as increased number of transactions as well other than just the sharing of information. The main reason for the increased frequency of interaction was found as the increased volume of production in the new structure. Since YouTube is a free platform open to public, it enables huge numbers of uploading by further increasing the volume of production

every day. Respondent 10 says that *“When we see the general picture, in each day a great number of songs are published via netd on YouTube by various production companies and performers as we know.”* The increase in the number of performers and producers also triggers this much. Similarly, Respondent 8 says that

*Since now there exists easiness and speed in the digital world, the intensity of the relationships is denser than ever. Highly frequent transactions occur between the actors. ... Producing and publishing a song takes three or four days. That is why the volume of production increased.*

Respectively, Respondent 6 says that

*There are too many works put on the digital platforms. Huge number of unemployed people is dealing with digitalization. This increased volume is the reason of the intensity of the relationships.”*

In sum, the ease and speed that digitalization brings increases the volume of production, which is then reflected as the increased frequency of the relationships or the increased frequency of the relationships increased the volume of production further. There is a two-way positive relationship between the volume of production and frequency of relationships.

As a result, it is clear that each day a great number of products are published on the digital platforms and the revenue is shared between the related actors, which entails the highly frequent relationships between these main actors in the digital music supply chain based on sharing of information and materials. This stems from the fact that producing a song in the digital structure takes a few days only for the official record companies now and the transaction costs decreased thanks to digitalization. Sharing of information and materials is easier than ever in such a structure. Though it was found that the intensity of the relationships between some actors like radio and TV channels are not much dense now compared to the past as Respondent 6 says *“Even today there is less interaction with the radio and TV channels.”*, in the whole picture the intensity of the relationships are denser than before together with digitalization.

### **4.3.2. Type of Interaction**

The changing nature of the relationships with increase in the frequency of interaction between the actors affects the type of interaction between the actors in the digital music supply chain. According to the answers taken from the respondents, two main types of relationships exist between the actors in the digital structure. These are cooperative and competitive relationships respectively. However, these two types can be observed at the same time as well.

#### **4.3.2.1. Cooperation**

The most outstanding cooperative relationship was found between the big record companies and indies. This cooperative relationship is based on the partnership between these parties where the majors or the big record companies function like an intermediary between the indies and the digital distributors. Indies pay commission to the big record companies and the big record companies transport the work of the indies to the digital distributors. They help indies in their promotion and marketing activities. The revenue generated at the end is shared in accordance with predetermined percentages or rules. Most of the indies were found to act like that. There exists a need for that type of a cooperative relationship since the indies are less powerful than the big record companies and they need support. Respondent 8 (as an indie) mentions that *“I have an arrangement with one of the big record companies and I benefit from that arrangement or collaboration.”* However, it was found that there were not much cooperative relationships between the indies and big record companies in the past. Today’s cooperation shows that the big record companies are more powerful than the indies than they were before. This partnership was found to be valid for the traditional record companies as well. They also work in partnership with some big record companies. Some of the respondents mentioned that these cooperative relationship stem from an obligation, which indicates that they are not

based on a real cooperation. Respondent 10 states that *“The minor producers have to be in cooperation with the majors...”* Similarly, Respondent 6 notes that *“... as the indies, we have to work with the majors and the digital distributors since the majors have agreements with the digital distributors mainly.”*

Obligatory partnerships were also found to be between the record companies, digital distributors, and digital platforms since they share the revenue based on the agreements in their partnership. The big record companies need the digital distributors in the sense that they cannot aggregate the information coming from the digital platforms otherwise. Respondent 15 talks about the main distribution strategy in the digital structure and he says that *“The dominant one is the one which is from the record company to the digital distributor and from the digital distributor to the digital platforms.”* Big record companies’ cooperative type of relationships is not limited to the main actors only. They outsource some of their jobs to the third parties outside and they cooperate with those parties. Respondent 6 says that *“... These triadic relationships may stem from outsourcing relationships of the big record companies with other outside actors. More than two actors are involved in these kinds of relationships.”*

Other cooperative relationships were found to be between the performers. The performers from different record companies are in collaboration with each other especially via social media now, contrary to the situation in the past. Musicians have a social network where they communicate with each other now. They generate social benefits there and they can even conduct joint projects together. Respondent 8 states that *“The performers have connections (communication) via social media. There is a network for them as well. By that way, they generate social benefits. They do joint projects.”*

Hence, whether stemming from an obligation or not, there are certain type of cooperative relationships between some main actors in the digital music supply chain to make works easier. Digitalization seems to entail cooperation for certain main

actors in the chain while cooperation may also be based on the aim of utilizing more benefits.

#### 4.3.2.2. Competition

Competition was found to be in relation with power. As most of the respondents expressed, a power balance is necessary between the related actors for the existence of competition. The main competition affecting the others indirectly at the same time was found to be between the big actors. There is a competition between the big record companies while the competition of the indies with the big record companies is really difficult since they are not very powerful. As Respondent 10 said *“Some types of relationships are competitive. For instance, the competition between the majors is continuing, but as I have mentioned before, the indies cannot compete with the majors.”* As for the digital distributors, some of the respondents said that there is a competition between them (especially between the two main ones) while the others thought that one of the main digital distributors is dominant over the other since it is owned by one of the big global record companies. Respondent 6 states that *“On the digital distributors’ side, Believe cannot compete with The Orchard now since it is less powerful.”* Respondent 10, on the other hand, talks about the digital distributors by saying that they do not need to compete since the system is settled well now, but at the beginning of digitalization they were competing more fiercely with each other. Thus, there were contradictory answers regarding the competition between the digital distributors.

Decrease in revenues compared to the past was found to be the main reason for competition. According to some respondents, competition was found to lead to the big record companies’ acting opportunistically to gain competitive advantage, which caused uncertainties in the structure. Some other respondents, on the other hand, do not think that there are opportunistic acts on the digital side since everything is clear.

Respondent 8 states that *“Yes, there exists opportunism. ... However, on the digital side, I do not observe much opportunism.”* Respondent 10 thinks in the opposite way by saying that *“Competition of the big record companies may also force them to behave opportunistically.”* What is more, the competition is also observed regarding the advertisements given by the record companies on social media. They even need to receive training about how to give advertisements on social media. Respondent 6 said that social media platforms educate the record companies about how to make advertisements. He continued *“There is competition in this field. The money paid is going abroad.”*

Nevertheless, the competition on the whole was not found to be as fierce as it was before. For instance, Respondent 8 says that *“In the past, for example, all producers were competing for Ümit Besen. Now, I do not remember such kind of a competition within the last five years. I think that kind of competition has ended.”*

As for both competitive and cooperative type of relationships, the relationships between the record companies (between same types of record companies) and performers can be evaluated in this context. Although the record companies as well as performers are in competition with each other within their groups, they sometimes come together for joint projects in the digital structure. Hence, there is cooptition (both cooperation and competition) regarding these actors. As Respondent 8 mentioned, the musicians do joint projects by coming together with other musicians and these joint projects are held by the cooperation of their record companies (the big record companies especially).

Therefore, competition may exist for the actors who are balanced in power in the digital music supply chain. Nevertheless, there are contradictory answers from the respondents whether competition is completely eliminated with digitalization or not.

Table 13 illustrates the types of the relationships between the actors in line with the answers of the respondents respectively.

**Table 13: Interaction Type of the Actors**

<b>Interaction Type</b>	<b>Actors</b>
<b>Cooperation</b>	Big record companies & indies
	Big record companies & traditional record companies
	Record companies & digital distributors & digital platforms
	Between performers
	Big record companies & third parties outside (outsourcing)
<b>Competition</b>	Between the big record companies
	Between the digital distributors
<b>Competition and Cooperation</b>	Between record companies (and their performers)

Table 14 demonstrates the representative statements of the respondents for interaction. It also demonstrates the related actors and context in association with interaction.

**Table 14: Representative Statements of the Respondents for “Interaction”**

<b>Representative Statements of the Respondents</b>	<b>Actors</b>	<b>Context</b>
"The frequency of transactions is really high. When we see the whole picture, each day a great number of songs are published via netd on YouTube by various production companies and performers as we know." (R10)	Record companies, digital platforms and performers	Intensity of the relationships
"As I have said, the collaboration of the majors and the indies is an example. In the past, the big record companies did not collaborate with us, but now we can say that there is a need for collaboration." (R8)	Big record companies and indies	Collaboration

**Table 14: ( continued )**

"Some types of relationships are cooperative. The partnerships between the majors and the indies is an example. The majors work like the intermediaries between us and the digital distributors. ... Sometimes production firms collaborate to make mixed albums with different performers." (R10)	Big record companies, indies and digital distributors	Cooperation
"... as the indies, we have to work with the majors and the digital distributors since mainly the majors have agreements with the digital distributors." (R6)	Indies, digital distributors, big record companies	Agreement between indies, big record companies and digital distributors
"Some types of relationships are competitive. For instance, the competition between the majors is continuing, but as I have mentioned before, the indies cannot compete with the majors." (R10)	Big record companies and indies	Competition between record companies
"I think that the relationships are more competitive in this new structure now. Decrease in revenues forces this competition." (R6)	All actors in general	Reason for competition
"Yes, there is opportunism. ... However, on the digital side, I do not observe much opportunism." (R8)	All actors in general	Opportunity in competition
"Considering the dependency of the relationships, the structure is integrated but there are alternative channels evolving as time passes." (R7)	All actors in general	Integration
"... all of this process turns into a social network (advertisement/promotion network) growing increasingly, which is formed by the listeners." (R15)	Consumers especially and all other actors	Social networks
"Sharing of information and materials in this production process is really fast. In this way, communication, trust, and the formation of network developed." (R8)	Record companies	Network formation

All in all, the key points to take notice about interaction are:

- Sharing of information and materials is easy and fast thanks to digitalization, which increases the frequency of the relationships between the actors.
- Due to the increase in the volume of production, the frequency of the relationships between the actors increases and vice a versa.
- Intensity of the relationships is denser than before in the digital structure though the relationships between the physical actors have lessened.



- Cooperative relationships may stem from an obligation between the big record companies and indies as well as between the record companies, digital distributors, and digital platforms.
- The most likely collaboration is between the big record companies and indies because the indies need the expert power of the big record companies and the big record companies gain financially from that collaboration, which then becomes a win-win type of relationship for both sides.
- Power balance between the actors is necessary for the existence of competition and the intensity of the competition between the actors is less than it was before.
- The relationships between the big record companies as well as performers are both cooperative and competitive since digitalization makes it easy for them to come together for joint projects.

#### 4.4. Dynamic Complexity

The uncertainties analyzed in the structure were evaluated as the sources of the dynamic complexity in the study. Some of these uncertainties were found to be related with specific actors while the others were relevant for all actors in the structure on the whole. There were views that digitalization decreases uncertainties in general since it makes the things clear-cut in information and materials sharing. However, this was valid when the visibility is ensured for the related actors. Whenever there are problems with visibility, the uncertainties are inevitable. For instance, Respondent 8 said that *“I think there is not much uncertainty regarding the processes. They are somewhat automatic. Especially the sharing of revenues is easy and visible now.”*

The biggest actor-specific uncertainty was about the lack of transparency of the collecting societies in the distribution of the royalties collected. Besides, a guerilla-

type formation where the big record companies and collecting societies share the revenue generated unfairly with the other big actors were also mentioned by most of the actors. In this respect, Respondent 10 says that *“There is uncertainty stemming from invisibility in the sharing of revenues and royalties. ... The effects of uncertainties in royalties are material.”* Parallel to that, Respondent 6 says that *“... uncertainty does not exist for the actors with super power. They have capital and arrangements with the main digital actors to make their work sell.”* It can be inferred that the big actors’ abusing their power causes uncertainties for the other actors in the chain, which harms the proper operation of the digital supply chain in the aggregate level.

Nevertheless, nearly half of the actors think that there is visibility in the digital music supply chain structure and there is not much uncertainty as a result of this. Respondent 8 says that *“Some processes are certain in the digital system. Digitalization did not cause a big increase in uncertainty in general at the end.”*

As for the record companies and performers, forecasting the demand and sales are critical issues causing uncertainties for them. Whether the song will be popular or not is an issue for both the record companies and performers. Respondent 10 says that *“It is not easy to predict the customer demand. It is volatile.”* However, they think that this uncertainty was not a new one. Respondent 8 says that *“Whether the songs will be popular or not is the major uncertainty regarding products in the chain. This uncertainty was relevant in the past though.”* He thinks that digitalization did not change the uncertainty level on the whole in fact by saying that *“There are uncertainties. However, I think the uncertainty level is the same with the one in the past.”*

What digitalization adds to uncertainty is the fact that too much work is produced and there is not a standard pricing procedure in the transformation of the product from the record companies to the digital platforms. Different pricing may be imposed by the digital distributors or the big record companies. As Respondent 6 say *“There*

*is too much uncertainty because too much work is produced now. ... There is not a standardized pricing procedure in the transformation of products from production companies to the partners and digital platforms.”*

There are short-term fashions or trends on social media affecting the sales in the digital music industry. As Respondent 10 says

*Sometimes, some slogans, fashions, or events pop up in social media spontaneously and these slogans, tags, or events are used in the music industry economically as well. Some work is produced in relation to these spontaneous changes in trends in social media affecting the sales.*

Also, the number of actors changes fast. As Respondent 8 says *“The number of actors is always changing. This may increase or decrease. It is volatile.”* These sudden or fast movements in the digital world may be the cause of changing demand of the consumers as well as their fast consumption of the music and decreased sustainability at the end becomes inevitable. Respondent 9 says in this manner that *“Now the young people listen to the music for just twenty seconds and then switch to another song. Because of this, the structures of the song and video clips have changed in this short-run minded way.”*

Eventually, nearly all of the respondents agree that there are uncertainties on the side of the collecting societies. They are not working properly. There are concerns about unfair gains earned by the big actors. There is lack of visibility in sharing of the revenues and royalties. That is why there is the need for the governmental authorities to exert their legal legitimate power by taking the necessary legal steps and making the arrangements regarding the collecting societies. As Respondent 16 says *“There should be control mechanisms. Necessary legal steps should be taken.”* However, there are conflicting views that whether the structure is visible or not on the whole regardless of the collecting societies. Some of the actors support the view that there is visibility for all of the actors while the others support the view that there is visibility for the big actors only since they abuse their power by causing invisibility for the others deliberately.

Other than these, though the forecasting issues were problematic in the past. The volatile structure of the digital supply chain provokes other uncertainties when taking into account the spontaneous movements occurring, which then affect the behavior of the actors by forcing them to act in the short-term or short span of time.

Table 15 demonstrates the representative statements of the respondents for the dynamic complexity in the structure together with the related actors and context.

**Table 15: Representative Statements of the Respondents for “Dynamic Complexity”**

<b>Representative Statements of the Respondents</b>	<b>Actors</b>	<b>Context</b>
"These uncertainties are for the producers and the performers mostly since it is not known before that the song and the performer will be popular or not." (R10)	Record companies and performers	Popularity of the product and performer
"As for the products, whether the song will be popular or not is an uncertainty." (R6)	Record companies especially	Popularity of the product
"There is too much uncertainty because huge volume of work is produced now." (R6)	All actors in general	Volume of production
"There are uncertainties. However, I think the uncertainty level is the same with the one in the past. ... Some processes are certain in the digital system. Digitalization did not cause a big increase in uncertainty level in the end." (R8)	All actors in general	Digitalization, processes and uncertainty level
"Unfair competition and transparency are still the concerns. ... so the complexity stems from complex and non-visible relationships in the chain." (R7)	All actors in general	Unfairness and invisibility
"What is more, we could not see the details of the income that we get from the digital platforms like fizy, iTunes, netd etc. because the income comes to us as total in number from the digital platforms. There is no transparency." (R10)	Digital platforms and indies	Invisibility
"... there is a market which is totally illegal and function with the legal market at the same time This illegal market exploits the revenues of all actors by destroying the developments of the market." (R14)	All actors in general	Piracy

**Table 15: ( continued )**

<p>"Copying is really easy and people may publish songs without the consent of the music owners by ignoring the quality concerns, which decreases the value of the music and causes unfair gains." (R13)</p>	<p>All actors in general</p>	<p>Copying</p>
<p>"Even though YouTube allows the sale of the number of clicks, the promotion benefits will be just in the short-run because these are artificial numbers." (R9)</p>	<p>Digital platforms</p>	<p>Fraud</p>
<p>"Some buying options to increase the number of viewers on YouTube are also possible to promote the artist, which is not deemed as ethical." (R10)</p>	<p>Digital platforms, record companies and performers</p>	<p>Fraud</p>

Thus, the key points regarding the dynamic complexity are:

- There are uncertainties and concerns about the invisibility and unfairness in sharing of the revenue between the actors and distribution of royalties by the collecting societies.
- There is a lack of necessary legal steps taken by the governmental authorities against the invisible and unfair sharing of the revenues and royalties.
- If visibility is ensured, there is no uncertainty between the actors in the digital structure regardless of the collecting societies.
- There is the risk that the big actors may use their power in their favor by hiding critical information from the other actors or they may act opportunistically, which restrains the visibility in the structure.
- There are speculations of fraud on YouTube regarding the number of clicks.
- The digital structure is volatile or open to sudden changes stemming from the changes in demand of the consumers and changing trends spread on social media, which then harm sustainability.

## 4.5. Power

Power in the digital music supply chain was found to be the result of the resources the actors have, especially the revenues they have, which then also specifies other types of resources for them such as having a large network. The results illustrate that power is an important concept that needs to be evaluated in relation to the three dimensions of the detail complexity as well as the dynamic complexity. The direct effect of power dynamics is on the dependencies between the actors shaping the relationships. However, the dependencies were found to be dissolved more with digitalization being embraced as time passes. Respondent 6 says that “*It seems that there are dependencies between the actors, but these dependencies are becoming dissolved more and more each day.*” As the main reason for the disintegration, he alleges the freedom of people to make their own music individually without concerns of social benefits.

In light of the answers given by the respondents, it was observed that the power of some actors who existed in the past structure changed with the emergence of new actors in the digital structure. It can be said that the power dynamics changed with increased freedom of the actors and they are still open to change since there is dynamism in the structure.

### 4.5.1. Power Balance

Taking into account the dynamics of power in the digital music supply chain, there were contradictory answers regarding whether the power is held by the big actors only or it was shared by all actors to some extent. The respondents who supported the view that the power is held by the big actors consider that the trend is toward a monopolistic structure with limited number of players with super power. Some of them liken this structure to an oligopoly. Respondent 6 says that “... *the most*

*powerful actors are the ones that dominate the industry with their super power.*” He adds that *“It seems that just one big major will remain with its super power.”* Most of the respondents thought that the big record companies, two main digital distributors, and digital platforms were the most powerful actors in the digital music supply chain governing the structure. Respondent 5 as one of the big record companies admitted that *“... we have control over them as big record companies together with digital distributors.”* The reasons for their dominance were their having capital, networks, and expertise. A large network makes things done easier for these actors. The big record companies were found to use their network power for publishing and promotion activities. As Respondent 8 says *“The big producers’ network is large and their network in terms of distribution channels is large and they get most of the revenue in the industry.”* Yet, power imbalances cause a structure where the big actors abuse their power to behave opportunistically. Respondent 10 says *“... in royalty distribution big majors behave opportunistically, abusing their power stemming from network relationships.”*

Being the founders of the digital platforms and taking necessary strategic actions at the beginning of the digitalization process in Turkey (for the big record companies) were some specific reasons as the sources of the big actors’ power mentioned by the respondents in the detailed interviews conducted later. According to this view, power is imbalanced. From the record companies’ point of view, since the indies and traditional record companies cannot compete with the big record companies, power is in the hands of the big record companies. Discrepancies in revenues or the variety of the actors by size causes a power imbalance between them. As Respondent 10 says *“The power asymmetry is huge, stemming from the discrepancies in revenues.”* The differences in the power of the actors make them diverse geographically, organizationally and culturally. In this respect, power imbalance gives rise to variety between the actors.

Contrary to this view, the opposing view about power was it being balanced somewhat. Power was found balanced within the record companies, digital

distributors, and performers. Some of the respondents think that the competition between the big record companies is the result of the power balance between them.

As Respondent 10 says

*... there is a competition among the majors. For the existence of competition, there should be power balance or somewhat equality I think.*”, and adds that *“Another example may be the indies in similar power in the consortium of netd considering their quality and sales figures.*

He continues by giving the example of the two main digital distributors: *“... Orchard and Believe can be evaluated as the digital distributors that have similar power.”*

Respondent 6 touches upon the indies by saying that *“Yes, there are power symmetries. Most of the indies have similar power. This is because of their similarity in their scale and capabilities.”* Moreover, it was found that the performers are in power balance if they have similarities regarding their popularity. In short, the resources possessed by these actors (whether tangible or intangible) within their group determine the power balances between. Respondent 10 addresses power symmetry by saying that *“It may be between the performers in terms of their popularity.”*

On the other side, power was found balanced or in a decreasing trend of imbalance between different main actors. Record companies’ power decreases while the performers’ power increases. As Respondent 8 says *“... the producers and the performers have the same power. This is because they have reciprocal relationships and they need each other at the same level.”* He supports his view by saying that *“The power of the majors decreased. For instance, without a need for any record company, a performer can put his/her work on the digital platforms by making arrangements with the digital distributors.”* Digitalization gives more freedom to the actors and they have chance to act independently. This is valid for all actors due to increased alternative channels that digitalization offers for each actor in the chain.

In brief, since most of the actors talked about the governance power of the big actors (big record companies, digital distributors, digital platforms, and collecting



societies), there is power imbalance considering the controlling mechanism in the digital structure. However, most of the actors agreed that digitalization increases alternative channels for each actor, which leads to their acting independently in their work. This means more freedom and the interdependencies of the actors are decreasing in a parallel way. Therefore, power is getting balanced more between different actors with digitalization. Furthermore, there may also be power balances within certain actor groups in the digital structure. The table below illustrates the balance of power between the actors.

**Table 16: Balance of Power between the Actors**

<b>Balance of Power</b>	<b>Actors</b>
<b>Power asymmetry</b>	Big record companies together with two main digital distributors and digital platforms > other actors
	Big record companies > indies
	Big record companies > traditional record companies
<b>Power symmetry</b>	Between big record companies (=)
	Between indies (=)
	Between traditional record companies (=)
	Between digital distributors (=)
	Between performers (=)
	Performers = record companies

#### 4.5.2. Power Type

Different power types of the actors classified as mediated and non-mediated were found to be existent in the Turkish digital music supply chain structure.

The resources as well as capabilities that the actors have determine the power type that they have.

#### 4.5.2.1. Reward Power

Most of the respondents think that the big record companies have reward power. Their reward power is based on their having valuable resources, especially the capital, popularity, and network power. They usually exert their reward power on other record companies (by giving some incentives to the indies and traditional record companies) with whom they have binding partnerships.

As Respondent 10 says *“They may offer some benefits to the indies who are their partners. For example, they may use their reward power on the indies by offering various promotion options with the help of their relationships in their network.”* In a similar way, Respondent 6 says *“The majors, the record companies in İstanbul, have such kind of power. This stems from their network power or you can call it old boys’ network.”*

Financial power, network power, and popularity lead to the big record companies’ superiority over the others by offering some rewards for the others in the digital structure. Respondent 17 suggests the record companies being involved in servitization services together with the digital platforms where the services are offered with products so that they exert reward power more by saying that *“... streaming based servitization proposals for the consumers and a system in which the record companies are involved will be more rewarding for servitization activities in terms of capturing the real value from the customers.”*

#### 4.5.2.2. Coercive Power

As another type of non-mediated power, coercive power was found to be possessed by the big record companies and indies. Respondent 6 says that *“The big record companies may give incentives and pave the way for opportunities or they may*

*impose sanctions based on their network power.*” It is understood that network power can be used as the source of reward power as well as coercive power by the big record companies. Along similar lines, Respondent 10 says that

*In the netd consortium, for instance, if I do not want another indie in this consortium since we are in conflict, my major partner may dismiss this indie by using its coercive power.*

Hence, the main reason was found as the old boys’ network of the record companies who exert coercive power on the others. Indies may get help from the big record companies or they may collaborate with their partner big record company to exert this kind of power in the digital structure. As it is reflected by an indie (Respondent 9) *“Sometimes because of the small and binding network you are involved in you are not allowed to do business with other parties but a large social network, on the other hand, makes continue and promote your work easier.”*

#### **4.5.2.3. Legal Legitimate Power**

Legallegitimate power was found to be possessed by the powerful actors who have binding legal contracts with other parties. The major or minor record firms were found to have legal legitimate power. The record firms have legal contracts with the digital distributors as well. In the case of the relationship between the record companies and digital distributors, the two main digital distributors may exert legal legitimate power on the record companies if the contracts are binding for the record companies. This is because the record companies cannot change their digital distributors whenever they want. They should obey the conditions or the duration given in the contract. In a similar vein, a contract between any kind of record company and a performer may be binding for the performer making him/her dependent to the record company for a specific period of time. The partnerships between the big record companies and the others (the indies and traditional record

companies) are based on legal agreements. That is why it was also found that the big record companies exert legal legitimate power on the other minor record companies.

Respondent 8 says

*Minor or major record firms may exert this power if they make contracts because the contracts are binding.*”, and Respondent 10 says “... *digital distributors have legal power on the production companies (the majors or indies) since their relationship is restricted by legal contracts or agreements about the sharing of the revenue.*”

Despite the fact that there are less number of long-term binding contracts between the actors in the digital structure, contracts are still binding to some extent for the relationships between certain type of actors and this enables the powerful party’s exerting legal legitimate power on the other in that sense. Respondent 10 refers to this by saying that “*There is lack of long-term contracts between the performers and the production companies.*”

Finally, the governmental authorities were found to be the main legal authority exerting legal legitimate power on the actors by making the legal regulation in the music industry though there are missing steps taken by them now and there are inefficiencies in the implementation of the acts in the digital structure as mentioned by most of the respondents. Collecting societies also exert legal legitimate power on the related actors like the record companies, performers, and music owners based on the regulations they have. Respondent 14 says

*It is necessary, on the other hand, to use the lobbying power of collecting societies well to overcome legal problems. At this point, it is important to forward the suggestions to the legal authorities to meet the needs of the new era.*

#### 4.5.2.4. Expert Power

Expert power as one of the non-mediated power types was found to be possessed by the big record companies. Other than the big record companies, the big global actors who produce the technology and who are the founders of the main digital actors like the digital platforms and digital distributors were also found to have such kind of power. The sources of this power stem from their being the pioneers or leaders at the beginning of the digitalization process. Respondent 10 says that *“Their having foresight and taking strategic steps at the beginning of the digitalization process made them experts.”* regarding the big record companies. Given the producers of the technology, Respondent 6 adds that *“I think these actors are the ones who produce the technology. The owners of digital platforms and digital distributors like Sony have such kind of power.”* Specifically, it was found that the executives or the managers of the big record companies have expert power when their companies have expert power. As Respondent 8 says *“Some executives of some record companies may have expert power. ... This is because of their having capital. This also brings media power to them.”*

Thus, the actors who are the first ones or the pioneers in the digitalization process now enjoy their expert power over the others with the capital and experience they gain over time.

#### 4.5.2.5. Referent Power

Referent power as yet another type of non-mediated power was found to be possessed by the performers. This is because they are admired by most of the actors in the supply chain for their abilities, expertise, values, or by their popularity. Most of the actors are struggling to work with them for that reason. Respondent 10 says *“Every production company has respect for these kinds of performers based on their*

*expertise and qualifications in music and wants to work with them.”, and Respondent 8 says “Some performers have such power with their talent and abilities. This is because of their special and valuable properties as well as popularity.”*

Considering these, the performers’ most important power source was found as their being admired and respected by the others, which means their being the one and only type of actor as having referent power in the digital music supply chain structure.

Table 17 demonstrates the representative statements of the respondents for power together with the related actors and context respectively.

**Table 17: Representative Statements of the Respondents for “Power”**

Representative Statements of the Respondents	Actors	Context
"The reason is that they keep the dominance by either their capital, network, and expertise or they are the founders of these platforms." (R6)	Big actors	Sources of power
"The music sector in Turkey is governed by these seven major production companies." (R10)	Big record companies and all actors in general	Governance
"There are commissions taken by the big actors and since they administer the market, they exploit the income generated in their favor." (R11)	Big actors	Governance
"The power of the majors decreased. ... The power is less imbalanced now." (R8)	Big record companies	Power dynamics
"... the severity of the record companies’ exploitation of the artists lessened." (R9)	Record companies and performers	Exploitation
"Now there is more freedom and the actors became more independent than they were before. The power of the majors decreased." (R8)	Big record companies and all actors in general	Freedom
<b>Expert power:</b> "They need us since we have more equipment and infrastructure than them." (the big record companies' power over the indies) (R5)	Big record companies and indies	Resources

**Table 17: ( continued )**

<p><b>Coercive power:</b> "There is a need for increased transparency in the sector, but we do not think that MÜ-YAP or other officials will permit the formation of such a corporation." (R12) (need for a corporation like IFPI)</p>	<p>Collecting societies</p>	<p>Permission</p>
<p><b>Reward power:</b> "... streaming-based servitization offerings for the consumers and a system in which the record companies are involved will be more rewarding for servitization activities to capture the real value from the customers." (R13)</p>	<p>Record companies and digital platforms</p>	<p>Offerings</p>
<p><b>Legal legitimate power:</b> "This corruptive structure should be regulated with the legislation and necessary arrangements by the government. There should be a control mechanism." (R9)</p>	<p>Governmental authorities</p>	<p>Control</p>
<p><b>Referent power:</b> "There are actors like that. Some performers have such power due to their talent and abilities. This is because of their special and valuable properties as well as popularity." (R8)</p>	<p>Performers</p>	<p>Sources of power</p>

To conclude, the key findings about power can be summarized as:

- Power dynamics between the actors is evolving into a more balanced situation with an increased freedom that comes with digitalization.
- Although there is power imbalance between the actors in favor of the big actors, increased alternative channels and increased independence of each of the actors with digitalization challenges this imbalance by necessitating a more balanced structure in power.
- Power balance exists within certain actor groups like the record companies, digital distributors, and performers.
- Big record companies were found to have reward power and together with the indies they have also coercive power stemming from their network and since the interactions in this old boys' network are not formal and visible, they have potential to harm visibility.
- Governmental authorities, collecting societies, and big actors who have binding contracts with the other parties have legal legitimate power and this type of power is formal, its effect on visibility is positive in the structure.
- Big record companies as well as other big actors who were the pioneers at the beginning of the digitalization (the founders of digital distributors and

platforms) have expert power while the performers have referent power. Big actors' having expert power paves the way for collaboration of them with other actors who need that expert power like it is the in case in the collaboration between the big record companies and indies, which will then have potential to increase trust in these relationships. Similarly, since performers have referent power, other actors in the chain want to work with these qualified performers. This contributes to the increase in the quality of the work produced in the end.



## **CHAPTER 5**

### **DISCUSSION**

In this thesis, the new emerging Turkish digital music industry supply chain was analyzed from a supply chain complexity perspective by utilizing an in-depth single-case study approach together with the interviews conducted with interviewees of executive level positions from the main actors in the extant supply chain as well as the secondary sources of data. The principal aim was to understand the effect of digitalization on supply chain complexity of the Turkish music industry supply chain. The other research aim was to grasp the association of power with complexity to be able to better understand the relationships between actors. Using single-case approach was suitable considering the exploratory nature of the study (Yin, 1994).

Based on the data collection efforts, specific results have been obtained in relation to detail and dynamic complexity, power, and the interaction of these concepts. The main findings and discussions regarding key concepts are provided below.

The general conclusion drawn is that digitalization increases supply chain complexity in the Turkish music industry considering the increase in detail and dynamic complexity. A dramatic increase in the number of actors in total brings increased intensity of interaction between them and also a further increase in dynamic complexity in the structure. To be able to grasp this complexity better, combining the information obtained from the interviewees, the structure of the Turkish traditional as well as digital supply chain were tried to be drawn in Figure 10 and Figure 11, where the rectangles were used for the main actors and the arrows were used for the interaction channels between the actors where the flow of information and materials occur.

From the figures drawn, it was found that in the structure of Turkish digital music industry supply chain, the relationships are not as linear as the relationships in the structure of Turkish traditional music industry supply chain, which indicates that the activities are not serially dependent like in traditional supply chains. Therefore, these results were in parallel with the findings of Graham (2006) for global music industry supply chains. There were increased number of actors and increased number of linkages among the actors as is the situation in the global music industry supply chain (Renard et al., 2013). This means an increase in size considering the three new actors in the digital structure who are the *digital distributors*, *digital platforms*, and *social media* and increased intensity of interactions with new ties emerged with the existence of these new actors. The increase in the number of actors on the digital side together with the decrease in the number of actors on the physical side triggers the increased volume of digital production where digitalization decreases the number of processes in critical functions with its ease and comfort.

A linkage with size and variety can be conducted in terms of products and processes. The increase in the volume of production and increase in the number of actors on the digital side leads to the increase in the variety of the products. At the same time, it also results in the decrease in the variety of the processes since expansion of digitalization makes the processes simpler, easier and less costly than ever by not rendering any actor as privileged or by making the actors having same opportunities in terms of technical background. That is why organizational differences are not much material although cultural and geographical diversification still matter between the actors. Other than social media, the two new digital actors (digital distributors and digital platforms) only replace the function of the past actors (physical distributors and retailers). However, power dynamics play the role as one of the main drivers of the variety between the actors respecting their diversification by size. Since the big actors like the big record companies, digital distributors, and digital platforms are powerful and govern the structure, there is significant power asymmetry between these actors and the rest, which is also the reason of variety in the size or scale of the main actors. This interaction of power and variety was deemed as a problem by most

of the respondents and they correlate this power asymmetry with the trend of monopolization.

The findings of this thesis illustrate that the concepts of interaction and power are highly related. Although the focus on determining interaction was on the type of exchange (i.e., cooperation vs. competition) and intensity, power dynamics have strong effects on both of these aspects. More specifically, when there is a power balance between the actors, it paves the way for competition while power asymmetries forces actors more into obligatory partnerships where one powerful actor exerts power over the other and becomes more advantageous. Different power types like reward power, coercive power, or legal legitimate power cause the variety in these asymmetric power-type of relationships.

It seems that competition stimulates a more productive supply chain in the sense that increased competition indicates increased size and variety in the products produced. It is clear that increased volume of production increases the intensity of the interaction between the actors, which will then create a network where trust and communication is fostered more. Increased intensity of the interactions paves the way for new linkages between different actors, which then yields new formations, unbundling of the structure more with alternative ties emerging.

Apart from these, there is a strong linkage between dynamic complexity and power as well as the dimensions of detail complexity. The relationships with power asymmetries could be problematic since they increase the uncertainties for the less powerful party. The relationship between the big record companies, indies, and digital distributors as well as the relationship between the collecting societies and the record companies are the most frequently mentioned examples. There is lack of transparency regarding the group of actors which consists of the big record companies, digital distributors, and collecting societies where they are assumed to hide the critical information from the less powerful parties with whom they work. The existence of uncertainties such as unfair competition, lack of visibility, lack of

fair distribution of revenues enlarges the gap of power between the actors, increasing further the intensity of the power asymmetry.

Dynamic complexity affects the size dimension of detail complexity in the sense that volatility in the demand of the consumers or the difficulty in forecasting the demand before the production causes the increased volume of production. The producers and performers want to be sure that they get popularity in the end by trying large number of alternatives in production. Also, the number of actors is not fixed, it is changing all the time due to the volatile nature of the digital structure. It is easy for the new actors to enter the structure with decreased costs. Likewise, size may increase dynamic complexity since the increased volume of production adds uncertainties. Dynamic complexity affects the variety dimension of detail complexity in some directions. Since there is not a standard pricing mechanism applied between the actors in the transformation of products, there is increased variety in pricing. As mentioned before, the uncertainty about the popularity of the work produced causes different alternatives or genres tried by the producers and performers in production, which increases the variety of products as well as the number. This association with variety may be in the opposite direction as well. An increased number and variety of products causes a short-run minded consumer type. In a similar vein, there is an interaction between the interaction dimension of detail complexity and dynamic complexity. Due to the short-run mindset which can be generalized to all actors and caused by the uncertainties in the structure, the relationships between the actors do not last long or they are not based on long-term projects in the new digital structure. The interaction between the actors shaped by power asymmetries makes increase dynamic complexity for the less powerful actors. Similarly, the increased intensity of relationships especially via social media has the potential to cause sudden changes in trends on the side of the consumers, which is reflected on the main actors' business. As for type of the relationships, although cooperative type of relationships are better for increasing trust (Sahay, 2003), there are still uncertainties regarding the relationships based on partnerships in the Turkish music supply chain due to the lack

of visibility. Competition, on the other hand, can decrease dynamic complexity if fairness and visibility ensured in this structure.

As the above discussions illustrate, some associations were found between the dimensions of detail complexity, power, and dynamic complexity, suggesting that supply chain complexity is also a complicated matter with several dimensions related to each after the results were examined. Thus, they are not separate items from each other.

## CHAPTER 6

### CONCLUSION

In the digital era, the music industry is in a transformation process economically and geographically in macro terms and organizationally in micro terms (Leyshon, 2001), both in global and local industries (Sánchez, 2016). These overall changes are reflected in the music industry supply chain as a whole (Nakano and Fleury, 2017). The actors and the activities as well as the relationships between the actors are reshaped in this emerging digital music industry supply chain (Graham et al., 2004; Graham, 2006). The new structure is not like the linear chain of the past, but it is more like a network with increased number of actors and links between them (Renard, 2010; Renard et al. 2012; Bellamy and Basole, 2013; Renard et al. 2013). Various studies examined the global music industry or global music industry supply chain (Premkumar, 2003; Goodrich, Renard, and Rossiter, 2011; Renard et al., 2013) while some others focused on the local context in the music industry (Poel and Rutten, 2005; Sander, 2013). In this study, however, the supply chain was taken as the sample unit and the focus was on Turkey. The effect of digitalization on the supply chain complexity of the Turkish music industry supply chain was investigated together with the association of power with complexity dimensions. Where possible, comparisons were made between the traditional and digital music supply chain regarding the investigated concepts. An in depth, single-case study approach was utilized with interviews conducted with key persons at executive level positions from the main actors in the chain, combined with secondary sources of data. It can be concluded that digitalization increased complexity in the Turkish digital music supply chain taking into account the increase in the dimensions of size and interaction (which is also shaped by power dynamics and types) as well as the increase in dynamic complexity. It was found that digitalization increased the

number of actors on the digital side while it decreased the number of actors on the physical side. In the same line, there is less need for employees on the physical side while the employees who are skilled at digital work are demanded more. Digitalization also increased the volume of production while it decreased the number of processes. Although the actors were not found to be diverse organizationally considering their capabilities, practices, and the key resources, the variety was significant for their geography (physical location in the country) and culture in the Turkish music supply chain. The cultures of the indies were found to be diverse more evidently. Most of the actor groups like record companies, digital distributors, and performance venues were not found as diverse in terms of their function. However, the big record companies were found to be diverse by size. Moreover, digitalization made products diversified while it made processes less diversified. Parallel with these, it was found that the ease and comfort of digitalization paves the way for the increase in the volume of production, which then increases the intensity of the relationships between the actors. Cooperative type of relationships were found to be based on the agreements between the record companies, digital distributors, and digital platforms. The most likely collaboration was found to be between the big record companies and indies. For competitive type of relationships, it was found that there should be a power balance between the actors. In this line, the most likely competition was found to be between the big record companies as well as between the digital distributors. Although it cannot be concluded that digitalization eliminated competition completely, it was found that the intensity of the competition is not as fierce as before. Both competitive and cooperative relationships were found to be valid for the same type of record companies and their related performers who came together for joint projects though they are rivals. Given dynamic complexity, it was found that invisible and unfair sharing of the revenues and royalties between the actors was the main reason of uncertainty in the Turkish music supply chain. Powerful actors' (such as the big record companies) abusing their power to act opportunistically was found to increase the uncertainty in the structure. It was also found that the structure is open to fraud and it is volatile, with sudden changes triggered by changing trends, fashions, or events on social media, which is reflected

as changing demand on the consumers' side. In this dynamic structure, power was found to be imbalanced in favor of the big actors like the record companies, digital distributors, and performers although it tends to be more balanced for all actors considering the increased independence of each of the actors with digitalization. For power types, the network of the big record companies was found to lead to their exerting reward power over other actors. Likewise, it was found that the big record companies together with the indies exert coercive power depending on their network. Furthermore, the big record companies, as well as the founders of digital distributors and platforms were found to exert expert power since they accumulated expertise and knowledge since the beginning of digitalization. While the governmental authorities, collecting societies, big record companies, digital distributors, and digital platforms which have binding legal contracts with other parties were found to exert legal legitimate power, performers were found to have referent power as they are admired by the most of actors for their expertise and qualifications in the Turkish music supply chain.

In parallel with the resource dependence theory (Pfeffer, 1972), it was found that increased interaction of the actors with digitalization paves the way for increased exchange of resources between the actors with proliferation of alternative channels and increased freedom for each actor. This then reduces the power imbalance in the structure considering all actors. In addition, the exchange of resources between the actors contributes to the exertion of power by one party over the other. It also determines the power types (i.e., mediated or non-mediated). Resource dependence theory (Pfeffer, 1972) posits that this structure is not stable, but dynamic, making all actors vulnerable to sudden changes. However, it was found that the exchange of resources of the actors with increased interactions is not sufficient to reduce uncertainty. Ensuring visibility was found to be critical to reduce uncertainty in the Turkish music supply chain. Taking into account power types, it was found that unique and valuable resources which cannot be substituted provide competitive advantage for the actors in the structure, which is in line with the resource-based view perspective (Vanpoucke et al., 2014). The power types which stem from these



distinctive resources which cannot be replicated were found to be non-mediated power types (i.e., expert and referent power) in the Turkish music supply chain. Therefore, pioneers such as the big record companies, the founders of digital distributors and digital platforms which have expert power, and the performers which have referent power were found to have competitive advantage over others in the structure since their resources arise from their distinctive expertise, knowledge, and qualifications.

Furthermore, it was found that supply chain complexity (i.e., detail complexity and dynamic complexity), its dimensions, and power's association with supply chain complexity cannot be analyzed separately since they interact with each other.

The increase in supply chain complexity in the music industry has different implications for different actors. Increased complexity may imply benefits or efficiencies for some actors while it may imply disadvantages or inefficiencies for the others. As it can be seen from Figure 11, three actors, which are digital distributors, digital platforms and social media have emerged with digitalization. Since the volume of production is increasing on the digital side, these new actors are becoming more important in production. Although the digital distributors are not diversified by function, there is huge potential for the digital platforms and social media to differentiate themselves to reach more consumers. They may offer distinctive services to the consumers such as engaging in servitization-related services. Digital distributors, on the other hand, may arrange their pricing strategy such that an environment suitable for competition could be constituted. They may differentiate themselves by offering promotion services for the record companies as well. Between the record companies, it was found that the importance of the indies is increasing. Although the indies are good at niche genres, they should seek ways to produce in more large-scale to compete with the big record companies. Likewise, the traditional record companies should aim at adapting themselves to digitalization well to increase their profits. They may utilize transforming their old but rich repertoire to the digital platforms. Big record companies, on the other hand, may lead the

formation of trust-based networks or collaborations with other actors by exerting their reward and expert power since the partnerships of the big record companies which are based on obligatory agreements were not found efficient. By that way, they may gain their control power again in this structure with increased complexity. All types of record companies should try to produce high quality and long-lasting work to ensure sustainability against the fast consumption of music by the consumers which then causes increase in dynamic complexity.

Moreover, new performance venues could be opened with digital background to better meet the needs of current digital listeners or the existent performance venues could modify themselves in this direction. For governmental authorities, they should exert their legal legitimate power over the collecting societies, big record companies, digital distributors, as well as digital platforms by imposing legal acts or arrangements to decrease uncertainty stemming from the lack of visibility in the structure. Regarding the performers, like the big record companies, they may be the pioneers of the formation of social networks based on trust since they are the critical actors in cooperative type of relationships with referent power. They do not have to depend on the record companies. They may produce independently and contribute to a structure where there is more power symmetry between the actors. Other than these, studio musicians and management agents should develop their capabilities to adapt to the digital settings. They may receive training for that purpose. In a similar vein, radio and TV channels should interact more with new digital actors (especially the social media and digital platforms) in order not to lose their viewers/listeners. Hence, each actor should take the necessary strategic steps accordingly for a better functioning supply chain on the whole.

All in all, the study contributes to the literature theoretically and managerially by examining supply chain complexity in the service industry and country-specific context focusing on Turkey as one of the developing countries which is still at the beginning of its digitalization process in the music industry and provides rich insights

about how digitalization increased the supply chain complexity of the Turkish music industry.

### **6.1. Limitations**

There are several limitations regarding this study. First of all, it is a single-case study where the information is derived mostly from the interviews conducted with the key respondents of the key actors in the new digital music industry supplychain in Turkey. Although similar approaches have been adopted in previous studies to examine music supply chains (e.g., Graham et al., 2004; Graham, 2006), there are some biases related to conducting interviews such as subjectivity and limited knowledge of the interviewees. This issue was tried to be overcome by trying to indentifying interviewees from actors according to their market shares and importance in the industry. However, not all actors referred as the main actors in this study were included in the interviews. For instance, although the performers, music owners, as well as the social media and the consumers were included in the structure, interviews were not conducted with these actors. Therefore, their information about the effects on digitalization on them were not taken directly from these parties, but were based on other actors' knowledge and assessment.

In total, twenty three interviews were conducted with eighteen actors. For two of the actors, the interviewees were conducted with more than one interviewee to be able to see different angles from the same actor. However, this was not possible for all of the actors. To overcome this problem, a second round of interviews were conducted which revealed more insights about the topic, enabling to complement the answers from the first round. Moreover, reaching the executives, especially from big record companies, was difficult. Therefore, the interviews with the actors from the big record companies were included in the study in limited numbers. Similarly, since most of the digital platforms were not operating in Turkey or had closed their offices

in Turkey, only one interview could be conducted as an actor of the digital platforms. The interviews could have been supported by the surveys applied to the respondents as well to get more information benefiting from distinctive methods or quantitative analyses.

## **6.2. Suggestions for Future Research**

Given the limitations of this study, there are some suggestions for future research. Because not all the actors defined as the main actors in the Turkish music industry supply chain were included in the data collection, further research on this topic could include them in the analysis with a more holistic approach. In the same way, the number of interviewees could be increased more by ensuring to get answers from multiple respondents from the same actor. These interviewees may be in different positions from different departments to be able to increase generalizability of the research or focus groups could be formed to get more insights and interesting ideas about the topic searched for in a case study context (Baškarada, 2014).

For further in the Turkish music industry supply chain, it would be better to choose a longer time period to collect data in more detail. By that way, more information can be taken from the actors that were difficult to reach in a short period of time due to their busy work pace. In this case, the major difficulty was reaching out the big record companies and digital platforms. More importantly, in further research the effect of digitalization on supply chain complexity of the Turkish music supply chain can be analyzed with quantitative analysis with software used like in the study of Renard (2010) for global music industry supply chain. A social quantitative social network analysis could be conducted in relation with complexity (Waldrop, 1992). Different methods can be combined such that the interviews could be supported by surveys in further studies about this topic. Thus, both quantitative and qualitative analyses can be utilized while studying the Turkish music industry supply chain.

Lastly, performance effects of complexity on the Turkish music supply chain could be analyzed or comparative studies of the complexity of the music industry supply chains by comparing the structure in Turkey and the other countries between the global and local context could be done in the future in this field.

This thesis makes a first attempt to examine the impact of digitalization on the music supply chain complexity. Considering the scarcity of literature on the topic, exploratory insights generated in this thesis can aid future studies in developing more theory-building and theory-testing approaches.

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## APPENDICES

### A. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE / ETİK KURULU FORMU

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ  
APPLIED ETHICS RESEARCH CENTER



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06 Haziran 2018

Konu: Değerlendirme Sonucu


Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)


İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu


Sayın Dr. Öğretim Üyesi Melek Akın ATEŞ'in

Danışmanlığını yaptığınız yüksek lisans öğrencisi Deniz TÜRK'ün "Dijital Platformların Müzik Endüstrisinde Tedarik Zinciri Yapısına Etkisi: Türkiye'de Deneysel Bir Çalışma" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay 2018-SOS-116 protokol numarası ile 18.06.2018 - 30.12.2018 tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.


  
Prof. Dr. Ayhan SOL  
Üye

  
Prof. Dr. Ş. Halil TURAN  
Başkan V

  
Prof. Dr. Ayhan Gürbüz DEMİR  
Üye

Doç. Dr. Yaşar KONDAKÇI  
Üye

Doç. Dr. Zana ÇITAK  
Üye

  
Doç. Dr. Emre SELÇUK  
Üye

  
Dr. Öğr. Üyesi Pınar KAYGAN  
Üye

## **B. THE INTERVIEW PROTOCOL**

### **Instructions**

My name is Deniz TÜRK. First of all, thank you for your acceptance to this interview. The interview consists of open-ended questions in two parts. These parts are allocated according to the topics. The first part is Supply Chain Complexity and Power. In this part, I am asking questions to you about the supply chain complexity dimensions of the Turkish music industry as well as power characteristics of the relationships between actors to get insight about these. The second part is Music Industry and Digitalization. In this part, I am asking questions to you about current trends and market shares in the industry as well as digitalization's overall effect in the Turkish music supply chain. I will explain the supply chain related concepts appearing in the first part to you before I ask these questions.

You do not have to answer all of the questions asked if you think that there is sensitive or secret knowledge that you do not want to share with me or if you do not have any information regarding the related question. Also, if you want, you can skip some questions and we can go back to these questions at the end of the interview.

### **Instructions about Recording**

If it is not problem for you, I will be recording the conversation during the interview. It is because I am able to get the insight from your answers in a detailed and elaborative manner. Whenever you want to stop the recording, you can state that. I can give you confidence that your answers to the interview questions will not be shared with third parties and they will be used only for academic purposes. Further, your name and the name of your company will be denoted as anonymous if you do not allow the mentioning of them.

Now, please look at the questions in a few minutes before we start the interview.

**(The transcripts of all of the interviews conducted were provided separately by the consent of the interviewees and the approval of the Ethics Committee of Middle East Technical University was added into the Appendix as well.)**

## C. TURKISH SUMMARY/TÜRKÇE ÖZET

### 1. Giriş

2018’de elde edilen dijital gelirler düşünüldüğünde müzik endüstrisi 19.1 milyar dolar büyüklüğünde bir iş alanıdır (IFPI, 2019). Bu gelirler içinde, müşterilere abonelik bazında hizmet veren streaming hizmetleri neredeyse gelirlerin yarısını oluşturmakta ve tarihte ilk kez dijital müzikten elde edilen gelirler toplam gelirlerin yarısından fazlasını oluşturmaktadır (Abu Seman ve Putri, 2018; IFPI, 2018). Bu rakamlar günümüzde müzikte dijitalleşmenin önemini gözler önüne sermektedir. Bugün müzik endüstrisinde farklı iş modelleri ile çok sayıda dijital platform ve hizmet şirketi bulunmaktadır (Lin, Shih, Tzeng, ve Yu, 2016). Müzik tedarik zinciri bir bütün olarak düşünüldüğünde, dijital platformlar; yapım şirketleri, dijital distribütörler, tüketiciler ve şarkıcılar gibi tüm aktörleri etkileyebilmektedir (Leenders, Farrell, Zwaan ve ter Bogt, 2015; Lee, Choi, Cho ve Lee, 2016; Puerta, 2017).

Tedarik zinciri, bilgi ve malzeme akışının sağlandığı bağlarla tüm aktörlerin birbirine bağlandığı bir yapıdır (Graham, Burnes, Lewis ve Langer, 2004). Dünyada teknolojik değişimler ve gelişmeler yönünde artan bir trend olduğu için literatürde tedarik zincirini ele alan çeşitli çalışmalar mevcuttur (Quinn, 2017). Literatürdeki çalışmaların çoğu imalat endüstrisinde tedarik zincirine odaklanırken hizmet sektörü, kâr amacı gütmeyen iş alanları ve sanat gibi ekonomik alanlarda az sayıda çalışma bulunmaktadır (Handal, 2017; Mashiloane, Mafini ve Pooe, 2018; Duong, Wood, Wang ve Wang, 2017). Ancak tedarik zinciri yönetiminin hizmet sektöründe de önemli rol oynadığı görülmektedir (Tseng, Lim, Wong, Chen ve Zhan, 2018). Bu noktada az incelenen alanlardan biri müzik tedarik zincirleridir. Bu alandaki sınırlı sayıda olan çalışmalar içinde bazı çalışmalar müzik endüstrisi ve tedarik zincirine global olarak yaklaşırken (Graham ve Hardaker, 2003; Graham, 2006) bazı

çalışmalar aktörler ve aktörlerle ilgili konular olmak üzere tedarik zincirinin daha spesifik tarafları üzerinde durmuştur (Renard, Goodrich ve Fellman, 2012). Benzer şekilde, bazı çalışmalar dijitalleşme öncesi dönemi bazı çalışmalar ise MP3 dönemi ile birlikte dijitalleşme ile başlayan dönemi kapsamaktadır (Shemel ve Krasilovsky, 1985; Premkumar, 2003; Yang, Jingjing ve Xu, 2011).

Son çalışmalar düşünüldüğünde odak noktası değişmektedir. Örneğin bazı çalışmalar dijitalleşme döneminde korsana odaklanmaktadır (Jeong, Khouja ve Zhao, 2018); öte yandan, bazı çalışmalar yalnızca dijital platformlar ve dağıtım kanallarına odaklanırken bazıları global müzik tedarik zincirinin bir bütün olarak yeniden şekillenışı üzerinde durmaktadır (Premkumar, 2003; Nakano ve Fleury, 2017). Aynı zamanda müzik tedarik zincirine dair hizmetleştirme gibi farklı konseptler üzerinde de çalışmalar yapılmıştır (Bustinza, Parry ve Vendrell-Herrero, 2013).

Bu çalışma birkaç sebepten dolayı geçmiş çalışmalardan farklıdır. Öncelikle, bugünün müzik endüstrisinde artan sayıdaki dijital kanallar ve bu kanallar gelir yaratmadaki önemi düşünüldüğünde, bu tez temel olarak dijitalleşmenin Türk müzik tedarik zinciri yapısına etkisi üzerinde durmaktadır. Karmaşıklık kavramı hem yapısal karmaşıklık hem de dinamik karmaşıklığı kapsadığı için bu çalışmada tedarik zincirinde karmaşıklık perspektifi benimsenmiştir. Şimdiye dek, müzik tedarik zincirlerini tedarik zincirinde karmaşıklık perspektifini benimseyerek ele alan bir çalışma olmalıdır. Literatür bu konuda eksik olduğundan geliştirmekte olan bir ülke, Türkiye, üzerinde durularak tekli vaka çalışması ile keşfedici yaklaşım benimsenmiştir.

Dijitalleşme müzik tedarik zincirlerini global ve lokal olarak etkilemektedir (Graham, 2006). Ancak bu tez geliştirmekte olan bir ülke, Türkiye, bağlamında analiz yapabilmek için ülkeye özgüdür. Son zamanlarda, Türkiye müzik endüstrisi gelenekselden dijital bir geçiş süreci içerisinde ve son on yıldaki Pazar payları dikkate alındığında dünyanın en büyük yirmi müzik endüstrisi arasında değildir (IFPI, 2018). Türkiye’de son beş yıl içinde artan dijital satışlar ile birlikte



dijitalleşmenin önemi artmıştır (“MÜ-YAP/Türkiye”, 2018). Tedarik zincirinin bağımsız bölümlerine ve aktörlerine odaklanmak yerine, bu tez ülkeye özgü bağlamda tüm tedarik zincirini analiz birimi olarak ele almakta ve tedarik zincirinde karmaşıklık perspektifinden dijitalleşmenin etkilerini incelemektedir. Bu açıdan aktörler arası ilişkileri ve karmaşıklık ölçüleri arasındaki etkileşimi daha iyi anlayabilmek için alt konu güç kavramı ile ilgilidir.

### **1.1. Araştırmanın Amacı ve Soruları**

Bu çalışmanın ana amacı dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığa etkisini araştırmaktır. Tedarik zinciri geniş bir kavram olduğu için “tedarik zincirinde karmaşıklık” perspektifi benimsenmiştir. Tedarik zincirleri, aktörlerin sayısı ve çeşitliliğindeki artış, artan globalleşme ve tüketici isteklerindeki değişim hızı ile birlikte giderek daha karmaşık hâle gelmektedir (Bozarth, Warsing, Flynn ve Flynn, 2009; De Leeuw, Grotenhuis ve van Goor, 2013). Şimdiye dek, hizmet tedarik zincirleri yerine imalat sektörü üzerinde durulmuştur. Artan dijitalleşme ile büyük bir değişim geçiren müzik endüstrisi tedarik zincirlerinin hızla değiştiği bir başka alandır. Hizmet tedarik zincirlerine yönelik literatürdeki eksiklik düşünüldüğünde bu tezde amaç aşağıdaki araştırma sorularını cevaplandırmaktır.

*“Dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığa etkisi nedir?”*

Tedarik zincirinde karmaşıklık iki alt konu ile ele alınıyor (Bozarth vd., 2009; Lu ve Shang, 2017). Yapısal karmaşıklık aktörlerin sayısı, çeşitliliği ve birbirleriyle etkileşimi olarak ayrılmaktadır. Aktörler arası ilişkileri daha iyi kavrayabilmek adına güç tipleri ve dengeleri de ele alınmıştır. Kurumlararası ilişkiler birçok ilişki özelliği ile incelenebiliyor olsa da önceki çalışmalar güç özelliklerinin aktörlerin birbirleriyle etkileşimi, ürün/hizmet ve bilgi paylaşımını etkileyen en önemli özelliklerinden biri olduğunu gösteriyor (Takashima ve Kim, 2016; Malik, Ngo ve Kingshott, 2018). Bu nedenle, aktörler arası ilişkileri daha iyi inceleyebilmek için aşağıdaki alt konu sorusu oluşturulmuştur.

*“Dijitalleşmenin Türk müzik endüstrisi güç özelliklerine etkisi nedir?”*

## **1.2. Araştırma Stratejisi**

Bu çalışmada keşifsel araştırmaya uygun olan tekli vaka çalışması araştırma stratejisi olarak benimsenmiştir. Araştırma amacı ve sorularına bağlı olarak, çalışma Türkiye’de yapılmıştır. Analiz birimi genel olarak Türk dijital müzik endüstrisinde tedarik zinciridir.

Analiz birimindeki aktörlerin yöneticileriyle görüşmeler gerçekleştirilmiştir ve görüşme sonuçları, mümkün olan yerlerde, ikincil verilerle (geçiş yıllara ait satış figürleri ve grafikler) ile birlikte değerlendirilmiştir. İkincil veriler hakkındaki detaylar Metodolojik Yaklaşım bölümünde verilmiştir. Araştırma sorularının keşifsel yapısı nedeniyle, niceliksel analiz yerine niteliksel analizin daha uygun olacağı düşünülmüştür.

## **2. Tedarik Zincirinde Karmaşıklık**

Karmaşıklık çeşitli disiplinlerde ele alınmış ve karmaşıklığın çeşitli tanımları yapılmıştır (Choi, Dooley ve Rungtusanatham, 2001; Bozarth vd., 2009). Genel anlamda unsurların çoklukları, çeşitlilikleri ve birbirleriyle olan etkileşimleri ile ortaya çıkan bir durum olarak tanımlanabilir (Jacobs ve Swink, 2013). Diğer tanımlar ayrıca belirsizlik ve anlaşılmazlık gibi özellikleri de içermektedir (Jacobs, 2013). Karmaşıklık bileşik (kompoze) bir kavramdı, bu nedenle karmaşıklık ölçülerinden herhangi birindeki artış karmaşıklıkta artış anlamına gelmektedir.

Daha önceki çalışmaların çoğu ana yapı olarak tedarik zinciri karmaşıklığı üzerinde durduğu için (Aitken, Bozarth ve Garn, 2016; Birkie, Trucco ve Campos, 2017; Turner, Aitken ve Bozarth, 2018), bu tezde analiz seviyesinde tedarik zinciri benimsenmiştir. Bu aynı zamanda merkez firmaya (yapım şirketleri)

odaklanılmasına ve tüm endüstrideki karmaşıklığı incelemek yerine yapım firmalarındaki karmaşıklık üzerinde durulmasına imkân vermektedir.

Tedarik zincirinde karmaşıklığın farklı tanımları bulunmaktadır (De Leeuw, Grotenhuis ve van Goor, 2013; Serdarasan, 2013); ancak çalışmaların çoğunda Choi ve Krause (2006) tarafından belirtilen ölçüler baz alınmaktadır. Bu açıdan Bozarth vd. (2009) tedarik zincirinde karmaşıklığı ürünler, süreçler ve ilişkiler bakımından *yapısal karmaşıklık* ve *dinamik karmaşıklık* olarak karakterize etmiştir. *Yapısal karmaşıklık* bir sistemi oluşturan çeşitli unsurları ve bunların birbirleriyle etkileşimlerine tekabül etmektedir ve *dinamik karmaşıklık* genel anlamda bu sistemin tahmin edilemezliği ile ilgilidir.

## 2.1. Yapısal Karmaşıklık

Yapısal karmaşıklık tanımlarının çoğunda geçen üç genel ölçü *sayı*, *çeşitlilik* ve *etkileşim* olarak isimlendirilebilir (Choi ve Krause, 2006; Bozarth vd., 2009; Serdarasan, 2013; Jacobs, 2013; Ateş, Wynstra ve van Raaij, 2015).

### 2.1.1. Sayı

Yapısal karmaşıklık kapsamında sayı, tedarikçilerin sayısı ya da tedarik ağındaki aktörlerin sayısı (eğer tedarik ağı çevresi ile etkileşim içinde olan karmaşık bir yapı olarak değerlendirilirse) gibi spesifik bir unsurun sayısına işaret etmektedir (Choi, Dooley, and Rungtusanatham, 2001; Choi ve Krause, 2006). Ancak daha kapsamlı bir açıdan sayı tedarik zincirinde birbiriyle etkileşim içinde olan unsurların toplamı olarak tanımlanabilir (Cheng, Chen, and Chen, 2014). Aslında, karmaşık yapılar birbirine lineer olmayan şekilde bağlı eşsiz unsurlardan oluşmaktadır ve bir unsurun işleyişini anlamak bütün olarak karmaşık bir sistemin anlamak anlamına gelmemektedir (Perona ve Miragliotta, 2004). Bu anlamda unsurlar çok çeşitli olabilmektedir. Bu unsurlar tedarikçiler dışında müşteriler ve tedarik zincirinin iş ünitesinde bulunan ürünler de olabilmektedir (Aitken, Bozarth ve Gam, 2016).

Bilginin volümüne işaret eden tedarik zincirinde iş süreçleri ve fonksiyonlarının sayısı da sayı ölçüsü kapsamında değerlendirilebilir (Serdarasan, 2013). Çalışan sayısı ya da markaların, üretim hatlarının ve üretim tesislerinin sayısı da sayı ölçüsünü oluşturabilmektedir (Birkie, Trucco ve Campos, 2017). Benzer açıdan, bir tedarik ağı düşünüldüğünde, ağdaki tüm katılımcılar sayı ölçüsü kapsamında değerlendirilebilir (Tachizawa ve Wong, 2015).

Ayrıca, sayı karmaşıklığının farklı sınıflandırmaları altında çeşitlendirilebilir. Yatay karmaşıklık doğrudan merkez firmaya tedarikte bulunan tedarikçilerin sayısına işaret ederken dikey karmaşıklık ikmal üssündeki katmanların sayısına işaret etmektedir (Lu ve Shang, 2017). Benzer şekilde, bir tedarik ağında, hiyerarşik olarak katmanların sayısı ve her bir katmandaki tedarikçilerin sayı bakımından farklı ölçeklerdir (Giannoccaro, Nair ve Choi, 2018).

Genel olarak sayı ölçüsü iç, dış ve arz/talep faktörleri bakımından ele alınabilir ve tedarik zinciri katmanlarındaki ve aktörlerindeki artış artan bilgi ve fiziksel malzeme akışı ile birlikte karmaşıklığı arttırmaktadır (Serdarasan, 2013; Brandon-Jones, Squire ve Van Rossenberg, 2015). Bu bakımdan, aktörlerin, müşterilerin ve çalışanların sayısı ile birlikte ürünlerin ve süreçlerin volümü de müzik tedarik zincirinde sayı ölçüsüne tekabül etmektedir.

### **2.1.2. Çeşitlilik**

Çeşitlilik tedarik zincirindeki unsurların farklılığını yansıtmaktadır (Jacobs, 2013). Yöneticiler tarafından farklı kültürler, uygulamalar ve teknolojiler benimsendiğinden çeşitlilik; tedarikçiler, müşteriler, üretim hatları, süreçler, hizmetler ve markalardaki farklılıkları kapsamaktadır (Birkie et al., 2017; Leeuw, Grotenhuis ve van Goor, 2013). Ürünlere odaklanıldığında çeşitlilik, ürün portföy karmaşıklığının temel ölçülerinden biridir (Kavilal, Venkatesan ve Sanket, 2018). Tedarik zincirinde yukarıya dönük karmaşıklık ele alındığında, tedarikçilerdeki

çeşitlilik; onların teknoloji, coğrafya, organizasyon ve sayı (büyüklük) bakımından farklılaşması olarak tanımlanabilir (Ateş, Wynstra ve Raaij, 2015).

Çeşitliliğe işaret eden spesifik alt konular ayrıca incelenebilir. Örneğin, uzaklık çeşitlilik ile ilgili olan özel bir konsepttir (Awayesh ve Klassen, 2010). Coğrafik uzaklık ya da unsurların coğrafik olarak birbirinden uzaklaşması çeşitliliği etkileyen bir factor olarak değerlendirilebilir (Brandon-Jones, Squire ve Van Rossenberg, 2015). Unsurlar arasındaki uzaklık ne kadar çok olursa farklı bölgelerin birbirine benzemeyen kültürleri ve uygulamaları nedeniyle bu unsurların yönetimi o kadar zor olmaktadır ve sonuç olarak karmaşıklık artmaktadır (Choy ve Lee, 2003). Buna ek olarak Awayesh ve Klassen (2010), uzaklığın kültürel ve organizasyonel olabildiğini; kültürel uzaklığın aktörlerin toplumlarındaki kültürel farklarla ilgili olduğunu ve organizasyonel uzaklığın tedarik zincirinde merkez firmanın tedarikçilerden veya müşterilerden ayrılması ile ilgili olduğunu öne sürüyor.

Ana nokta, tedarik zincirinde ne kadar çok çeşitli unsur bulunursa yapı daha fazla potansiyel kombinasyonla birlikte o kadar karmaşık hâle gelecektir (Cheng vs., 2014). Artan çeşitlilik firmaları ve yöneticileri farklı uygulamalar benimsemeye ve gerekli önlemleri almaya zorlamaktadır. Örneğin, system tasarımında kişiselleştirme ve sadeleştirme alternatifleri çeşitliliği yönetmek amacıyla firmalar tarafından uygulanmaktadır (Perona ve Miragliotta, 2004; Hamta, Shirazi, Behdad ve Ghomi, 2018). Bunlara paralel olarak müzik tedarik zincirinde çeşitlilik aktörlerin farklı organizasyonel uygulamaları, becerileri ve kültürleri ile onların boyut (büyüklük) ve coğrafya bakımından farklılaşmalarına tekabül etmektedir.

### **2.1.3. Etkileşim**

Etkileşim tedarik zincirinde birbirini etkileyen ilişkiler veya unsurların bağlantısı anlamına gelmektedir (Jacobs, 2013). Bu etkileşim insanlar ya da görevler arasında olabilmektedir, ki bu da bu unsurların birbirine bağlılığının önünü açmaktadır (Turner, Aitken ve Bozarth, 2018). Genellikle yapısal karmaşıklığın ana ölçülerinden

biri olarak incelenen etkileşim, sınırlı sayıda çalışmada dinamik karmaşıklığın ölçüsü olarak ele alınmıştır (Giannoccaro vd., 2018).

Unsurlar genellikle birbirlerine kaynak, materyal ve beceriler bakımından bağlı olan tedarikçiler ya da firmalara işaret etmektedir (Awayesh ve Klassen, 2010). Bu bakımdan her ne kadar daha çok alıcı ile tedarikçi arasındaki ilişkilerde etkileşim gözlemlenmekte olsa ve literatürdeki çalışmalar da sıklıkla bu tür ilişkileri ele alsada etkileşim bir çeşit tedarikçi-tedarikçi ilişkisidir (Helper, 1991; Wu ve Choi, 2005). Bu noktada, *ilişkinin tipi ve ilişkinin yoğunluğu* etkileşimle ilintili olarak öne çıkan iki önemli boyuttur (Choi ve Krause, 2006). İlişkinin tipi rekabetçi ya da işbirlikçi olabilmektedir (Choi vd., 2001; Ateş vd., 2015). İşbirliği açıklık ve dayanışmaya işaret ederken rekabet paylaşılmayan bilgiyi ve ilişkilerdeki uzaklığa vurgulamaktadır (Wu ve Choi, 2015) İlişkilerin yoğunluğu bakımından ise işlemlerin sıklığı unsurlar arasında hem fiziksel ürünlerin hem de bilginin paylaşımını yansıtmaktadır (Choi ve Krause, 2006). İşbirlikçi ilişkilerde bilgi daha zengin içerikli olduğundan işlem maliyetleri daha çok azaltılmakta, bu da işleme özgü varlıklara daha fazla yatırım yapılmasına öncülük etmektedir ve işleme özgü varlıkların değiş tokuş edilmesi işlemlerin sıklığını ve ilişkide bağlılığı arttırmaktadır (Dwyer, Schurr ve Oh, 1987; Carr ve Pearson, 1999).

Özetle, etkileşimin iki ana özelliği tipi (rekabetçi ya da işbirlikçi) ve yoğunluğudur. Karmaşıklığı nicel bir ölçüt olarak ele alan çalışmalar tarafından da desteklendiği gibi etkileşim ilişkileri şekillendirmesi ile karmaşıklık seviyesini belirleyen önemli ölçülerden biridir (Jacobs, 2013; Cheng vd., 2014). Bu görüşler temelinde, etkileşimdeki artış karmaşıklıkta artış olarak yansımaktadır. Müzik tedarik zincirleri bakımından, en iyi sanatçılarla çalışma çabaları düşünüldüğünde rekabet bu zamana dek yapım firmaları arasındaydı (Belinfante ve Johnson, 1982). Ancak bugün müzik tedarik zinciri dijitalleşme ile aktörlerin birbirine bağımlı olduğu gelişmekte olan bir ekosistem gibidir ve aktörler arasındaki karşılıklı etkileşimden dolayı aktörler birbirleriyle hem rekabet edebilmekte hem de işbirliği içinde olabilmektedir (Huygens, Baden-Fuller, Van Den Bosch, ve Volberda, 2002; Nakano ve Fleury,

2017). Bu nedenle, bu gelişmekte olan müzik tedarik zinciri yapısında aktörler arasındaki ilişkilerin tipine karar verebilmek zordur ve bu ilişkileri inceleyen çalışmalar sınırlı sayıdadır.

## 2.2. Dinamik Karmaşıklık

Dinamik ya da operasyonel karmaşıklık en geniş anlamda tedarik zincirindeki belirsizlik ve rastlantısallık ile ilgilidir (Dittfeld, Scholten ve Van Donk, 2018). Bu, tedarik zincirinin dinamik yapısı dolayısıyla aktörlerin eylemlerinin ya da aktiviteler ve süreçlerin kolaylıkla tahmin edilemediği anlamına gelmektedir. Dolayısıyla, değişkenlik dinamik karmaşıklık ile ilgili bir konudur çünkü tedarik zincirinde performansı büyük ölçüde etkileyebilecek beklenmedik değişiklikler her zaman meydana gelebilir (De Leeuw vd., 2013).

Dinamik karmaşıklık tedarik zincirinin yukarıya ya da aşağıya yönelik her bölümünde gözlemlenebilmektedir (Milgate, 2001). Örneğin, yukarıya yönelik bölümde kalitesiz parçaların tedariki ile birlikte tedarikçilerin kötü performansı belirsizliğe neden olabilirken aşağıya yönelik bölümde müşterilerin değişen beklentileri yüzünden talep tahminini yapabilmek belirsizliğe neden olarak dinamik karmaşıklığı tetikleyebilmektedir (Davis, 1993; Fisher, Hammond, Obermeyer ve Raman, 1997; Manuj ve Şahin, 2011). Bunlar hız ve güvenilirliğin dinamik karmaşıklıkla ilgili olan birtakım özellikler olduğunu göstermektedir.

Dinamik karmaşıklık bir tedarik zincirinin her zaman static bir sistem olmadığını, bunun yerine beklenmedik, spontane değişikliklere açık olan canlı bir organizma gibi olduğunu göstermektedir. Belirsizlik ve rastlantısallık ne kadar fazla olursa dinamik karmaşıklık da o kadar fazla olmaktadır. Müzik tedarik zincirini dinamik karmaşıklık bakımından ele almak yerindedir çünkü tüm endüstri dijitalleşme ile birlikte bir dönüşüm süreci içerisinde. Dijitalleşmenin getirdiği hız ve kolaylık müşterilerin isteklerini değiştirmekte ve bu aynı zamanda aktörlerde de dijitalleşmeyi benimsemeleri ya da reddetmeleri bakımından bir değişiklik gerektirmektedir

(Pinna, 2017). Ancak belirsizlik konuları ve böylesine dinamik bir endüstride devamlılığın nasıl sağlanacağı şimdiye dek araştırılmamıştır. Benzer şekilde, müzik tedarik zinciri için ne tip dinamik karmaşıklığın yararlı ya da zararlı olacağı noktasında net bir görüş bulunmamaktadır.

### **2.3. Kurumlararası İlişiler: Güç/Bağımlılık Yaklaşımı**

Tedarik zincirleri materyal, bilgi ve karar akışının kapsamaktadır ve tedarik zincirlerini yönetirken bu akışların etkililiği ve verimliliği düşünüldüğünde kurumlariçi ve kurumlararası ilişkiler önem kazanmaktadır (Wang, Childerhouse, Kang, Huo ve Mathrani, 2016).

Kurumlararası ilişkilerde güven ve bağlılık gibi diğer ölçüler arasındagüç önemli bir ölçü olarak öne çıkmaktadır (Gulati ve Sytch, 2007; Nyaga, Lynch, Marshall ve Ambrose, 2013; Cao, Huo, Li ve Zhao, 2015; Cuevas, Julkunen ve Gabrielsson, 2015; Gölgeci, Murphy ve Johnston, 2018). Güç, birbirlerine olan bağlılıkları baz alınarak bir tarafın diğer tarafa olan üstünlüğü şeklinde tanımlanabilir (Emerson, 1962). Be nedenle, bağımlılık güç ile ilgili olan önemli bir kavramdır, ilişkilerarası perspektifte bağımlılık taraflar arasındadır ve bu açıdan birbirine bağımlılık olarak da isimlendirilebilir (Gulati ve Sytch, 2007).

Daha önceki çalışmalarda, birbirine bağımlılık tarafların sahip olduğu kaynaklar ile ilişkilendirilmiştir (Turnbull, Ford ve Cunningham, 1996; Ford ve Mcdowell, 1999). Kaynaklardan kasıt, firmalar tarafından sahip olunan ve onlara güç ya da zayıflık verebilen somut ve soyut varlıklardır (Caves, 1980; Wernerfelt, 1984). Kaynak Bağımlılığı Teorisi'ne göre (Pfeffer, 1972), tarafların sistemdeki varlığı kaynakların gönüllü paylaşımına bağlıdır.

Buna paralel olarak Kaynak Bazlı Perspektif (Vanpoucke, Vereecke, and Wetzels, 2014), rekabetçi avantaj elde etmenin yolunun ikame edilemeyecek ayırt edici ve



değerli kaynaklara sahip olmak olduğunu öne sürmektedir. Özetle, somut ve soyut kavramlar gücün ana belirleyicileri olarak görülmektedir.

### 2.3.1. Güç Dengesi

Tedarik zincirinde aktörler arasındaki güç dengesi kaynaklara sahip olma durumuna göre değişebilmektedir. Tipik bir tedarik zincirinde aktörlerin farklılaşması düşünüldüğünde aktörler arasında güç asimetrisi beklenmektedir (Belaya, Gagalyuk ve Hanf, 2009). Zayıf aktörün korunmasız olduğu ve güçlü aktörün fırsatçılığına maruz kaldığı düşünülmektedir (Shervani, Frazier ve Challagalla, 2007). Bu nedenle, asimetrik güç aktörler arasındaki azalan güvene işaret ederken, simetrik güç tarafların birbirleri hakkında olumlu görüşlere sahip olmasıyla artan güvene işaret etmektedir (Anderson ve Weitz, 1989; McEvily, Perrone ve Zaheer, 2003).

Ancak yakın zamandaki çalışmalarında Cuevas vd. (2015), böylesine basit bir sonuç çıkarmanın kolay olmadığını ve aktörler arasında hedef uyumunun güveni geliştirmede önemli bir factor olduğunu göstermiştir. Bu nedenle, asimetrik güç ilişki kalitesi bakımından zararlı görülse de gücün asimetrik ya da simetrik oluşunu önemsiz kılan birtakım aracı faktörler ilişkiye yön veren ana etmenler olarak öne çıkmaktadır. Tarafların ortak bir hedefe sahip olması, güveni ve ilişkilerin kalitesini arttıran bu etmenlerden biridir (Cuevas vd., 2015). Ortak bağımlı ilişkiler güveni ve ilişkilerde kaliteyi arttırmada daha avantajlı görülmektedir (Lawler ve Yoon, 1996).

Güç, kurumlararası ilişkilerin en önemli özelliklerinden biri olsa da güç ve bağımlılığın kurumlararası ilişkileri şekillendirmedeki ve performanstaki rolü literatürde kesin sonuçlara varmamıştır (Cuevas vd., 2015). Öncelikle güç tipleri değerlendirilmelidir.

### 2.3.2. Güç Tipi

French ve Raven (1959) beş tip güç tipi tanımlamıştır: *uzman gücü*, *referans gücü*, *ödül gücü*, *baskıcı güç* ve *yasal güç*. Bu güç tipleri iki grupta sınıflandırılmıştır: aracılı ve aracısız (Zhao, Huo, Flynn ve Yeung, 2008). *Aracısız güç* tipleri daha içten ve olumludur (Benton ve Maloni, 2015). *Uzman gücü* ve *referans gücü* aracısız iki güç tipidir (Chae, Choi ve Hur, 2017). Uzman gücü bir taraf ya da firma diğerinden daha fazla diğerinden daha fazla uzmanlık ve bilgiye sahip olduğunda mevcuttur (Palmatier, Dant, Grewal ve Evans, 2006; Nyaga, Lynch, Marshall ve Ambrose, 2013). Referans gücü bir taraf diğer tarafın kendisinden daha iyi performans sergilediğini düşündüğünde kendisini ve kendi değerlerini diğer üstün taraf ile özdeşleştirdiğinde oluşmaktadır (French ve Raven, 1959). Önceki çalışmalar uzman ve referans gücünün güven ve bağlılığı geliştiren bir ortam sağladığını doğrulamıştır (Crook ve Combs, 2007).

Diğer ana güç tipi sınıflandırması aracılı güç tipleridir. Bu güç tipleri, gücün ortaya çıkabilmesi için hedefin iç motivasyonuna dayanan aracısız güç tiplerinin aksine güçlü tarafın hedefi istenilen yönde davranmaya zorladığı dış motivasyonu gerektirmektedir (Brown, Lusch ve Nicholson, 1995; Benton ve Maloni, 2005). Aracılı güç tipleri *ödül gücü*, *baskıcı güç* ve *yasal gücü* içermektedir (Nyaga vd., 2013). Ödül gücü güçlü tarafın hedefi etkilemek amacıyla ona ödül sunmasıyla oluşmaktadır (French ve Raven, 1959). Baskıcı güç güçlü tarafın hedefi etkilemek amaçlı onu cezalandırması durumunda oluşmaktadır (Molm, 1988). Yasal güç ise yasal anlaşmalara dayanarak bir tarafın diğerini etkileme çabaları ile ilgilidir (Nyaga vd., 2013).

Aracılı ve aracısız güç tiplerinin ilişkiler üzerindeki etkisi farklıdır (Benton ve Maloni, 2005). Bu bakımdan, ödül gücü, yasal güç ve baskıcı güç gibi aracılı güç tipleri performans üzerindeki etkisi olumsuzken uzman ve referans gücü gibi aracısız güç tiplerinin işbirliğini teşvik ederek performans üzerinde olumlu etkileri olduğu bulunmuştur (Maloni ve Benton, 2000; Jonsson ve Zineldin; 2003, Zhao vd., 2008).

Müzik endüstrisinde kurumlararası ilişkiler, aktörlerin müziğin geleceği hakkında bilgi sahibi olmaları, güven sahibi olmaları ve müziğin ve sanatçıların gelişimde becerilere sahip olmaları temelinde şekillenmektedir (Gander ve Rieple, 2004). Gander ve Rieple'a göre (2004), büyük yapım şirketleri ve küçük ölçekli bağımsız yapım şirketleri müzik endüstrisini şekillendiren iki tip aktördür. Dolayısıyla, bu aktörlerin kaynakları düşünüldüğünde bu aktörler farklı güç tiplerine sahip olabilir ve bu aktörler arasındaki bağımlılıklar da farklı güç tiplerinin bir sonucudur.

### 3. Yöntem

Bu tez gelişen Türk dijital müzik endüstrisinde tedarik zinciri karmaşıklığını ele almak amacıyla tekli vaka çalışmasını benimsemiştir. Dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığa ve kurumlararası ilişkilere etkisi ile ilgili keşifçi yapıdaki araştırma soruları düşünüldüğünde vaka çalışmasının diğer metotlara göre daha uygun olduğu görülmektedir (Yin, 1994).

IFPI tarafından yayımlanan rakamlara göre müzikte dijitalleşmede hâlâ dönüşüm aşamasında olan ülkelerden biri olarak araştırma bağlamında Türkiye seçilmiştir (IFPI, 2018). Ayrıca, tedarik zinciri karmaşıklığını incelemek ana aktörlerin ilişki özelliklerini araştırmayı gerekli kılmaktadır. Bu nedenle, bu tez aşağıdaki araştırma sorularını cevaplamayı amaçlamaktadır.

*“Dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığa etkisi nedir?”*

*“Dijitalleşmenin Türk müzik endüstrisi güç özelliklerine etkisi nedir?”*

Çalışmanın örneklem birimi, tüm Türk dijital müzik endüstrisi tedarik zinciridir. Bu tekli vaka çalışmasında, ana veri toplama kaynağı *büyük yapım şirketleri*, *'indie'* denilen *küçük ölçekli yapım şirketleri*, *dijital distributor şirketleri*, *dijital platformlar* ve *meslek birliklerinin* üst düzey yöneticileri ile gerçekleştirilen yarı

yapılandırılmış görüşmelerdir. Toplamda, ilk turda İstanbul ve Ankara'daki yöneticiler ile 20 yarı yapılandırılmış görüşme gerçekleştirilmiştir. İlk turdaki görüşmelerin süreleri 45-85 dakika arasında değişmektedir.

İlk tur görüşmelerin Türk müzik tedarik zincirinde karmaşıklığı irdelemede yeterli olmadığı görüldüğünden 2019'da Mayıs-Haziran arası ikinci tur görüşmeler gerçekleştirilmiştir. İkinci turda Ankara'da bulunan 3 indie yapım firmasıyla dataylı görüşmeler gerçekleştirilmiştir. İkinci tur görüşmeler karmaşıklık bakımından daha detaylıdır ve bu görüşmenin süreleri 60-105 dakika arasında değişmektedir. Toplamda 23 görüşme yapılmıştır. 23 görüşme yapılmasının sebebi özellikle detaylı ikinci tur görüşmelerden sonra yöneticilerden ilk tur görüşmelerdeki cevaplara paralel benzer cevapların gelmiş olmasıdır. Bu noktada, daha fazla görüşme yapmasına gerek olmadığı düşünülerek görüşmeler sonlandırılmıştır.

Görüşme soruları farklı konularda iki bölümdedir. Bu bölümler şu şekildedir.

- I. Tedarik Zincirinde Karmaşıklık & Güç
- II. Müzik Endüstrisi & Dijitalleşme

Sorular tedarik zincirinde karmaşıklık, müzik tedarik zincirleri ile güç ve dijitalleşme ile ilgili makaleler baz alınarak oluşturulmuştur.

Veri analizinde araştırılan ana ölçüler/yapılar için bir kodlama şablonu oluşturulmuştur. Bu şablonda ana yapıların tanımı yapılmış ve anahtar kelimeler hazırlanmıştır. Daha sonra tedarik zinciri yönetimi alanında nitel veri analizinde oldukça benimsenen bir uygulama olarak bu kodlama şablonu baz alınıp görüşmecilerin alıntıları kodlanmıştır. (Foerstl, Azadegan, Leppelt ve Hartmann, 2015; Busse, Meinschmidt ve Foerstl, 2017). Bu uygulama gerçekleştirilen tüm 23 görüşme için benimsenmiştir. Son olarak görüşme kodlamaları araştırılan her ana yapı için ayrıca toplanmıştır, bu da araştırmacının bulguları toplamasına ve görüşmeler arasındaki benzerlik ve farklılıkları tespit edebilmesine olanak sağlamıştır.

#### 4. Bulgular

Gerçekleştirilen 23 görüşme baz alınarak ana bulgular görüşmecilerin tedarik zincirinde karmaşıklık ölçüleri ve güç hakkındaki temsili cümlelerinden çıkarılmıştır. Buna göre sayı ölçüsünde, aktörler için artan dijital alternatif kanallar ile birlikte dijital taraftaki aktörlerin sayısında artış bulunmuştur. Fiziksel üretim hacminin düşüşü ile birlikte fiziksel taraftaki aktörlerin sayısında azalış bulunmuştur. Dijital tarafta üretimin hacmindeki yüksek artıştan kaynaklı toplam üretim hacminde artış bulunmuştur. Dijitalleşmenin getirdiği konfor ve kolaylık birçok süreci ortadan kaldırdığı için tedarik zincirinde kritik fonksiyonlardaki süreçlerin sayısında da azalma bulunmuştur.

Çeşitlilik ölçüsünde, aktörler arasında organizasyonel farklılıklardan ziyade coğrafik ve kültürel farklılıkların önemli olduğu bulunmuştur. Müzik janrı düşünüldüğünde indie yapım şirketlerinde çeşitlilik daha fazla bulunmuştur. Aktörlerin boyut (büyüklük) bakımından farklılaşması en çok büyük yapım şirketlerinde bulunmuştur. Yapım şirketleri, dijital distribütörler ve sahne mekânlarının fonksiyonları bakımından çeşitli olmadığı bulunmuştur. Ürünlerin çeşitli olduğu süreçlerin ise daha az çeşitli olduğu bulunmuştur.

Etkileşim ölçüsünde, dijitalleşme ile bilgi ve materyal paylaşımının kolay olmasının ilişkilerin sıklığını arttırdığı ve bunun da üretim hacmini arttırdığı ya da üretim hacminin artmasının ilişkilerin sıklığını arttırdığı bulunmuştur. İlişkilerin yoğunluğunun dijitalleşme öncesi döneme göre daha fazla olduğu bulunmuştur. Büyük yapım şirketleri ve indie yapım şirketleri arasındaki ya da yapım şirketleri, dijital distribütörler ve platformlar arasındaki işbirlikçi ilişkinin zorunluluktan kaynaklanıyor olabileceği bulunmuştur. En olası işbirlikçi ilişki büyük yapım şirketleri ile indie yapım şirketleri arasında bulunmuştur; çünkü bu ilişki her iki tarafında kazançlı çıktığı bir kazan-kazan ilişkisidir. Öte yandan, aktörler arasındaki rekabetin şiddetinin eskiye nazaran daha az olduğu ve rekabetin oluşabilmesi için aktörler arasında güç dengesi olması gerektiği bulunmuştur. Ayrıca, büyük yapım

şirketlerinin ve şarkıcıların kendi aralarındaki ilişkilerin hem işbirlikçi hem rekabetçi olduğu bulunmuştur.

Dinamik karmaşıklıkta, aktörler arasında gelir paylaşımında ve meslek birlikleri tarafından ödenen teliflerde belirsizlikler ve şeffaflık hakkında endişeler olduğu bulunmuştur. Yasal otoriteler tarafından şeffaf ve adil olmayan gelir ve telif paylaşımı hususunda gerekli yasal adımların atılmadığı bulunmuştur. Meslek birlikleri düşünülmediğinde, şeffaflık sağlandığında dijital yapıda aktörler arasında belirsizlik olmadığı bulunmuştur. Büyük aktörlerin kritik bilgileri diğer aktörlerle paylaşmayarak fırsatçı davranıp güçlerini kendi lehlerine kullanmalarının şeffaflığa zarar verme riskinin olduğu bulunmuştur. YouTube’da izlenme rakamlarının satın alınmasına dair hile spekülasyonlarının olduğu bulunmuştur. Dijital yapının tüketicilerin taleplerindeki değişiklikler ve sosyal medyadaki değişebilen trendler ile ani değişikliklere açık olduğu, bunun da sürdürülebilirliğe zarar verdiği bulunmuştur.

Güç bakımından, her ne kadar aktörler arasında büyük aktörler lehine bir güç eşitsizliği olsa da dijitalleşme ile artan özgürlük ile birlikte güç dinamiklerinin daha dengeli bir hâl aldığı bulunmuştur. Yapım şirketleri, dijital distribütörler ve şarkıcılar gibi belli aktör grupları içerisinde güç dengesi bulunmuştur. Büyük yapım şirketlerinin ödül gücüne sahip olduğu ve resmî ve şeffaf olmayan ahbap-çavuş ilişkilerinin geçerli olduğu tedarik ağlarına dayanarak indie yapım şirketleri ile birlikte baskıcı güç uygulayıp şeffaflığa zarar verdikleri bulunmuştur. Diğer aktörler ile bağlayıcı yasal anlaşmaları olan resmî otoriteler, büyük aktörler ve meslek birliklerinin yasa güç sahibi oldukları ve bu gücün şeffaflık üzerinde olumlu etkisi olduğu bulunmuştur. Dijitalleşme sürecinde öncü olan büyük yapım şirketleri, dijital distribütörler ve dijital platformlar gibi büyük aktörlerin uzman gücü olduğu şarkıcıların ise referans gücü olduğu bulunmuştur. Bu uzman ve referans gücün ise ilişkiler üzerinde olumlu etkileri olduğu bulunmuştur.

## 5. Tartışma

Bu çalışmadan çıkarılan genel sonuç, yapısal ve dinamik karmaşıklığıdaki artış göz önüne alındığında dijitalleşmenin Türk müzik endüstrisinde tedarik zinciri karmaşıklığını arttırdığıdır. Toplamda aktörlerin sayısındaki önemli artış onların etkileşim yoğunluğunu ve yapının dinamik karmaşıklığını arttırmaktadır. Bu karmaşıklık daha iyi anlayabilmek için yapısal karmaşıklık ölçüleri, güç ve dinamik karmaşıklık arasındaki bağlantıları da irdelemek gerekmektedir.

Sayı ve çeşitlilik ölçüleri düşünüldüğünde, üretim hacmindeki ve aktörlerin sayısındaki artışın ürünlerin çeşitliliğini arttırdığı görülmektedir. Aynı zamanda bu, süreçlerdeki çeşitliliği azaltmaktadır. Ayrıca güç dinamikleri de aktörler arasındaki çeşitlilikte önemli rol oynamaktadır. Özellikle aktörlerin büyüklük bakımından farklılaşmalarının sebebi aktörler arasındaki güç asimetrisidir.

Bulgular etkileşim ölçüsü ve gücün de birbiriyle oldukça ilgili olduğunu göstermektedir. Bu açıdan, güç dengesinin aktörleri rekabete teşvik ettiği ve güç asimetrisinin aktörleri daha çok işbirliğine teşvik ettiği görülmektedir. Rekabetin ise tedarik zincirini artan ürün sayısı ve çeşitlilik ile tedarik zincirini daha verimli hâle getirdiği görülmektedir. Bu şekilde ilişkilerin yoğunluğu artmakta ve artan iletişim ile birlikte güven ortamının önü açılmaktadır.

Benzer olarak dinamik karmaşıklık ile güç arasında ve dinamik karmaşıklık ile yapısal karmaşıklık ölçüleri arasında da güçlü bağlantılar bulunmaktadır. Güç asimetrisinin zayıf taraf için belirsizliklere sebep olduğu görülmektedir. Haksız rekabet, şeffaflık eksikliği, gelirin adaletsiz bölüşümü gibi belirsizlikler aktörler arasındaki güç açığını daha da genişletmekte ya da güç asimetrisinin yoğunluğunu arttırmaktadır.

Tüketicilerin talebindeki değişikliklerin sebep olduğu belirsizlik yüzünden üretim hacmi arttırılmaktadır, ki bu da dinamik karmaşıklık ve yapısal karmaşıklık ölçüsü

sayı arasındaki bağlantının bir göstergesidir. Ayrıca, aktörlerin sayısı sabit değildir. Dijital yapının değişken doğası gereği aktörlerin sayısı değişmektedir. Benzer şekilde dinamik karmaşıklık ve yapısal karmaşıklığın çeşitlilik ölçüsü düşünüldüğünde, ürün fiyatlandırmasında standart bir prosedür uygulanmadığı için fiyatlarda çeşitlilik mevcuttur. Etkileşim ölçüsü ve dinamik karmaşıklık bağına bir örnek verilecek olursa dinamik karmaşıklık ile birlikte gelen aktörlerdeki kısa vadeli bakış açısı aktörler arasında uzun süreli ilişkiler kurulamamasına sebep olmaktadır.

Genel olarak bulgular incelendikten sonra tedarik zincirinde karmaşıklığın birbiriyle etkileşim içinde olan çeşitli ölçüleriyle birlikte komplike bir olgu olduğu görülmektedir. Bu nedenle, karmaşıklık ölçüleri birbirinden bağımsız değerlendirebilecek unsurlar değildir.

## **6. Sonuç**

Dinamik karmaşıklık ve yapısal karmaşıklık ölçülerinden sayı ve etkileşimdeki artışlar göz önüne alındığında dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığı arttırdığı görülmektedir. Ana bulgulara ek olarak Kaynak Bağımlılık Teorisi (Pfeffer, 1972) ile benzer şekilde aktörlerin artan etkileşiminin aktörler arası kaynakların artan değişimini sağladığı ve bunun da dijital yapıdaki tüm aktörler düşünüldüğünde güç eşitsizliğini azalttığı görülmüştür. Ayrıca kaynakların değişiminin aktörler arasında bir tarafın diğerine güç uygulamasının önünü açtığı ve aynı zamanda güç tiplerini belirlediği görülmüştür Kaynak Bağımlılık Teorisi'ne göre (Pfeffer, 1972), böylesine bir yapı tüm aktörleri ani değişikliklere maruz bırakacak şekilde dinamiktir. Ancak müzik tedarik zincirinde aktörler arası kaynak değişimi ile birlikte artan etkileşimlerin belirsizliği azaltmada yeterli olmadığı görülmüştür. Şeffaflığı sağlamanın Türk müzik tedarik zincirinde kritik öneme sahip olduğu bulunmuştur. Kaynak Bazlı Görüş Perspektifi'ne uygun olarak (Vanpoucke vd., 2014), güç tipleri göz önüne alındığında ikame edilemeyen eşsiz ve değerli kaynakların aktörlere rekabetçi avantaj sağladığı bulunmuştur. Türk müzik tedarik zincirinde bu kopyalanamayan, kendine özgü kaynaklara dayanan güç tiplerinin



aracısız güç tipleri olduğu bulunmuştur. Dolayısıyla, dijitalleşme sürecinde öncü olan uzman gücüne sahip aktörler ile referans gücüne sahip şarkıcıların diğer aktörlere göre rekabetçi avantaja sahip olduğu bulunmuştur.

Bundan başka, tedarik zincirinde karmaşıklığın (yapısal karmaşıklık ve dinamik karmaşıklık), karmaşıklığın ölçülerinin ve gücün tedarik zincirinde karmaşıklıkla olan bağlantısının birbirinden bağımsız olarak analiz edilemeyeceği görülmektedir.

Müzik endüstrisinde tedarik zinciri karmaşıklığındaki artışın farklı aktörler üzerinde farklı etkileri bulunmaktadır. Artan karmaşıklık bazı aktörler için fayda sağlarken bazıları için zararlı olabilmektedir. Dijital distribütörler, dijital platformlar ve sosyal medya dijitalleşme ile birlikte ortaya çıkan yeni aktörlerdir. Dijital tarafta üretim hacmi arttığı için bu aktörlerin önemi de tedarik zincirinde artmaktadır. Dijital distribütörler fonksiyon olarak çeşitli olmasa da dijital platformlar ve sosyal medya için daha fazla tüketiciye ulaşmak adına kendilerini farklılaştırma alternatifleri bulunmaktadır. Yapım şirketleri arasında ise indie yapım şirketlerinin öneminin arttığı görülmektedir. Alternatif müzik türlerinde indie yapım şirketleri iyi olsa büyük yapım şirketleri ile rekabet edebilmeleri için büyük çaplı işler yapmanın yollarını aramalıdır. Benzer şekilde, geleneksel yapım şirketleri kârlarını arttırabilmek için iş modellerini dijitalleşme ile daha uyumlu hâle getirmelilerdir. Büyük yapım şirketleri güven temelli ağlar ve işbirlikleri oluşumunda ödül ve uzman güçlerini kullanarak öncü rol oynayabilirler. Bu şekilde, karmaşıklığın arttığı yeni yapıda kontrol gücünü tekrar ellerine alabilirler. Dinamik karmaşıklıktan kaynaklanan müziğin hızlı tüketimine karşı sürdürülebilirliği sağlamak amacıyla tüm yapım şirketleri kaliteli ve uzun vadeli işler üretmelidirler.

Dahası, dijital altyapı ile uyumlu yeni sahne mekânları açılabilir ya da var olan sahne mekânları kendilerini bu doğrultuda modifiye edebilir. Resmi otoriteler şeffaflık eksikliğinden kaynaklanan belirsizliği azaltmak adına büyük yapım şirketleri, meslek birlikleri, dijital distribütörler ve dijital platformlar üzerinde yasal güçlerini devreye sokabilirler. Şarkıcılar düşünüldüğünde, büyük yapım şirketleri gibi onlar

da güven bazlı sosyal ağların oluşumunda öncü rol oynayabilirler. Bağımsız üretimde bulunabilirler ve daha fazla güç simetrisinin olduğu bir yapının oluşumuna katkıda bulunabilirler. Bunlar dışında, stüdyo müzisyenleri ve menajerler dijital ortamlara uyum sağlayabilmek için becerilerini geliştirmelidirler. Aynı doğrultuda, radyo ve televizyon kanalları da dinleyicilerini/izleyicilerini kaybetmemek adına yeni dijital aktörler ile daha fazla etkileşimde bulunmalıdırlar. Dolayısıyla, her aktör daha verimli işleyen bir tedarik zinciri için gerekli stratejik adımları atmalıdır.

Sonuç olarak bu çalışma müzik endüstrisinde dönüşüm sürecinde ve gelişmekte olan ülkelerden biri olan Türkiye’de hizmet sektöründe tedarik zinciri karmaşıklığını inceleyerek literatüre teorik ve yönetsel katkıda bulunmaktadır ve dijitalleşmenin Türk müzik tedarik zincirinde karmaşıklığı nasıl arttırdığına dair bulguları gözler önüne sermektedir.

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