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**The History of Music Distribution and its
Effects to Audience in the Sample of Turkey**

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The History of Music Distribution and its Effects to Audience in the Sample of Turkey

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Abstract

Since the beginning of human history, music has been able to find its place in every aspect of life. After a series of technological developments starting from the recording of the voice, music has become a tool that is personalized by getting out of the masses and which people can carry and consume at any time. Before the recording technologies, music was created and performed by acappella to very small audiences. Thanks to development of recording technology, music starts to be spread to mass audience and it commercialized. After this commercialization music products turned to be a part of an industry. This paper is about how music is distributed through its historical milestones and how its distributed today. The paper consists of two main parts. In the first main part there is a conceptual part about the history of music. The paper explored the secondary data from industrial and academic researches done about how music is listened in Turkey. The application part of the research consists of a survey done in Turkey in the city of İstanbul about the music listening habits of Turkish music listener. The main question of the research is ‘how people listen to music in millennium era’ in the sample of Turkey. In the conclusion part of the research there is a statistical analysis showing that people have a big demand to the digital platforms for listening to music rather than traditional platforms. This finding is discussed on the effects of economy and industrial structure of music industry.

Keywords: Music, Music Consumption, Digital Music, Turkey.

Introduction

Music has placed itself in all areas and moments of life since the beginning of human history. After a series of technological developments starting from recording of sound, music has evolved into a tool that is personalized out of its massiveness and that people can carry and consume at any moment. Especially with proliferation of stream technology, music consumption among young people is increasing every day with the ability to access desired music from mobile phones via the Internet.

This study was conducted to determine music consumption habits of today's millennium generation youth in Turkey. A conceptual research was conducted related to music in the first part of the study, and a research was conducted on how music was consumed in the first part of the study.

Music and the Concept of Music History

As old as human history, music is a versatile concept that includes emotions and ideologies as well as cultural and artistic aspects. Music is one of the most fundamental forms of humans' artistic expression. Although it is not possible to know when people first started to make music, it is possible to find instruments that are considered to have been used for producing music from archaeological excavations. Studies have proved that people have generally produced music "somehow" for a very long time (Çuhadar, 2016: 219).

Music is a phenomenon that opens doors of a magical world and that can infiltrate even the most secluded corners of everyday life. Even hitting a blank object can turn into notes. Even reefs and bamboos can produce music on their own with wind when they are wet. Therefore, music is a natural tool that exists nearly in almost all parts of nature in addition to the everyday life of man and that is only waiting to be produced.

Music exists in every known culture in various types based on time and space. All the people in the world have a music including tribal groups isolated away from the modern world. The music of a culture is influenced by many different factors such as social and economic factors, climate and access to technology. Emotions and thoughts that music expresses depend on factors such as situation in which music is played and listened, music player and attitude towards composer. These factors vary between regions and periods (Sakar, 2009: 377).

History of music is as old as history of human kind. Primitive flutes, which were determined to be 43 thousand years old with carbon date detection method, made of bird bones and ivory in the region where modern people began to settle in the Southern Slovenian border of today's Germany and Austria in 2012 are the oldest musical instrument ever known. It is believed that the people of that period used this instrument as a part of hunting rituals and primitive cultural meetings (Johnson-Laird & Oatley, 2008).

The oldest known forms of music are most likely drum-based ones. Percussion instruments were the easiest musical instruments to reach during those periods. Rocks, rods, tree branches were used as simple musical instruments. There was of course no music writing or notes during that period. Music works produced with percussion instruments were used by Native Americans and African Indians, depending on old religious practices. The first example of modern forms of percussion instruments is the instrument dated back to 2500 BC in Denmark. This instrument is the oldest form of trumpets known today. The first examples of guitars, which are the most used string instrument nowadays, were used by Hittites in 1500 BC (Montagu, 2017).

The first known examples of recorded music are relatively from recent past. A Sumerian clay tablet dating from 4000 BC includes information on how to perform and toned a music produced to honor the Sumerian God, Ishtar. However, “Hurrian Hymn No. 6” written to the goddess Nikkal by cuneiform in the ancient city of Ugarit in Syria is the oldest known musical work dated back to 14 BC. There were special instructions on how to play the song with almost complete notes and a nine-wire lyre on this cuneiform (Joseph, 2017: 47).

Although Hurrian Hymn No. 6 is considered the oldest melody in the world, the oldest musical composition that has survived in its entirety is Greek melody “Seikilos Epitaph” dated back to 1 BC. This song was found on a woman’s tombstone and engraved on an old marble column. This work was found in the Ancient City of Tralleis during the construction of Aydın-Izmir railway in the 1880s. On this marble inscription kept at the National Museum of Denmark today, firstly the following words are written, “*I am a tombstone, a vision. Seikilos placed me here as an infinite sign of deadly memories,*” then a short song was included with the notation, which was the lyrics of the oldest known song (Findlay, 2015: 146):

*“Shine while alive,
Never feeling sorry,
Life is there just for a short while,
And life demands everything back...”*

The music created by this musical instrument, which is part of hunting rituals, began to evolve in Ancient Greece, where different celebrations and life events, such as weddings, religious ceremonies and funerals, covered an important place in everyday lives. Live music performances were often made with the effect of the theater developed in this period. There are findings that many elements, such as the note and scale used to compose music today, were used for the first time in Ancient Greece (Sakar, 2009: 379).

Greece is the culture in which all art branches, as well as music, owe their origins. Pythagoras’ octave scale is a cornerstone that allows music to be notated and recorded. Because music was a passion for the Ancient Greek society. They developed their artistic skills by passing their leisure time with music as much music as possible. Trumpet competitions, which were held in

400 BC, are examples of music demonstrations performed live and made public in Ancient Greece. Aristotle wrote about music scientifically and gave life to notes in the known sense today (Demirgen & Esin, 2016: 520).

Figure 1. *The World's Oldest Melody Hurrian Hymn No. 6*



Source: <http://www.hurriyet.com.tr/kelebek/hayat/kayitlara-gore-dunyanin-en-eski-sarkisi-tam-3-bin-400-yasinda-26865569>.

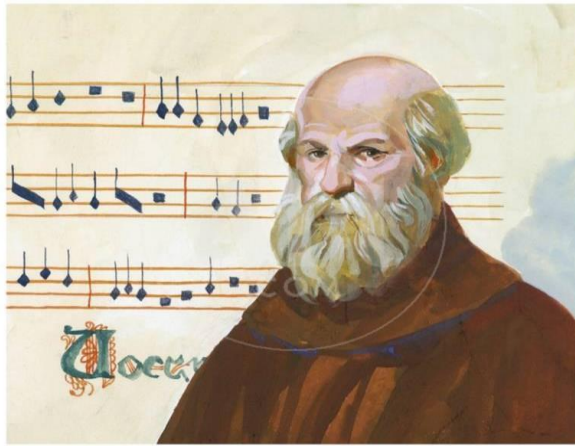
While music was influenced by Ancient Greece in ancient times, it was influenced by the church after the fall of Rome in the Middle Ages. The majority of music created after the destruction of the Roman Empire was produced with orders from the church. Therefore, the Catholic faith played an important role in development of music. Schola Cantorum, built by Pope Gregorius in 600, is known as Europe's first musical school (Demirgen & Esin, 2016: 521).

In the same period, music began to progress in China. Orchestras consisting of hundreds of musicians were established for various dyers ruling in China in 612. Although the music style for this period in China is unknown, it is possible to say that music progressed from a different arm because of the different types of music from the west, even in the last period of Asian orchestration (Marangoz, 2015: 3).

Song school opened in the Monastery of Fuda in 744 also increased the interest in professional practice of music. In the 790s, parts of Schola Cantorum were also seen in Paris, Cologne and Metz. In the 850s, the first samples of music were seen in polyphonic (using more than one musical instrument and vocals at a time). With the onset of the second millennium, polyphonic tunes were chosen in the Gregorian Hybrias (Macey, 2002).

In the second millennium, Guido D'arezzo's contributions to music theory are undeniable. D'arezzo invented standard notation and solfege. This innovation influenced almost every modern vocalist. Despite all these developments, music remained under the influence of church in the Middle Ages. Unfortunately, it is not possible to access music remaining from that period today. Today, a few medieval rituals found in the Roman Catholic Church are one of the few musical works that have survived that period (Kaygısız, 2017: 12).

Figure 2. *Guido D'Arezzo*



Source: <https://www.mynet.com/notalarin-isimleri-nereden-geliyor-190101089654>.

The Renaissance music era introduced a clearer, more sound-centric melody. These songs joined the balanced polyphoni and created pieces that people could easily sing. The chords became more flexible and made it easier for artist to adapt artwork to his style. In the end, with the emergence of the printing press, music works began to be printed, distributed, taught and disseminated (Mimaroglu, 2017: 15).

While the sacred music (divine) was still dominant during the Renaissance, other musics also began to spread. Significant expansions also experienced in instrumental music repertoires. New instruments, including Klavikor and Virginal (a kind of keyboard), were invented during this period, and many existing instruments were improved. The chores, however, were the main forms of polyphonies for hymns. Other vocal forms included motets (hymn without music) and madrigals. Instrumental works were usually short polyphonic artifacts or music created for dancing (Yıldız, 2000: 70).

Instrumental music began to revolutionize in the baroque period, and the music became an artistic identity by getting rid of divine monopoly. Composers of the period also began to add improvisations to their works. Baroque music is often very ornate, colorful and rich in patterns compared to its predecessors. For example, opera is considered the beginning of the

Baroque period. Opera was born in the early 17th century. This unique form combines poetry, theater, visual arts and music. During this period, a group of Italian intellectuals wanted to re-capture the spirit of ancient Greek drama in which music played a key role. The first major opera was the piece, “Orpheus”, by Claudio Monteverdi that was first performed in 1607. Vivaldi’s famous concert set, the Four Seasons, is a famous example of the music of the period. Although imitation polyphony formed the basis of musical composition, homophonic music became increasingly important. This genre was important in opera and other solo vocal songs, because it focused audience’s attention on singer’s impressive melody. Homophonic genre gradually spread in instrumental music as well (Ertekin, 2007: 9).

Figure 3. Claudio Monteverdi’s work “Orfeo”



Source: <https://edutheque.philharmoniedeparis.fr/0752026-l-orfeo-de-claudio-monteverdi.aspx>.

The classical period (the 18th century) is the peak years of the artistic form of music. During this period, composers created different tunes and chords by combining music components. Beethoven’s Fifth Symphony emerged as the most important and memorable work of this period. Western Art Music during the classical period was characterized by European trained elite containing the use of a unified, complex, standardized musical notation. As of the Middle ages, Western Art Music positioned itself as a culturally alternative music to folk and dance music of ordinary people (Kaygısız, 2017: 17).

One of the most important developments of the classical period is the growth of folk concerts. Although the aristocracy continued to play an important role in music life, it became possible for composers to survive without being an employee of a person or family. This also meant that concerts were no longer confined to palace halls. Composers organized concerts with their own music, and these concerts attracted great audiences. Growing

popularity of public concerts had a strong impact on the growth of orchestra. Although chamber music and solo works were played at home or in other specialty environments, orchestra concerts were designed for large public spaces. As a result, symphonic music composers gradually expanded the size of orchestra to adapt to this extended musical vision (Mimaroğlu, 2017: 20).

The Romantic Period (the 19th Century) brought the search for emotion and meaning in the art of music. However, music was performed by virtuosos in the Romantic Period. Highly skilled artists and especially pianists, violinists and singers became extremely popular. But, since composers are virtuoso artists, the music they composed would be extremely difficult to play. The Romantic period was a period in which artist was glorified, not music.

In the 20th century, music was massified with the invention of radio. After the invention of recording devices and radio, a new style, music taste, tempo and form began to emerge almost every decade in the 20th century. The effect of technological developments has resulted in the change of music listening patterns (Nacakcı & Canbay, 2015: 253).

The 20th century music has brought new freedom and expansive experiences with new music styles and formats that defy accepted musical rules of previous periods. Discovery of musical amplification and electronic instruments, especially the synthesizer, during the mid 20th century has revolutionized popular music and accelerated the development of new forms of music.

Historical Development of Music Listening Tools

Nowadays, wireless headsets are widely used to listen to music. However, the music listening tools did not come into wireless headphone technology in a day without a doubt. In the historical process, way and tools of listening to music have shown a huge improvement. This process, which began with the invention of phonograph in 1877, has reached on-demand stream system over the Internet today.

Phonograph: Before the phonograph invented by Thomas Edison in 1877, people could listen to their favorite songs in a concert or when someone else played in their home. Although people managed to record music to the physical media before 1877, Edison started the modern era by inventing the phonograph that could record music and play music in 1877.

Figure 4. *The Phonograph Invented by Edison*



Source: <https://en.wikipedia.org/wiki/Antique>.

While voices were recorded through a recording pen that would create indents in phonographic cylinder of a phonograph, sounds on the cylinder could be listened again and again by means of a track pen tool, diaphragm and iconic horn. The first phonograph, which Edison invented, consisted of tin foil wrapped around a metal cylinder. 10 years after its invention, a group of engineers, including Alexander Graham Bell, invented a wax-coated cardboard phonograph cylinder. Thereupon, Edison created a cylinder entirely of wax to record new voices, which was the ancestor of recently used CD-RW and DVD-RW (Suisman, 2010: 15-16). Over time, wax was hardened, and the number of reuses was over 100. The 1890 was the beginning of transition to flat discs (records). In 1903, a 10-inch and 78 rpm disc, replacing the wax cylinder, became the most popular size for several years, allowing for three minutes of music recording. Then, the 12-inch 33 RPM disc (Long Play-LP), on which 20 minutes of music could be recorded on each side, dominated the market. After the Second World War, 45 rpm records became widespread. Since one song could be recorded on each side of these records, they started to be called 45's. Materials belonging to this technology discontinued today are exhibited at the London Science Museum (Osborne, 2012: 27).

Figure 5. *Records Called Long Play*



Source: http://www.avelamia.com/201906_elegias.htm.

Radio: 19. The radio invented in the early 20th century as a result of a series of technological developments during the past century created a significant leap in the age of communication. In the advancement of radio technique, names such as James Clark Maxwell, Heinrich Hertz, Guglielmo Marconi and Lee de Forest are of great influence (Aziz, 2012: 5). Radio waves suggested by Maxwell is 1860, and Hertz confirmed Maxwell's claim in 1886 and gave his name to radio waves. On the other hand, Marconi managed to send the voice to a distant distance for the first time in 1901. De Forest advanced the technique by placing an antenna in the Eiffel Tower in 1907 (MEB, 2008). Although amateur radio activities were banned during World War I, the first commercial radio broadcast in the United States began in 1922 after the war. With the discovery of FM waves, more quality and uninterrupted radio broadcasting period began. Towards the middle of the 20th century, the radio took its place in the main corner of houses. In 1947, the invention of transistor played an important role. The invention of transistor made the radio smaller and more portable instead of being large and stationary (Balibeyoğlu, 2009: 6).

Figure 6. *Radio Receivers Used in 1930s-40s*



Source: https://en.wikipedia.org/wiki/Radio_receiver

The radio came to Turkey in 1927. With the law issued in 1926, the radio operation was given to the Radiotelephone Turkish Joint Stock Company for 10 years, and the company also received the right to broadcast radio (Aziz, 2012: 8). Radio is one of the most widely used music listening tools in traffic today. Rush hours are moments when radio is listened most.

Cassette tape: In 1958, Radio Corporation of America (RCA) released the RCA tape and changed the future of home music consumption. Before this cartridge, magnetic tapes were not an ideal and realistic option for home use. Because the roller system was pretty complicated. Until this period, people used to consume music first through phonograph and then radio (Canyakan, 2017: 184).

Figure 7. *The Most Popular Cassette Brand of the Eighties, TDK's 90 Minute Cassette Tape*



Source: <https://www.thecourier.co.uk/fp/news/local/dundee/549836/music-cassettes-new-vinyl/>.

Cassette tape was the first tool to encode noticeably higher quality audio into the magnetic tape media for home use. In contrast, the RCA tape was removed from the market due to the lack of widespread use in 1964, although it offered a 60-minute high-quality home music potential. In 1964, with the development of 8-piece tapes, 46-minute cassettes became widespread in houses and automobiles in the 1960s and 1970s (Canyakan, 2017: 185). After Philips' 46's tapes had dominated the market in the early 1970s, musical consumption began to personalize with a more important invention than the cassette itself in 1979. Sony's invention, the Walkman, was the beginning of today's understanding of mobile music. Released with the name of Sound-About in the United States, with the name of Stowaway in England, and with the name Freestyle in Sweden, the Walkman has changed the concept of listening to music. Audiences were no longer convicted of large radios or large cassette players thanks to the Walkman. Now, they could take their music with them whenever they wished. In Addition, the first Walkman had two headphone inputs, making it possible to listen to music with friends (Kürşat, 2009: 163). In 1983, the cassettes reached the largest sales figures in history thanks to the Walkman. In addition, with the release of rechargeable batteries, the 1980s and 1990s were the golden ages for the Walkman. The Walkman name is so iconic that portable CD players and MP3 players were also called Walkman in the next period. Briefly, the Walkman has changed the way people listen to music and has been an important marketing success.

Figure 8. *Sony Brand Walkman Image Produced in 1980*



Source: <https://www.teknomani.com/2018/01/teknoloji-nostaljisi-1980ler.html>.

Beginning of the Digital Age: Compact Discs (CDs): Although the development of digital recording materials to be called as the ancestor of CDs began in the 1960s, the CD format was standardized and widespread in the 1980s (Canyakan, 2017: 186). Before the CD, magnetic tape data were mechanically read with a sensor that transformed a magnetic or physical model into an electrical signal. Using a laser to read data encoded on disk in CDs has been an important step forward in audio technology. In 1981, the ABBA Group's 3-song album, *The Visitors*, was the first popular music to be printed on CD. Right after that, Billy Joel's 9-song *52th Street* album was the first full album to be printed on CD. All musical publications published after this album included the CD version during the late 80s, 90s and early 2000s (O'Regan, 2018: 198).

Figure 9. *The Visitors CD by The ABBA Group*



Source: <https://www.discogs.com/ABBA-The-Visitors/release/12103252>.

In the late 1980s, the popularity of CDs began to increase. Decreasing cost of the CD players and albums printed with CDs, CDs having 74 minutes of play time, high sound quality, the resistance of the laser to dust and other particles were all effective reasons in this popularization. CDs were adopted by the audience in the 1990s and became the main music consumption tool.

Although the CD technology remained virtually unchanged throughout its life, some experiments were also conducted. For example, in 1983, CD-RWs (rewritable CDs) were developed. In 1985, CD-ROMs were released on computers, and in the next period, the products using the CD technology infrastructure such as Video CD, Super Video CD, DVD, HD DVD, Blu-Ray Discs have been introduced. However, the overall logic for the music consumption of CDs has remained the same (O'Regan, 2018: 198).

Figure 10. *Discs Revealing CD – DVD - Blue Ray Technology*



Source: <https://www.quora.com/What-is-the-difference-between-CD-DVD-and-Blu-ray-discs>.

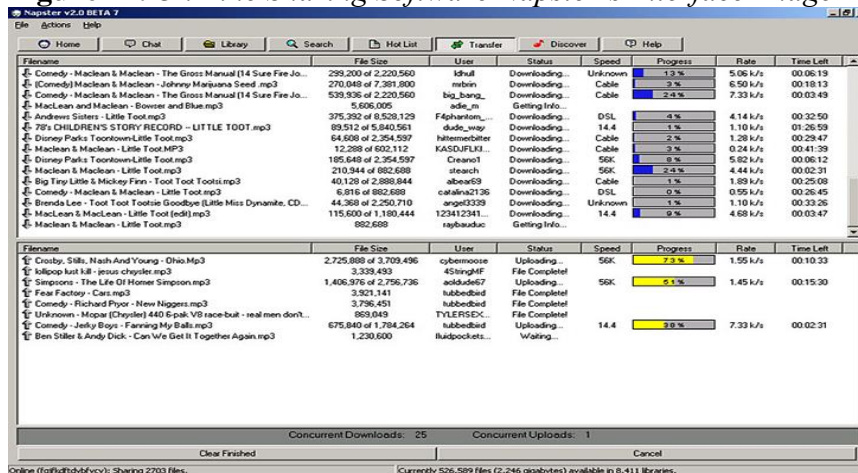
Because the only thing that has not changed is the change itself, the CDs have also been defeated in the spirit of time, and digital music has begun to move in MP3 format.

Emergence of Electronic Music: MP3s and MP3 Players: The MP3 format has been a major breakthrough in the music market to ensure integration with the Internet. Studies on this format began in 1986. In 1986, Karlheinz Brandenburg created the coding technique and separated the sound into three layers. The system was based on priority of which layer should be recorded and which can be discarded. However, Brandenburg, who found this method complex, worked on a new technique based on the boundaries of the human ear, and in 1988, he formed the team of Motion Picture Experts Group (MPEG). Due to the inability to reach a consensus on which would be more efficient among various audio compression techniques suggested by this community aiming to establish a media standard and move videos to CD-ROM, they decided to create a subgroup for audio compression techniques. These standards were called Layer I, Layer II and Layer III. With the creation of standards, the highest sound quality using the lowest bandwidth emerged as Layer III. As a result of these studies, with reference to the idea that Layer III should be the sound standard of Internet environment, in 1995, a file extension for this audio technology was sought, and researchers concluded on .mp3 extension. July 14, 1995, when the File extension was officially registered, became the birth date of mp3 in a sense. The first media player to use this format was Winamp (Castelan & Khodja, 2015: 25).

Figure 11. *World's First MP3 Player, Winamp*

Source: <https://onedio.com/haber/nostalji-zamani-28-ile-35-yas-arasindaki-herkesin-gulumseyerek-hatirlayacagi-23-ekran-goruntusu-739857>.

The inevitable rise of the MP3 technology initiated the era of peer-sharing music and led to the rise of Napster, subject to many legal problems and lawsuits. Napster reached almost 25 million users in 2001 and focused on mp3 sharing. Although it was a technological breakthrough, the P2P sharing system was subject to severe criticism and litigation because it provided the sharing and dissemination of music in a pirate way. In 2000, a major compensation lawsuit was issued against Napster due to leaking of “I Disappear”, by Metallica, one of the most important trash metal bands in history, prepared for the soundtrack of a film, and even due to playing of this song on the radio, and this case led to the birth of the Digital Media Copyright Law during the following years. In 2001, Napster lost the case, sentenced to compensation, went bankrupt and closed (Ulrich, 2012). However, Napster’s closure did not stop sharing technology, but instantly programs using the same technology such as LimeWire, Kazaa and many others emerged. Over time, many of these services were closed with similar cases.

Figure 12. *On Line Sharing Software Napster's Interface Image*

Source: https://www.reddit.com/r/nostalgia/comments/1v98nm/downloading_songs_on_napster_with_a_56k_modem/.

With the proliferation of the MP3 format, the need for portable MP3 players was born. In 1996, Audio Highway's Listen MP3 and MPMan in 1997 are considered as the first MP3 players. However, the market was shocked and dominated by Apple iPod in 2001. Although the Samsung SPH-M1000, the first mobile phone that can play MP3, was released in 2000, the iPod with no phone capability almost seized the market with its capacity up to 1000 songs.

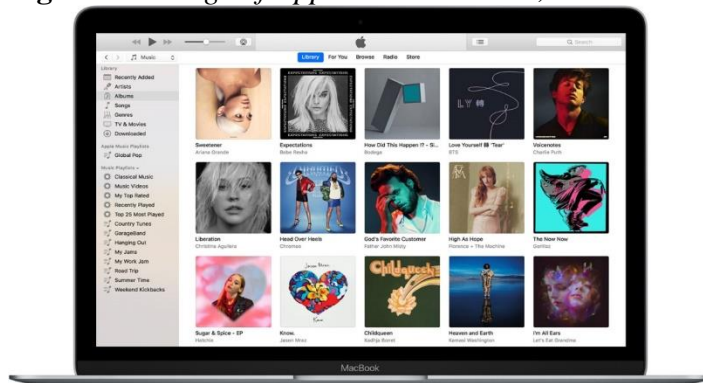
Figure 13. *Apple iPod*



Source: <https://demo.accesspressthemes.com/storevilla/product/ipod-classic-160gb-black/>.

After the first generation of iPods, iPod Mini, iPod Shuffle, iPod Nano and iPod Touch with touch screen were introduced. While many MP3 players were released in the same period, none of them could dominate the market as much as Apple's small and elegant product. It is also the role of Apple to legally purchase digital music with the iTunes service to dominate the MP3 player market. Since 2008, iTunes has been the most important music distributor in the United States, and throughout the world after 2010 (Denegri-Knott, 2015: 398).

Figure 14. *Image of Apple Music Service, iTunes*



Source: <https://www.apple.com/itunes/>.

Stream Revolution: Pandora and others: With the proliferation of digital music and the Internet, stream technology has become the new revolution emerging in music consumption. Founded in 2005, Pandora pioneered stream service, a music suggestion that has become one of the biggest music listening trends in today's modern world. This service, categorically classifying each song according to the musical characteristics of up to 450 and based on genre, was manually given by 25 employees encoding about 10 thousand songs per month, including two to four tracks. This information is given to an algorithm so that the user can listen to a particular song, album, or artists similar to a certain song. Briefly working as a kind of exploration engine, this technology introduced thousands of groups to millions of listeners around the world (Meneses, 2012: 239). Pandora, which reached the market value of 2.6 billion dollars in 2011, attracted approximately 200 million users by April, 2013.

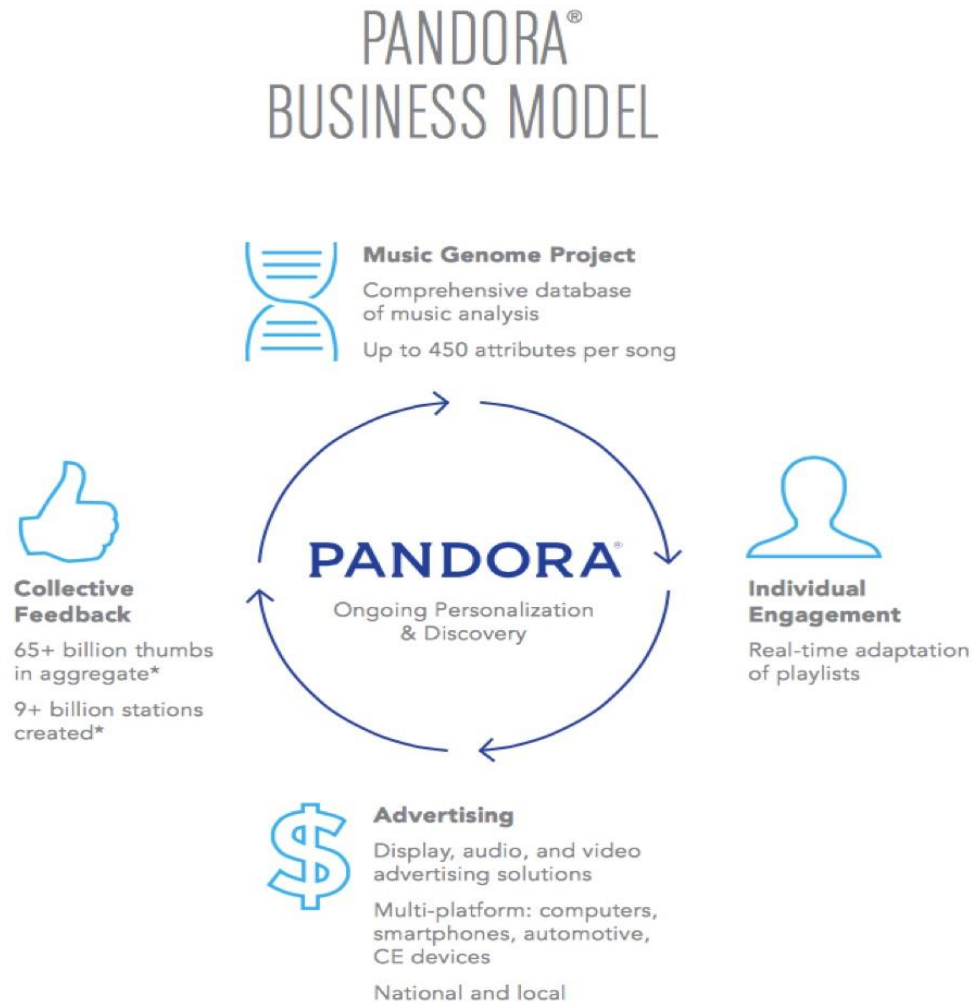
Figure 15. *World's First Music Stream Provider, Pandora's Application Image*



Source: <https://www.forbes.com/sites/bobbyowsinski/2018/10/06/heres-why-the-siriusxm-pandora-deal-makes-so-much-sense/#43a3ec242d31>.

As with any new technologies, Pandora faced many challenges. For example, although the subscription model demanded very low fees from users, it was possible for the user to listen to tens of thousands of different artists' albums and songs without purchasing a single artist's album; and this brought along many discussions. Pandora and other service providers using stream technology and artists who demanded higher royalties for copyright have consistently become a conflict. The need to listen to a million times for artists to receive a meaningful payout, due to the less than 1 cent copyright payment to registries and artists per single play led the system into controversy.

Figure 16. Pandora's Business Model in the Stream Model



Source: <https://in2sight.net/how-pandora-uses-data-to-improve-its-service-and-music-stations/>.

Pandora's success led to the proliferation of stream technology and resulted in different players investing in streaming technology. Nowadays, services such as Spotify, Fizzy, Apple Music and Tidal have dropped the popularity of their previous music listening tools and album sales, making MP3 technology unnecessary. Although artists are still distant from stream technology on copyright grounds, they are attracted to the stream music audience because they have access to tens of thousands of artists and millions of songs with a single payment. This has enabled the dissemination of stream technology, which is the most widely used method of today.

Figure 17. *Global Scale Brands Offering Stream Service in the Digital Music Industry Today*



Source: <http://www.ooc.com.tw/2016/04/22/edmschool001/>.

Studies Conducted on Music Listening Habits

Sectoral Studies

A study was conducted by Nielsen in 2015 on music listening habits of American music consumers. This study revealed that 91 percent of the American people listened to music and spent more than 24 hours a week listening to music. However, 75 percent of Americans stated that they listened to music online in a typical week. There has also been an incredible rise in listening to music with on-demand streaming, while 164 billion songs were listened through streaming in 2014, 135 billion songs were listened through streaming only in the first quarter of 2015. This reveals the incredible rise of on-demand streaming in 2015 (Nielsen, 2015).

The findings obtained from the study conducted by Music Biz and AudienceNet, two of the industry's major representatives, with 3000 Americans in July, 2018 have revealed that the most favorite media/ entertainment activity of the participants was to listen to music (20%). In the study, listening to music was more preferable than spending time on social media (19%), watching television (17%), playing games (13%) and doing sports (11%). However, listening to music for teenagers aged 16-24 (25%) was less preferable than playing games (32%) in the ranking of the most popular activities.

According to the findings obtained from the study, Americans listened to music for an average of 151 minutes. While the radio (31%) was the most popular music-listening tool and form, the radio was followed by on-demand streaming (27%), downloads (10%) and other Internet radios (such as Pandora) (5%). About 60% of the daily music listening times among 16-19 age group and 49% of the 20-24 age group consists of on-demand streaming (YouTube, Spotify, Apple Music, Amazon Prime Music, Google Play Music). 38% of on-demand streaming includes YouTube; 28% includes Spotify; 9% includes Apple Music; 7% includes Amazon Prime Music; and 4% includes Google Play Music (AudienceNet, 2018).

The Music Consumer Insight Report, published by IFPI in October, 2018, examined music consumers between the ages of 16-64 and forms of interest in musical in twenty-seven of the world's greatest music markets. The findings from this study showed that music was almost a part of our lives. The figures reached in the report are quite remarkable. For example, 17.8 hours of music are listened on average per week. Automobiles are the place where music is most listened to. Music listeners of on-demand streaming constitute 86%. YouTube is a leader in on-demand streaming channel. The 16-24 age group is the most important customer of channels offering paid streaming service (57%). According to music listening habits, music listeners prefer local music. For example, 66% of Japanese respondents prefer Japanese pop music, 69% of French respondents prefer French music, and 55% of Brazilian participants choose Brazilian Music. In China and India, the licensed music listening rate has reached 96%. However, 38% of respondents expressed downloading, i.e. listening to music in illegal ways (IFPI, 2018).

In a study by Common Sense Media research organization conducted with 8-18 years of age group 2658 American children and young people in terms of their digital media usage, it was revealed that digital media had become to a degree to rule almost all of their lives, they spared their 9 hours to digital media, and children believed in doing many things at the same time, in this context, 75% of participants indicated that they listened to music while doing their homework (Common Sense Media, 2015).

In Turkey, the inter-generation digital content consumption culture was examined by Pulicis One D&A's unit, DataWise. While the proportion of generation X consuming digital content from active Internet users in Turkey was 55%, this rate increased to 68% in the generation Z. In terms of music consumption, while generations Y and Z were above the Turkey average, the generation X was below the Turkish average. While one out of every four people in the generation Z indicated that they legally paid to listen to music in the previous month, those from generation X indicated that they paid for mobile apps not for music (DataWise, 2017).

Studies on music listening habits have also been conducted in Turkey. A research in this area was conducted by ZENNA with 1200 people aged 18 years and older with the name, "Research on Music Listening Habits" in January, 2018. According to the findings obtained from the research, the rate of unhappiness in the entire Turkish population decreased from 43% to 20% in 2018, and the proportion of people indicating that they were unhappy decreased from 60% to 39%. However, 71% of respondents expressed that music made them happy. While one in every 4 people in Turkey indicated that "they cannot live without music", music made the 18-24 age group happier than other age groups. While participants spent 1.5 hours a day listening to music, most popular tools to listen to music included mobile phone (80%), computer (58%), Radio (41%), TV (40%), MP3 player (18%) and pickup (2%). While 27% of the 18-24 age range indicated listening to music from the radio, 33% of them indicated listening to music from the TV; this rate was 61% for radio and %53 for TV among those older than 45 years old. While music was

most listened to at home (70%) and in traffic (59%), the most popular digital music services included YouTube (82%), Spotify (26%), Fizzy (24%), digital radios (22%), Google Play Music (20%) (ZENNA, 2018).

A research for the use of streaming technology was conducted by TNS. The findings obtained from research conducted with more than 20 thousand participants in 10 European countries, including Turkey, it was revealed that Spotify was the largest digital music service in Turkey with a rate of 20.1%. Besides, this rate rose to 27.8% in 15-34 age group. An interesting conclusion from the research was that, if Spotify were a traditional radio channel, it was the 6th largest in Turkey. With an access rate of up to 28%, Spotify left many radio stations behind. In addition, it was concluded that one out of two people knew Spotify, awareness on Spotify increased as the age fell, and generation Y listened to Spotify more than radio.

An interesting study making use of benefits of streaming technology was carried out by Andy Haldane, Chief Economist of the Central Bank of England. Haldane examined changes in the bank's interest rate and also wanted to examine the country's musical preferences. With streaming technology, the use of coded musical features such as tempo, energy and intensity of music was used in personalized play list recommendations, and it was examined whether the proposed music was linked to the developments in the country. The relationship between these emotional components in songs and country's economic sensitivity was examined thanks to natural language analysis, and it was observed that, especially after the global crisis of 2008, there was an increase in production and consumption of songs used in the words of anger and hatred in listeners' preferences, the production of lyrics based on trust and the frequency of listening such songs decreased. These findings show that the emotional state of the music listeners has a strong influence on the musical works they purchase (World Economic Forum, 2018).

It shows that the digital music services working with streaming technology of the American Recording Industry Association have almost seized the industry. In the report showing that online music services left behind all the revenue sources in the industry as of the first half of 2018, it was seen that 80% of revenues of music producers and distributors consisted of these services. The report also informed that more than 1 million paid subscriber registrations per month were made for the industry's giants, such as Spotify and Apple Music providing services with streaming technology (RIAA, 2018).

Academic Studies Conducted on Music Listening Habits

With the advancement of technology, studies on music listening habits has also evolved, and over the years, many studies on topics such as CD after tape, mp3 after CD, mp3 from Internet, etc. have been carried out.

For example, Pellegrino et al. (2013), examined listening to music with MP3 in the period when on-demand streaming was not yet fully disseminated. In 2010, the findings obtained from the study conducted with data gathered from secondary school students revealed that 88% of adolescent in that period

listened to music in portable vehicles with MP3, which was quite high as of the period. Listening to music with MP3 also caused these teenagers to listen to music louder.

Another research conducted in 2015 examined habits of listening to music through on-demand streaming that began to become widespread. The findings obtained from the research conducted with 200 university students studying at the University of Vermont described that Spotify was the most preferred “on-demand streaming”, and friends, families and effects of music-related Internet sites were as effective as Spotify in discovering new music, and 82% of participants went to concerts of new musicians who they discovered through Spotify. In addition, it was observed that nearly half of the participating students listened to songs by downloading in illegal ways. Additionally, university students expressed that they received music from online channels, not by physical means such as CDS, when they purchased music legally (Spinelli, 2015).

Williams, Geringer and Brittin (2019), in their study in which they examined music listening habits among middle school and high school students, studied subjects such as reason for choosing their favorite songs, duration of music listening, tools used for listening to music, tools for discovering new music and kind of music that they would like to perform. The findings obtained from the study showed that students enjoyed a musical work for musical reasons, listened to music for about 4 hours every day outside the school, listened to music from mobile devices and on-demand streaming technology, discovered new music through the Internet or special apps, and finally indicated that they listened and wanted to perform classical, jazz and rock music most. In general, findings revealed that secondary and high school students were active music listeners and music artists.

A research for the habit of listening to music in adolescence was conducted by Ter Bogt, Siotos and Delsing (2011). Findings from this research revealed that listening to music served important emotional, developmental and social functions in adolescence. Besides, findings were obtained from the research indicating that music preferences depended on the basis of rebellious and defiant behavior of adolescents.

Studies have also been carried out on the psychological effects of music listening habits. For example, a study was conducted by Miranda and Gaudreau (2011) on the effect of music listening habits on adolescents’ psychological well-being. According to the findings obtained from the study, listening to music during puberty led to different emotional well-being profiles. Social harmony in music tastes (with friends or parents) also led to emotional well-being in adolescence.

Uluçay (2018) studied the relationship between music listening habits, type of music being listened to and the tendency of violence. The findings obtained from the research conducted with a total of 1909 high school students studying in 7 provinces in 7 cities of Turkey showed that music genres that high school students listened to significantly influenced their levels of

violence, and listeners of arabesque music intensely containing elements of despair tended to be more violent.

Another study investigating the relationship between aggression and habit of listening to music was carried out by Yağışan (2013) on a sample consisting of university students. The findings obtained from the research conducted with 308 university students showed that behaviors of verbal aggression, anger, hostility and indirect aggression did not change significantly according to the preferred type of music; on the other hand, behavior of physical aggression varied significantly depending on the type of music listened to; and the physical aggression behaviors among Arabesque-Fantasy music listeners were higher than those that listened to other types of music.

The Aim, Importance and Method of the Research

Music has placed itself in all areas and moments of life since the beginning of human history. After a series of technological developments starting from recording of sound, music has evolved into a tool that is personalized out of its massiveness and that people can carry and consume at any moment. Especially with proliferation of streaming technology, music consumption among young people is increasing every day with the ability to access desired music from mobile phones via the Internet. This study was conducted to determine music consumption habits of today's millennium generation youth. The main objective of this study is to describe the transformation of young people's music consumption habits into traditional digital music in the Turkish sample. In this context, the hypothesis of "Teenagers nowadays prefer to listen to music from digital media rather than traditional channels" was tested.

The research was designed as a quantitative study. To examine the music consumption habits of participants, 16 multiple-choice questions and 1 open ended question were asked. These data were applied to a total of 665 people living within the boundaries of Istanbul Province in Turkey with ages ranging from 18 to 24 with a questionnaire. The data obtained from survey applied between 01 November – 30 December 2018 with face-to-face interviews with selected young people selected by random sampling were analyzed. Frequency analysis and Chi-squared analyses were utilized in the study. All analyses were performed through the SPSS for Windows v25.0 package software. The research is limited to the population in the range of 18 to 24 years of age living within the provinces of Istanbul.

Findings Obtained in the Study

Findings obtained from the research were summarized as follows:

- ⇒ 57.14% of the respondents were male, and 42.86% were female.
- ⇒ While participants listened to music most from the Internet (57.14%), and this rate was followed by listening to music on TV (20%), on social media (14.29%) and on radio (8.57%).

- ⇒ 62.86% of respondents paid to listen to music and expressed that they had a digital music subscription.
- ⇒ All those who participated in the study expressed that they listened to music on their mobile phones.
- ⇒ The proportion of those indicating that they listened the Internet radios was 85.71%.
- ⇒ In the study, the subjects were asked which platforms they used to listen to music and they were allowed to give more than one answer. Accordingly, while all participants used YouTube to listen to music, and the platforms that followed YouTube included Spotify (29.79%), Apple Music (15.96%), Fizy (8.51%), Muud Music (5.32%) and others (3.19%).
- ⇒ Participants were asked which music apps they had in their mobile phones, and they were allowed to give more than one answer. Accordingly, while all participants had the YouTube app on their mobile phones, 32.56% of them installed Spotify, 17.44%, of them installed Apple Music, and 9.30% installed Fizy app.
- ⇒ While 45.71% of respondents stated that they listened to music for 2-3 hours a day, 28.57% said they listened to music for 4-5 hours. Ratio of those indicating that they listened to music less than 1 hour was 11.43%, and rate of those indicating more than 5 hours for listening to music was 14.29%.
- ⇒ 80% of respondents stated that they did not share music on social media.
- ⇒ While all participants indicated that they had visited a bar and mall in the last 6 months, this rate was followed by cinema, club, concert and theater.

Research participants were also asked about the most favorite music genre, most listened music radio channel, most listened local and foreign music radio channel, and names of these radio stations. Findings are summarized in Table 2.

Accordingly:

- ⇒ The participants listen to Turkish Pop (25.84%), namely local songs, and Foreign Pop (14.61%).
- ⇒ The Participants expressed that they mostly watched Powerturk TV (21.52%) and Power TV (16.46%) on television.
- ⇒ The most listened Turkish music radios were PowerTürk FM (20%), Joy Türk FM (19.29%) and Alem FM (12.86%). The most listened foreign music radios included Metro FM (28.95%) and Power FM (23.68%)

Table 1. *Findings Obtained in the Study*

%		%	
Gender		Listening to Music from Mobile Phone	
Male	57.14	Yes	100.00
Female	42.86	No	0.00
Music Listening Tools		Listening to Internet Radios	
Internet	57.14	Yes	85.71
TV	20.00	No	14.29
Social Media	14.29	Music Apps On the Phone	
Radio	8.57	YouTube	40.70
Spending Money to Listen to Music		Spotify	32.56
Yes	62.86	Apple Music	17.44
No	37.14	Fizy	9.30
Digital Music Subscription		Daily Music Listening Time	
Yes	62.86	0-1 Hour	11.43
No	37.14	2-3 Hour	45.71
Digital Platforms Used to Listen to Music		4-5 Hour	28.57
YouTube	37.23	More than 5 Hours	14.29
Spotify	29.79	Activities Visited in the Last 6 Months	
Apple Music	15.96	Mall	24.31
Fizy	8.51	Bar	24.31
Muud Music	5.32	Cinema	22.22
Other	3.19	Clup	17.36
Making a Music Share in Social Media		Concert	6.25
Yes	20.00	Theatre	3.47
No	80.00	Karaoke Bar	2.08

Table 1. Music Listening Channels of Research Participants

Music Genre		Most Listened Turkish Music Radios	
	%		%
Turkish Pop	25.84	PowerTürk FM	20.00
Foreign Pop	14.61	Joy Türk FM	19.29
Other	13.48	Alem	12.86
Rock	13.48	Slow Türk FM	10.00
Arabesque	12.36	Süper FM	8.57
Folk Music	11.24	PAL FM	7.86
Art Music	8.99	Joy Türk Akustik	7.14
Music Channel Preference		Best	6.43
Powertürk TV	21.52	Dream Türk	5.71
Power TV	16.46	TRT FM	2.14
Number One Türk TV	15.19	Most Listened Foreign Music Radios	
Dream Türk TV	13.92	Metro FM	28.95
Dream TV	11.39	Power FM	23.68
Number One TV	10.13	Number One FM	21.05
TRT Müzik	6.33	Virgin Radio	15.79
Kral TV	5.06	Mydonose FM	10.53

Chi Square Analyses

As a result of chi-squared analysis conducted to determine whether there was a correlation between gender of the respondents and whether they paid for music, a correlation was determined between these two variables ($p=0.037 < 0.05$). Accordingly, men paid more to music compared to women.

Chi-square analysis was conducted to determine whether there was a correlation between gender of the participants and their daily music listening durations. As a result of the analysis, a correlation between two variables was determined ($p = 0.041 < 0.05$). Accordingly, while women listened to music for 4-5 hours a day, men listened to music 2-3 hours a day.

Conclusion

As a result of the research, it was observed that there was a serious increase in listening to music over digital platforms in Turkey, which was in the category of developing countries, as in countries with developed economies. Another notable issue here is that this demographic structure, which participated in the study and represented the youth, used the official digital music platforms to listen to music and paid for it. This result in Turkey shows a parallel development with world average. Digital music listening habits that started free with Napstar have become an indication that the digital music industry has grown every day by transforming it into official music platforms in Turkey as in other parts of the world. The hypothesis of the study that “young people

prefer to listen to music more from digital platforms than traditional platforms like radio – tv and physical albums.” has been confirmed in this competition sample. According to the research data, the youth in Turkey listen to music through streaming services in the Internet with a rate of 57.14% and by means of social media shares with a rate of 14.29%. People who listened to music in traditional ways remained under 30 percent in total. While mobile phone usage in listening to music is 100 percent, 85.71% rate of listening to radio via Internet also indicates that target audience listens to music more through digital media.

The digitalization of music industry and hence shaping of music habits in these proportions suggests that music industry’s journey from traditional to digital is very fast. This trend also brings along the danger that the materials such as CDs and Records among from traditional music listening tools are gradually disappearing and will not be produced anymore. This is one of the factors that will cause the traditional music economy to be affected. Now, a result that could cause albums not to be printed on CDs also raises the issue that players involved in physical music production can also be affected in employment and economic terms. It is now apparent that we face with a music industry in which a music album with its cover and its booklets containing interesting photos and song information has begun to disappear. Nevertheless, it would be beneficial to underline that the music collecting also faces danger of extinction.

Considering the fact that digital music listening rates are higher in developed countries, it is necessary to debate the question that “Will the whole future music industry go under the hegemony of digital music industry?”. Will music be listened to by a hundred percent on digital platforms, or will the CDs, which symbolize traditional music production and consumption, continue to be produced, even in a symbolic number?. The following issue to be discussed should be the answer to this question, also positive and negative effects of answers to this question on the music culture and music economy.

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