Journal of Engineering Science and Technology
Vol. 16, No. 2 (2021) 1644 - 1666

ANALYSIS ON DIGITAL MUSIC SERVICE USER BEHAVIOUR USING JUSTICE PERCEPTION FRAMEWORK

NANANG HUSIN*, ACHMAD NIZAR HIDAYANTO, BETTY PURWANDARI, RAHMAT M. SAMIK IBRAHIM

Computer Science Faculty, University of Indonesia,
Pondok Cina, Kecamatan Beji, Kota Depok, Jawa Barat 16424, Depok, Indonesia
*Corresponding Author: nangryo@gmail.com

Abstract

Despite the growth of digital music services, they are still very low compared to the peak when the physical music era reign. Many of the problems stem from the immaturity of the music industry, the failure to capture user demand, and the digital music piracy complexity. Those problems have caused billions of dollars in lost revenue and opportunities. The purpose of this research is to study user behaviour regarding the level of fairness in digital music services using the theory of Justice Perception Framework theories. The framework is chosen because it specifically caters to the user fairness behaviour, which could give insight into user consumer in choosing the digital music service. It also complements other previous studies performed with the Theory of Planned Behaviour or Theory Reasoned Action Framework for user behaviour related to digital music service offering in digital music transformation, so the result of this research can be used to make a better understanding regarding of this matter. The research is based on the Vicente Justice model which used three dimensions of justice to get a richer relationship study between justice and customer satisfaction, by using a survey questionnaire of 140 valid responders from audio group fan Kere Hore on Facebook. The reason for using data from this group because of the group member's diverse origin could represent the needed data research for Justice framework analysis between fairness of digital music service offering on user fairness by three dimensions of Justice. The analysis is done through AMOS to find the relationship between the three dimensions of justice and fairness. The research findings result could contribute to the change of all those segments involved in the transformation of digital music service, by highlighting the importance of fair treatment related to fairness in justice perception model. The research result consists of variables in regards to the user behaviour on digital music service that could be applied to make the adjustment or change, notably for the four front segments that responsible in the transformation of digital music service, which is the recording industry itself, the commercial music artist, the technological development related to the digital music, and also intellectual property rights protection in hope to be able to create an adequate well-received digital music service offering that benefit to them and also the user consumer.

Keywords: AMOS analysis, Digital music, Justice perception framework, Music service, Music transformation, User behaviour.

1. Introduction

The Music industry transformation brings a lot of changes, but a lot of its player is not ready yet. Before the music industry entered the digital age, global music sales were dominated by physical forms. However, with the advent of the MP3 digital format and the development of Internet networks in the community, the sale of music has changed from physical to digital.

As MP3 replaces compact discs (CDs) as the preferred music format, the demand for digital music has grown surprisingly. As of 2010, 47% of total US music sales were digital music, a significant increase from 9% in [1]. But in fact, sales of digital music have increased. From 2010 to 2014, sales fell by nearly 40%, but digital music sales fell by 53%. Sales reached $112.3 million [2].

Many digital music services have grown and failed. Share music files such as Napster and Kazaa to music streaming/shopping such as last.FM and Zune Marketplace. Some people refused after the first success, while others did not have enough users to continue the service [3]. To be able to provide a viable digital music service, you must comply with the needs of the user.

This user behaviour needs about digital music service the has been researched before. Giletti [4] researched piracy and the purchase of user behaviour in digital music. According to his research, most people are willing to pay for digital music but are discouraged by legal threats. Users also not subscribing to music streaming services despite being satisfied with it. Despite the violations of copyright laws, young viewers still like pirated music because they believe in the freedom of the Internet. This has encouraged the music industry and music artists to fight digital piracy and encourage punishment for use to use and pay for digital music.

Currently, much of the research regarding this matter used the theory of planned behaviour (TPB) and the theory of reasoned action (TRA) which is a special case of TPB in study regarding user behaviour in the digital music transformation [5]. Those research tries to understand the customer/user behaviour related to the digital music transformation, which including current digital music business model/service, technological involvement, IP law, piracy, and others. The current transformation of digital music is still going, with new players in the industry try to take the opportunity and the old one struggle to keep up, with each still has no clear idea of what is truly going on, especially in parts of user behaviour about digital music service offering [5]. The research on digital music service user behaviour using the Justice Perception Framework besides being able to enrich the understanding about the user/customer behaviour in digital music service, it could also give new insight on how and why user behaviour concerning their choice of digital music service, because the framework caters specifically on user/customer behaviour that could predict the variance in behaviour incremental to that explained by other variables [6].

The research is based on the user satisfaction model of Vicente Justice Perception. There are several studies already that are using the justice framework. Some studies focus only on one aspect of justice, while others use some of the dimensions together to get their related justice aspect research. In other hands, Vicente research is using three dimensions of justice, that is distributive, procedural, interactional justice that leads to a richer relationship study between justice and customer satisfaction [7], which is in line with the aim of this study, hence it is used as the based model of the research with data from survey questionnaire of 140 valid responders from audio

group Kere Hore on Facebook (https://www.facebook.com/groups/audiokerehore/) which at this time of the writing already have more than 50.000 members located mostly on the Indonesian archipelago.

When users/consumers feel that what they have to pay is unfair or when the price that they must pay to get a service or product is changing, they may feel that the situation is unjust. And when the opportunity arises, some may be resorting to piracy and some are not [8], thus this behaviour about piracy will also be included in the justice framework dimension.

The current digital music service form is mainly in service, but there is a digital service that also sells itself as a product, just like in digital music files sales. Therefore, digital music can be viewed as a product (results-oriented) or as a service (relationship-oriented). Since digital music can be seen as a product, hence it is nice to know whether if the user does it seen as a hedonic or utilitarian product, and how it could affect the fairness for a user to use them in the digital music service. that is why in this research we also included this theory as part of indicator in the justice framework, modified from Impacts of product type and representation type on the perception of justice and price fairness from Giuliana Isabella, which is included in the distributive dimension of justice where people measure the fairness of what output they get by input they have to pay. Based on this research justice fairness on the utilitarian and hedonic product, type of perception of justice and perception can be altered by different representation types using discriminatory pricing. So, when a product is represented by words, it lowers the construal level and makes people less sensitive to price changes because the user has to use their imagination to envision the product, which is inline in the case of digital music service, because when the service provider/supplier slap label high-res digital music, or audiophile-level quality music, HD Audio music compared to the standard one, they can make a differentiation of the price for the product [9]. By using the Vincent Justice instrument as an assessment tool, we can also predict which elements of each dimension of justice that perform the best in adhering to those both sides of customer satisfaction as it uses justice to measure digital music as a product or service.

The analysis is done through AMOS to find the relationship between the three dimensions of justice and fairness. The research objectives are to obtain variables as findings result of the study, so for those who are involved in the digital music industry notably the four front factor that responsible in the transformation of digital music service, which is the recording industry itself, the commercial music artist, the technological development related to the digital music, and also intellectual property rights protection could make the adjustment or change, in hope to be able to create an adequate well-received digital music service offering and grasp the upcoming available opportunity by highlighting the importance of fair treatment related to fairness for user/customer [5].

This research is divided into eight section with the first section is the introduction which provides about the background of the problems that arise, what problems are encountered and what will be done in the research to overcome them. The second section is about the theoretical foundation used in this research. The third section is the research model proposed to be used in conducting the research. The fourth section is the Methodology used which includes instrument development for the research, data collecting, and evaluation process. The fifth section contains results and analysis from the data gathered using the proposed

model. The sixth section explains the finding from data analysis from the previous section related and explained with the proposed model hypothesis. The seventh section addresses the discussion of the finding. The last is the eight sections which contain the summary conclusion, implication, and future works related to the finding and discussion before.

2. Theoretical Foundation

This section provides the necessary theory regarding digital music service offering, justice theory, and also piracy and other theories that support the study.

2.1. Perceived justice theory

The perceived justice theory is used as a framework for this research in the hope to complete other studies about user behaviour regarding digital music service.

As stated before, Justice perception is a framework which caters specifically on user/customer behaviour related to fairness, which in turn could explain user behaviour regarding fairness in the digital music service offering, the variance in behaviour incremental to that explained by other variables, and the reason why they would use them [6], in hope to complement previous research on user behaviour using TPB or TRA.

Justice theory, developed from applied research in organizational settings, focuses on how individuals socially construct from incidents of justice and injustice. Perceptions of justice are contextual., although certain norms may influence perceptions of justice in particular situations, norms do not necessarily determine or predict how individuals or groups will interpret or respond to particular situations. Nevertheless, justice research has identified certain patterns of justice-oriented behaviour, and these patterns do offer some guidance, whether formal or informal for those who are interested or involved [10].

Fairness or justice expresses that the right idea is based on moral, religious, just, fair, or legally defined actions. Organizational justice refers to the understanding of the impartiality (justice) of an organization by individuals or groups, and how to recognize and respond to their treatment. On Vicente model which used to explain the customer satisfaction, it uses three main dimensions, including distributive justice (the fairness of perceived outcomes), procedural justice (perceives the use of fair procedures to achieve the perception of outcomes), and interactive justice (perceived fairness of interpersonal treatment). These three main dimensions are interrelated and can be seen as the three components of overall fairness [11].

These three aspects of perceived justice have been proposed as a direct factor in customer satisfaction. If the three justices are met, it can be assured that the user is satisfied with the service/treatment. In reality, however, not all judicial conditions are met. The rationale to be prioritized depends on the field and circumstances. Each of them has unfair factors that may affect the fairness of users/members. On the Vicente research model, the study tries to find out which dimension of the three-justice dimension affects customer satisfaction most [7].

Distributive injustice typically involved in the feeling of inequality between the purchase/consumption and experience that they get. Distributive injustice mainly

caused by bad quality/price ratio, a feeling of "fooling", wasted time, and different processing factors [12].

Procedural injustice is concerned with procedures that providers are perceived to take. Procedural injustice may be caused by fraudulent use of power, fraud (legal, contract, or commitment), lack of commercial support, and retention and misinformation issues. Interactional injustice is predominantly lead by interpersonal and physical interactions. Interactional injustice may be caused by poor beliefs, lack of respect, lack of understanding, and listening/empathy factors exhibit from the customer services [12].

This difference has not only been established in consumer behaviour research but has also been established in other research areas such as organizational justice [7]. Some studies focus only on one aspect of justice, while others show that these three aspects of distinguishing justice led to a richer relationship between justice and customer satisfaction. And as digital music can be viewed as a product (results-oriented) or as a service (relationship-oriented), by using the Vicente Justice instrument as an assessment tool, we can predict both sides of customer satisfaction as it can measure product or service. The framework is used because it specifically caters to the user fairness behaviour, which could give a better understanding of why user consumer chooses their choice of digital music service. The framework also complements other previous studies performed with the Theory of Planned Behaviour or Theory Reasoned Action Framework for user behaviour related to digital music service offering in digital music transformation, so the result of this research could help to make a better understanding of this matter.

2.2. New digital music service in the digital music transformation

The knowledge about digital music service will give what sector should be kept on the tab to in adhering to the user behaviour. According to Leyshon' study [13] about new digital music services in the digital music transformation, the study shows that digital music transformation is inevitable because it is a new business model for restructuring the music industry driven by technological change and development. Companies are susceptible to these changes. In this case, technological change is large enough to change the infrastructure of the digital music business model. As the changes come, new opportunities are created, especially in the music artists by the elimination of the intermediary if they choose so [14]. The transformation in Digital Music also gives the user more control and choice. There are currently many options. a single, album compilation, the format, and even how they buy the goods is available where before the option is quite limited. In summary, there are four main factors in the decline of many strong old players in the music industry and also support the emergence of new players that providing the digital music services offering [5].

The first is the recording industry itself. With the low organization inertia of the existing organization, the low adaptability level of the music industry makes the situation worse. On the other hand, new players in the transformation of digital music have emerged due to their adaptability and agility (due to their relatively small start-up size) and their ability to fully innovate and utilize change to provide digital music service [15, 16].

Second is the commercial music artist role. One of the major downturns in the music industry is that the new transformation provides more freedom for commercial music artists, one of the main players in the industry. They are not tied to the labels of the music industry as they used to. Unlike labels that tell you what to do and what should not do, they have more ways to create their works and also more ways to sell their work in several forms. The less dependence of artists and even some artists leaving their label to the new start-up player hurt the record company which still cling to the old way [14, 15].

Third is technological development. The collapse of the music industry is also affected by technology underestimation by the music industry big player [17]. From a technical point of view, the music industry has traditionally been conservative. For a long time, people have been indifferent to new technological opportunities and their socioeconomic potential [13]. On the other hand, start-ups that fully integrate new technologies has soon become a new force in the transformation of digital music [14].

The last is intellectual property rights protection. IP protection is the foundation of digital music and its service but has been neglected at the beginning of the digital music transformation. As the technical barriers eliminated this physical barrier, the music industry, which used physical methods as an obstacle and barrier, quickly encountered IP protection problems. The new players realized this and already make limitations on the technology as artificial barriers for IP protection and protecting their business from unauthorized threats [18]. This makes them a successful new player in the transformation of digital music with their new digital music service offering [13].

The addition of a study on user fairness behaviour of current digital music service offering through the Justice perception framework could complement the knowledge gained from this past digital music transformation and how user/customer behaviour reacts to it, so those involved could act accordingly to take the newly available opportunities.

2.3. The process of justice

A very important moment in between the user/customer and the service provider is when the service/product cat meet the user expectation, which means the sufficient type and amount of justice has been applied by the provider to resolve in understanding the user/customer [19].

In this case of fairness behaviour research, aside from using three dimensions of justice, two kinds of linked behaviour also included in the dimension, which is piracy behaviour and seeing digital music service as a luxury or utilitarian product behaviour in the hope to give more and better result.

2.3.1. Digital music piracy and its nature

As stated before, that piracy has a great role connected to user behaviour. In the digital market, Smith's research shows that consumers have two segments. The first is the segment that willing to pay if a certain condition is met, and the other is the one that has a very low possibility to pay at all. Some users may not want to buy a full album to get their favourite title but willing to buy if there is a low-cost single one [20]. According to Koh et al. [21], there are granger causal linkages between online music piracy and physical music sales for data before the year 2003 but did not find any of

it for the data after the year 2003. This means that digital music services such as iTunes have reduced the negative impact of online music. The causal relationship between online music piracy and actual album sales may be caused by other system changes in the impact of other online services on music sales.

The data results obtained from four countries in the United States, Italy, Germany, and Belgium are consistent with the results obtained using data from Korea. Although digital music piracy has a causal relationship that affects actual physical music sales, online digital music is not so much. Four other countries have indicated that piracy of digital music and online music has led to a decline in physical music sales [21].

By understanding their nature, it is interesting to see whether that the better quality of streaming services/digital music files does affect the user needs to purchase them if they can their hand the products free via legal means or piracy, even though consumers see digital music as less valuable than actual products [22].

2.3.2. Music as hedonic or utilitarian

As digital music can be considered a product, digital music can be divided as a hedonic product or utilitarian. Usually, people buy products on their needs, and everyone has a clear need for the products they want. This is a utilitarian consumption when buying products based on basic functional requirements, which are enjoyable when considering the experience of joy and excitement [9].

When people spend more money on utilitarian products, they will find that the price is unfair compared to hedonic products. However, perceptions of price inequality have declined compared to hedonic products. These studies show how people will react differently by price changes with hedonic and utilitarianism based on the presentation because subjects who are stimulated by photo feel more unfair to the price changes of utilitarian products than hedonic products [9]. Because digital music is basically a product, digital music can be seen or positioned as a hedonic or utilitarian product.

Consumer perceptions and preferences could have had both demands the hedonic and utilitarian dimensions. In this case, consumers will trade off these dimensions in acquisition and forfeiture choices, and consumers show consistently an increase in forfeiting the hedonic aspects in choices.

But this behaviour could be moderated by the relative salience of hedonic considerations in the forfeiture condition. This was predicted based on the notion that the increased big sale or limited bundled product [23]. Similarly, another rationale for greater preferences for utilitarian items in acquisition choices can be derived from the subjective importance of attributes that are seen as enhancing or preserving the level of attribute uncertainty.

The choosing between utilitarian and hedonic ones also influenced greatly by pricing and promotion strategies. Marketers ought to be able to charge premiums for hedonic goods to which consumers have adapted in some manner when they are faced with a decision to discontinue consumption. For example, all else equal, marketers may be able to add a "hedonic" premium to the buy-out option price at which lessees of luxury or sports cars. In many cases, promotional special offers are used to acquire new customers. Studies have shown that trial periods and sample collection are

relatively effective for hedonic products. More generally, research has also shown that second-hand markets involving private sellers may be less efficient for hedonic than for utilitarian goods, since owners of hedonic goods may be relatively more reluctant to sell at prices that potential buyers are willing to offer [23].

Weighing from a normative perspective trade-off between hedonic and utilitarian choices for obtaining an overall assessment should be made independently of particular reference items. The consumer may have the propensity to focus on foregone alternatives and tend to elaborate on what might have been. In this case, the consumer usually chooses a more hedonic option because it may make them happier [23].

Digital music service's current form is mainly in service, but there is a digital service that also sells them-selves as a product is also available, like selling digital files in variable format, and some even deliver physical format. Therefore, digital music can be seen as a product, hence it is nice to know whether if the user does it seen as a hedonic or utilitarian product, by given them discrimination treatment, label, and price, and how it could influence the fairness for a user to use them in the digital music service offering.

3. Research Model

This section proposes the research model based on previous studies related to user satisfaction.

3.1. Proposed model

This research is done based on Justice Perception Framework, factoring the piracy factor, and also the music as a hedonic or utilitarian product factor.

The model on Fig. 1 was based on existing Vicente Justice research models that aimed to analyse the effects of justice dimensions on customer satisfaction by using three dimensions of justice, which is distributive, procedural, interactional justice, modified to reflect the relationship of user satisfaction with Digital Music service offering with the addition of an injustice factor from Aurier [7].

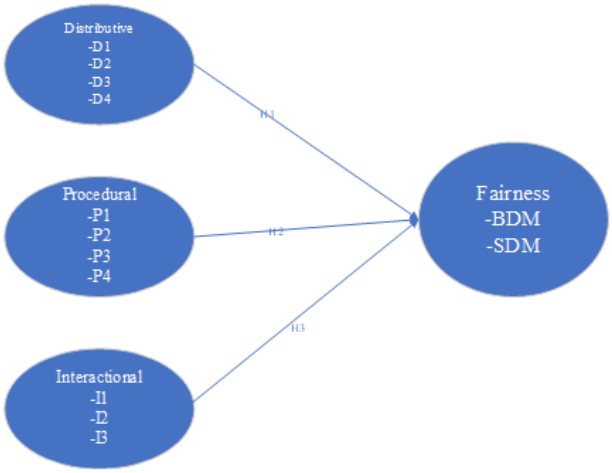

Fig. 1. Justice perception model to user fairness.

The *D2* indicator is a question based on distributive injustice factors combined with a study about digital music piracy [22], whilst the *D4* indicator question is also based on distributive injustice but combined with music as a hedonic or utilitarian product [9]. The model used is as follow.

3.2. Relationship

The model on the figure has a relationship which is between each the variables of justice to the user fairness, which is detailed as follow:

The Fairness variable explains the user behaviour when the fairness of justice within digital music service is achieved which resulted that they would use the of digital music service, which consists of a digital music file (product) or digital music streaming (service). The Distributive variable explains user behaviour regarding what users get related to the cost that they must spend. The Procedural variable explains user behaviour regarding what the user must do by procedural to get the service that they want. The Interactional variable explains user behaviour regarding what users get by with the customer service accompanying the digital music service offering [7]. As confirmed before in the previous Vicente model, that Distributive, Procedural, And Interactional has a direct effect on the user fairness, hence the proposed hypotheses are as follow:

H1. Distributive justice positively affects fairness in transaction-specific satisfaction.

Distributive justice explains greater variance in satisfaction, even more than the procedure justice [24, 25]. The inputs and outputs involved in assessing the equity could be tangible or intangible. For example, the input can include the amount of cost, learning cost, emotion, search cost and time cost, output including fun and convenience. Chiu et al. [26] research users invest time and money in exchange for convenience and fun. When what they pay is proportionate to the results, users will perceive that the distribution justice is high. There is a lot of empirical evidence that it is distributed fairness affects satisfaction with specific transactions [27, 28]. In the digital music service offering, the distributive justice is associated with price ration and quality and value of the streaming service or digital product, especially if they can have it for free or via the illegal method (piracy) [21], and whether each of digital music service should have tier in quality matched to their price which is related how user/customer more prefer to the music as basic utilitarian or luxury one with more feature and higher quality [9]. Therefore, the hypothesis above is assumed.

H2. Procedural justice positively affects fairness in transaction-specific satisfaction.

Procedural justice attribute to the fairness of policies, procedures, and criteria during the process of service offerings. This process is an integral part of service offerings and defining the service. Folger and Konovsky [24] discovered procedural justice contributes to the behaviour toward company service offering and commitment. Marketing research shows that procedural justice is positively related to customer satisfaction, especially if the company treats them fairly. [29, 19]. Besides, perception Procedural Justice may improve results of personal satisfaction [30]. Maxham and Netemeyer [29] found that procedural justice had related to overall company satisfaction. This confirms that procedural justice helps maintain long-term overall satisfaction

Between those who involved [24]. The digital music service is related to the procedural of how user/customer get/access their product like does the service has difficulty to get to, does it alter the service after the user gets them, the term of sale/subscription is making difficult for the user to use them, and also the procedural to contact them when the problem is arising. Therefore, the hypothesis above is assumed.

H3. Interactional justice positively affects fairness in transaction-specific satisfaction.

Interactional Justice happened when customers feel that they are treated with politeness, courtesy, respect, sympathy, and also the company actively takes an effort in solving the problem [28]. Tax et al. summarized that interactional justice includes an explanation, honesty, courtesy, hard work, and empathy. Though customer service is primarily given by the computerized system, customer interaction with the service provider is inevitable and should be provided [19]. Fair treatment on those interactions could influence the customer satisfaction assessment, especially when customers having a service failure event. In digital music service offering, including how the company customer service provides an adequate solution, their appreciation when the problem arises, and also lack of empathy and understanding. Therefore, the hypothesis above is assumed.

4. Methodology

This section describes the method used to analyse the research model proposed in the research model. While the source of data is user/customer opinion, the research uses the quantitative research model in the final data equation. The measures of the instrument used, survey for data collecting, and analysis of the survey responses are explained below.

4.1. Instrument development

All the measurement items used in this work were adopted from prior studies. They represent items that come from the Vicente research model. Vicente's research model is used because of it with the explanation for the three variables in the Justice Perception Framework as below.

The first variable is Distributive Justice (Distributive) which scale assesses the extent to which results are related to inputs [31]. Second is Procedural justice (Procedural) which has the score reversed for measurement, reflecting the accessibility and the waiting time [32]. The last dimension variable is Interactional Justice (Interactional) which is measured by using a three-item scale that assesses how many customers provided with individual attention and caring [33]. For User Fairness (Fairness) is measured by using a scale that assesses the satisfaction and feelings about the available choices [34]. These three dimensions will be used accordingly in the hope to find the significance in the user fairness in digital music service. Each variable on Vicente's research is then given an indicator to try to find how users perception of satisfaction with Digital Music Service. The indicator chosen is related from digital music service offering with each reflecting the aspect from Justice Perception Framework.

The measurement item table for the first dimension is showed in Table 1 with, D2 based on distributive injustice factors combined with a study about digital music

piracy [22] and *D4* indicator based on distributive injustice but combined with music as a hedonic or utilitarian product [9]. Table 2 is the measurement item table for the second dimension, whilst in Table 3 is the measurement item table for the last dimension. For the User Fairness (Fairness) item measurement variable and indicator is showed in Table 4.

Table 1. Distributive Justice variable dimension, aspects, and indicator.

No.	Variable Label	Indicator	Indicator Label
1	Distributive Quality has given by price; Services and features/facilities correspond to the price; The price is appropriate; Different prices for the same service [9, 12, 22, 31].	Prices for streaming services or digital files are in line with their quality	D1
		Using a streaming/buying music service is more valuable than getting music for free (legal or illegal)	D2*
		The streaming/selling service of digital music is useless to you	D3
		The service of streaming/selling digital paid files with different levels of service quality with the different price is preferred (example, the silver member can only listen to lossy but very cheap cost, but a golden member can choose lossless and all of the music collection but will be more expensive)	D4**

Table 2. Procedural Justice variable dimension, aspects, and indicator.

No.	Variable Label	Indicator	Indicator Label
2	Procedural Time to attend an inquiry; Lack of good faith; Duration of service problem solving; Difficulty to get in touch with customers [12, 12, 29, 32].	Digital music streaming/sales service that likes to alter its sales package without notice is not preferred	P1
		Digital music streaming/sales service that does not match descriptions is disliked (for example in the advertisement the service is lossless, but it is only for some albums only)	P2
		Inexpensive digital music streaming/sales service is hard to contact when problems occur	P3
		Digital music streaming/sales service that is not clear/convoluted	P4

Table 3. Interactional Justice variable dimension, aspects, and indicator.

No.	Variable Label	Indicator	Indicator Label
3	Interactional	The customer service part of an online streaming service / digital music sales often does not provide a solution when a problem occurs	I1
	Understanding of customers' needs; Personal attention to service; All out responding to customer service [12, 19, 28, 33].	Customers of digital music/music streaming services often feel underappreciated when long enough to subscribe but no more services	I2
		Customers of digital music/music streaming services are often not considered/responded to when they get into trouble	I3

Table 4. User Fairness variable dimension, aspects, and indicator.

No.	Variable Label	Indicator	Indicator Label
4	Fairness Fairness fulfilled (for the digital music product purchased); The future decision regarding a service [34].	You are likely to buy the digital music file because it is worthen	BDM
		You are a regular user of music streaming services because it is worthen	SDM

All of the indicators then used for the survey as the instrument of the research.

4.2. Data collecting process

For the survey, the tool used to collect the main data for this research is the questionnaire. It uses five scales of Likert scale, ranging from strongly disagree from the lowest number to the strongly agree to the highest number.

The survey was conducted by surveying monkeys from a member of the audio and music-related fan group of Kere Hore that is located on the Facebook site (https://www.facebook.com/groups/audiokerehore/about/) which is a group that has more than 50,000 members at the time of this research. The member is primarily Indonesian, spread across the archipelago, with some are abroad. There are too few foreign members like Russia, Japan, Singapore, the US, China, and others that mainly representation of their brand that they offer and sell in the group. The data collected during the analysis are 166 participants. All 155 surveyors filled out all the questionnaires, and 15 of them did not pass the data manipulation check test. Therefore, only 140 data (84%) are used. The reason for choosing this group is that they often deal with digital music in their daily lives. The group also has a large number of diverse members who can provide a variety of data. Two manipulation check tests were inserted to improve the validity of the test results. One is on the user profile question section, which is a simple math equation test, and the other is the research section question which consists of a simple logic question test to make sure that user fills the survey according to the instruction and not fill them randomly thus make the data more reliable.

4.3. Data evaluation method

The equation analysis of the data for the hypothesis is done using the AMOS SPSS to test the relationship between the effect of one variable on another. The confirmatory analysis is performed to ensure that the research instrument questionnaire is accurate, valid, and has a good consistency by using the Common Bias Analysis test to check the bias of each item used, test the measurement validation by using factor loading, t-values, Cronbach, C.R. and AVE, and also cross-loading test to ensure the difference of each variable construct. The structural model fit analysis also performed to make sure that the research model is adequate by using several model fit index measurements, and the last is the significant result to test the proposed hypothesis to see which hypothesis is supported. For the user profile, the demographic will be analysed to give more information.

From the data collected, it will have a demographic result as follow:

- The number of people that follow the survey.
- Characteristics of the people that follow the survey.
- The number of respondents that buy digital music.
- The number of respondents subscribes to digital music service.

4.4. Challenges

The challenge from this research is the time constraint and the number of valid data. Because of the limited time, only hundreds of valid data could be gathered from tens of thousands of group members. The choosing of the proper indicator for the variable is also a problem because if it were not right, it could ruin all the gathered data and the data must be re-collected again. Fortunately, in this research, the gathered data is adequately enough for the AMOS analysis and yield interesting results and findings.

5. Result and Analysis

This section contains the survey result demographics, the confirmatory analysis result using the common method bias examination, measurement model validation, cross-loading test, and also structural model fit testing.

5.1. Survey result

Figure 2(a) shows the demography profile from the surveyed user on the study that includes gender, age, education, occupation, and salary per month.

Figure 2(b) is another data surveyed user on the study that contains answer choices regarding the subject of study.

Below is the demography result from the survey.

5.2. Common method bias analysis

For common method bias, Harman's one-factor test is used, in which all items (measuring latent variables) are loaded into one common factor. If the total variance for a single factor is less than 50%, it suggests that CMB does not affect the data

[35]. The test result is shown in Table 5. It is shown that the total variance of less than 50%, which means there is no bias in used instruments. The table as follows:

Gender:

Answer Choices	Responses	
Male	94,83%	147
Female	5,17%	8

Age:

Answer Choices	Responses	
< 17	2,67%	9
18 – 21	34,67%	52
22 – 30	49,33%	74
31 – 64	13,33%	20
65>	0,00%	0

Education :

Answer Choices	Responses	
Primary Scholl	0,00%	0
Junior High School	9,03%	14
Senior High School	45,16%	70
Diploma	10,32%	16
Bachelor	29,68%	46
Master	5,16%	8
Doctor	0,65%	1

Occupation :

Answer Choices	Responses	
Student	7,74%	12
College	37,42%	58
Not Working	1,29%	2
Private	41,29%	64
Civil Servant/State Official	4,52%	7
Other	7,74%	12

Salary per month :

Answer Choices	Responses	
< Rp 1 Million	36,13%	56
Rp 1-4 Million	33,55%	52
>Rp 4 Million - 8 Million	20,65%	32
>Rp 8 Million – RP. 15 Million	7,10%	11
>Rp 15 Million	2,58%	4

(a). Profile data 1.

Frequency of listening to digital music (in one day) via music or streaming files (CDs, cassettes and Vinly not included)

Answer Choices	Responses	
< 1 Hour	14,19%	22
1 – 2 Hour	23,23%	36
2 – 3 Hour	21,94%	34
3 – 4 Hour	18,06%	28
4 – 5 Hour	12,90%	20
> 5 Hour	9,68%	15

Most frequently used music / listening media:

Answer Choices	Responses	
File music (Mp3, Flac, Wav dll)	51,61%	80
Layanan Streaming musik khus	43,87%	68
Youtube	3,87%	6
Physical (CD/Cassete/Vinyl)	0,65%	1
Radio	0,00%	0
Tv	0,00%	0

Frequency of purchasing digital music in the past year (itunes, amazon etc) if ever make a purchase (Not a streaming music subscriber service)

Answer Choices	Responses	
Never	63,23%	98
1 time	10,32%	16
2 – 4 time	22,58%	35
5 – 10 time	2,58%	4
> 10 time	1,29%	2

Duration of digital music subscription in the past one year

Answer Choices	Responses	
1 month	11,61%	18
2 month	0,00%	0
3 month	20,65%	32
4-6 month	2,68%	4
7-10 month	11,61%	18
Yearly	21,29%	33
Never	32,26%	50

Below is the most common digital music store service that you use

Answer Choices	Responses	
itunes	26,45%	41
Amazon MP3	0,00%	0
Google Music	2,58%	4
Napster	0,00%	0
7Digital	0,00%	0
Other	24,52%	38
Never	46,45%	72

Below is the most regularly streaming music service that you use

Answer Choices	Responses	
Spotify	65,81%	102
Deezer	3,87%	6
Joox	17,42%	27
Apple Music	2,58%	4
Other	2,58%	4
Never	7,74%	12

(b). Profile data 2.

Fig. 2. The demography result from the survey.

Table 5. CMB test.

Total Variance Explained						
Factor	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	2.815	21.652	21.652	2.205	16.958	16.958
2	1.989	15.302	36.955			
3	1.580	12.155	49.110			
4	1.280	9.842	58.952			
5	1.095	8.422	67.375			
6	0.837	6.435	73.810			
7	0.708	5.448	79.257			
8	0.646	4.970	84.227			
9	0.620	4.766	88.993			
10	0.474	3.647	92.640			
11	0.348	2.673	95.313			
12	0.324	2.491	97.804			
13	0.285	2.196	100.000			

5.3. Measurement model validation

In this section, validation analysis is performed, the measurement for the validation can be shown in Table 6, Cronbach's α and composite reliability (CR) value is ranged from 0.754 to 0.943, which is all beyond the 0.6 standard, which means it has good internal consistency [36]. The factor loading was all above 0.5, suggesting that the data supporting the construct is good enough [36, 37]. The t-values are all above the t-table, which is on the threshold of 2.853, therefore, implying that all the factor loadings were significant [38]. The AVE values of all constructs also higher than 0.5 value, which means the validity is proven [36].

Table 6. Factor loadings and t-values of factor loadings; Cronbach's α, C.R., and AVE.

Construct	**Item**	**Factor Loading/ Estimate**	**t-values**	**Cronbach's α**	**C.R.**	**AVE**
Distributive	D1	0.965	53.18	0.754	0.834	0.568
	D2	0.765	46.36			
	D3	0.510	27.23			
	D4	0.703	35.22			
Procedural	P1	0.978	39.21	0.780	0.942	0.806
	P2	0.952	41.70			
	P3	0.701	45.89			
	P4	0.933	44.73			
Interactional	I1	0.815	48.96	0.792	0.785	0.551
	I2	0.715	45.71			
	I3	0.691	50.89			
Fairness	BDM	0.727	19.36	0.812	0.855	0.750
	SDM	0.986	20.45			

From the measurement is obtained that *D1*, *P1*, *I1* have each the best consistency in respect to their variable. *D1* which is prices for streaming services or digital files are in line with their quality is supported on the distributive

variable dimension that shows the inputs and outputs involved in assessing the equity is tangible in this case for the user to see it as fairness in the digital music service [24, 25]. For *P1* which is a Digital music streaming/sales service that likes to alter its sales package without notice is not preferred is supported on the procedural variable dimension that shows the behaviour toward company service offering and commitment [24]. For *I1* which is the customer service part of an online streaming service /digital music sales often does not provide a solution when a problem occurs supported in the interaction variable dimension that shows about the company lack of understanding of customers need which affect the user fairness of justice [28, 33].

5.4. Cross loading test

This test aims to find out how the difference of each variable constructs with others. The measurement for the correlation value is in Table 7 whilst the cross-loading test value is in Table 8 as follow.

Table 7. Correlation value.

		Construct	Estimate
Procedural	<-->	Distributive	0.045
Distributive	<-->	Interactional	-0.012
Procedural	<-->	Interactional	0.593

As we can see in the cross-loading value in Table 8, the root square of the AVE (The bold number) is higher than the correlation value of the variable, hence all the construct passes the test [39].

Table 8. Cross loading discriminant validity.

Construct	Distributive	Procedural	Interactional
Distributive	**0.753**	0.045	-0.012
Procedural	0.045	**0.898**	0.593
Interactional	-0.012	0.593	**0.742**

5.5. Model goodness of fit indexes

Model goodness of fit index is part of a research model that describes the fitting structures of the model. Whether it is fitting for the research or not. In this section, we analyse the model fit using several variables.

Table 9. Model fit indexes.

	Cut off value	Value	Analysis
Chi Square	<181.800	178.065	good
Probability	>0.05	0.060	good
GFI	>0.9	0.854	marginal
AGFI	>0.9	0.841	marginal
IFI	>0.9	0.961	good
TLI	>0.9	0.955	good
CFI	>0.9	0.963	good
NFI	>0.9	0.958	good
RMSEA	<0.08	0.018	good

For model structure analysis, as shown in Table 9, the most important thing is that the chi-square value must be lower than the chi-square distribution table value [40]. The GFI and AGFI value is close to the good reference value so it is counts as marginal. The other value does meet all the cut off value so it can be explained that the model has an adequate fit in this research.

6. Findings

In this section, we present the model used for the AMOS calculations and analysis of the result table.

The model for AMOS calculation is on Fig. 3. as follow:

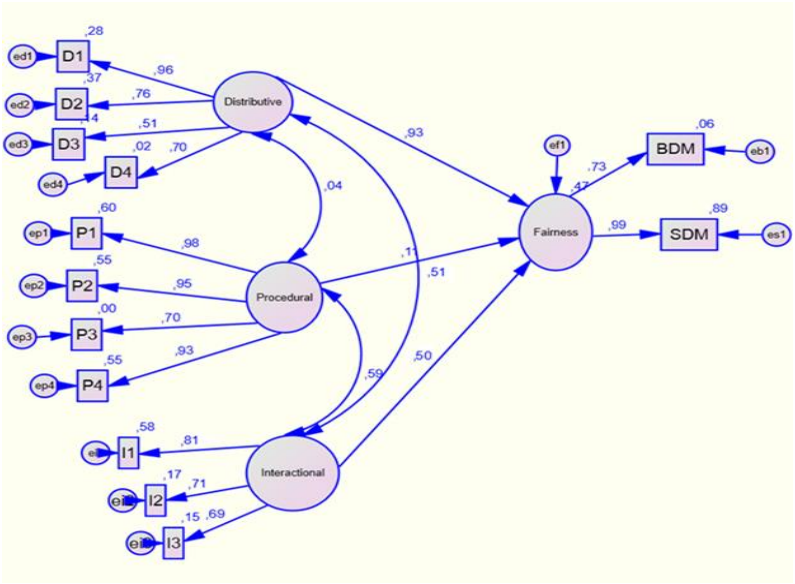

Fig. 3. AMOS model and calculation.

For significance result of each justice, dimension is shown in Table 10. as follow:

Table 10. Variable significance value.

	Hypothesis	Estimate	S.E.	C.R.	Support*	P (Direct Effect)
H1	Fairness <= Distributive	0.928	0.44	3.362	√	***
H2	Fairness <= Procedural	0.508	0.307	0.733	-	0.464
H3	Fairness <= Interactional	0.503	0.479	1.205	-	0.014

For each of those who have C.R. value>1.96 means has significance with the probability of 0.05 (p<0.05), and if the value is greater than 2.56 means it has significance with the probability of 0.01 (p<0.01) [41].

For the hypothesis and variable structure and significance, we can see that all the variable has loading factor >0.5, which means suggesting that the data

supporting hypothesis structure is good enough [36, 37]. In this result, we can see that distributive variable dimension has significance on the fairness of user fairness perception, which means that user/consumer feel that the experience they get from the purchase/consumption is equal or better [12], thus the user/consumer feel that current price for streaming services or purchasing the digital file is matched for the quality offered that they see it as fairness for them to continue to use the digital music service offering [24, 25], so the distributive variable dimension has a positive role to affect fairness in a specific transaction, that means the H1**.** Distributive justice positively affects fairness in transaction-specific satisfaction is supported.

7. Discussion

From this study, we can see from the Distributive variable that has significance to the user fairness, on specific satisfaction transaction supported best by *D1* indicator which means users are do valued good quality digital music files or streaming services, it just depends on how the value is placed on the service (specific satisfaction transaction) [24, 25]. Unfortunately, the *D2* indicator that includes piracy on the distributive dimension did not support the variable which means that the current service offering is not good enough to sway user/customer from resorting to piracy as apple has tried with the iTunes before which successfully decrease the rate of online digital music piracy, an insight to look for [21]. The D4 indicator which includes digital music service to be seen as the utilitarian and hedonic/luxury product and priced accordingly also did not support the variable, which means that user/customer did not see the fairness of discriminating price by tier yet which already common practice in the product marketing [9].

The Procedural dimensions did not have a strong significance on user fairness in transaction-specific satisfaction while it does have a strong loading factor. It means that at this moment users/customers still see value above companies' policies, procedures, and criteria that accompany the digital music service offering, which also could mean that companies still did not pull enough good things related to it that could affect the user/customers satisfaction. The history shows that company used to see user/customer as a potential criminal on building their service, which some of this still carries on [8], so while marketing research shows that procedural justice is positively related to customer satisfaction, especially if the company treats them fairly, but this is not the case yet in the digital music service offering [19, 29].

The Interactional dimensions also did not have a strong influence on user fairness in transaction-specific satisfaction. It means that users/customers still feel inadequate service regarding company customer service that accompanies the digital music service offering. Though their customer service is mainly given by the computerized system, the interaction is still needed by the user/customer when the problem arises which is not given enough attention by the company that influences the customer's negative satisfaction assessment [19, 28]. The interesting finding here is the minus correlation value between the distributive and the interaction dimension which shows that the stronger the satisfaction user get from the distributive dimension, that means if the user/customer see that the digital music service has great value, they likely to omit the level of lower fairness in the interaction justice.

On the demographic front, on the responder profile, it shows that most of the users are well educated, but because they have a minimum wage, they cannot afford the product. They used digital files more but rarely buy digital music files, but surprisingly, most of them use digital music streaming services. This means that most users feel that current digital music streaming services is reasonable enough and prefer to use them instead of buying digital music files or just resort to piracy, which aligned Byungwan, Murthi, and Srinivasan's research that shows a good digital music service could reduce the negative impact of online digital music service sales [21]. It also means that digital file as a product in digital music offering which currently most held by Apple still has room to grow because people still majority used them concurrent with digital music streaming service. For streaming service duration which at the current survey is dominated by Spotify, people tend to subscribe to a shorter period but more than a month which is cheaper, or all the way to yearly which is much cheaper. This is matched with the hypothesis analysis that shows users/customers see fairness on specific satisfaction transactions supported by their value placed on the service, in this case, the lower price on the long service period of subscription. Deezer which is known for supporting high-quality digital music streaming with their hi-definition CD-quality only has few users. Mainly because of the hard to use the UI and fewer music library. Whilst the new apple music that also has free tier subscription-like Spotify also still has fewer user mainly because of the much more limited option in the free tier hence the value is much lower, and also the difficulty to pay for its subscription at the time compared to the Spotify that already many ways to pay for its digital music service subscription [42].

The emergence of the distributive variable as significance is something that does should be concerned in the digital music service offering. It shows that a good value digital music service offering is the most important variable for the user/customer fairness to use them. But it is currently not enough to deter them from using the means of piracy when the chance arises. So current digital music service offering should find a way to increase the value/goodness of their offering so that user/customer is willing to pay even though they have the means to do the piracy or even could have the free alternative ones. The other thing to look for an acceptable modification to the current digital music service offering to include a different price for tiered service/product, which already common practice in the marketing world so they can get all the opportunities while keeping the user fairness regarding the digital music service offering.

8. Conclusion and Implication

The research shows how digital music's user behaviour using Justice Perception Framework, with Distributive Justice as part of the framework as one main significant factor for user fairness regarding digital music service offering, which shows that consumer is willing to use and buy a digital streaming service or as long as specific satisfaction transaction are met, which in this case is represented by the value of good quality digital music files or the streaming service quality offered. The research result also shows that the current quality of the digital music files service or the digital streaming music service is still not good enough to prevent them from resorting to piracy means. The result also shows that discriminating prices according to the level of quality granted is not preferred by consumers, which means that consumers simply did not want them to be that way or could mean there

are opportunities to be work on to make the offering more attractive. Complementing the previous research on Digital Music Service in Digital Music Transformation this finding could help to strengthen the four-factor to help the current music industry to offer better digital music service offerings.

The research has several implications. For the Recording Industry front, the music industry needs to take the necessary steps to grasp the changes and opportunities in the evolving digital music business. [15, 16]. The best way is to create a service and make sure that it has a value that met the user fairness expectation, so they are willing to use the digital music service offering. Ideally is if they can create the service with good enough value so that user/consumer will not resort to piracy or turn into the free alternative solution. Even better if they could take the opportunity to create a tiered price digital music service offering that could still meet the user/consumer level of fairness to keep using them [5, 20]. For the Commercial music artist front, they should be more creative in creating a more diverse product using the new freedom to create product and or service that gives more value to user so that they would buy them and not resorting to piracy. Even better if they could create tiered product/service to be offered to users/customers that they deem fair to accept [14, 15]. For example, the premium live show or limited-edition song stream cast and other [5, 22]. For the Technological front, it encourages new services using emerged new technologies to create more value for the user to choose, especially the technology that supports the fairness experience of the user/customer and not hindered them like the obtrusive DRM, or hard to use service limitation and so on [13, 17]. Even better if the technology could hinder the piracy whilst supporting the legal experience to not decrease the user fairness level of digital music service offering [5, 43]. The last is for the Intellectual Property front, where the IP should be supporting the emergence of the new digital music service, and not barring and frustrate the user that could decrease their digital music service fairness level satisfaction, so the user will see the value of the new digital music offering [13]. Ideally, the IP could protect those involved in the music industry whilst still cater to the fairness of the user/customer to make them want to use the digital music service offering [5, 18].

The digital music industry is still forming and developing. The final product of the called ultimate digital music service has not yet appeared. As we can also see in the demography section report that even new players with the right decision could overthrow existing players with the new or modified service that users deemed worth with, just like in the case of Spotify with Apple. There is an opportunity to grow and thrive in this era by adapting to the changes and cater to what users and artists demand on the digital music service offering. This research has some shortcomings due to its data source. Data is limited due to time and resource constraints. But if the research is given enough time, the quality of the data increases, thus the results will be greatly improved, so for similar future works/ research to get a better result, they should use an increased sample size and also adding more refined questionnaire items which more reflected user's data and opinion so it should give more accurate and richer results.

References

1. Friedlander, J. P. (2010). News, and notes on 2010 RIAA music shipment data. Retrieved October 20, 2018, from https://www.musicaememoria.com/ docs/riaa-2010.pdf

2. Dilmperi, A; King, T.; and Dennis, C. (2017). Toward a framework for identifying attitudes and intentions to music acquisition from legal and illegal channels. *Psychology and Marketing Journal*, 34(4), 428-447.
3. Michael, K.; and Alves, K. (2005). The rise and fall of digital music distribution services: a cross-case comparison of MP3.com, Napster, and Kazaa. *Proceedings of the Collaborative Electronic Commerce Technology and Research Conference LatAm*. Talca, Chile, 1-22.
4. Giletti, T. (2012). *Why pay if it is free? Streaming, downloading, and digital music consumption in the iTunes era*. Master Thesis. School of Economics and Political Science ("LSE"), University of London.
5. Husin, N.; and Hidayanto, A.N. (2018). Influence factors in the fall of music industry and the emergence of new digital music service player in the digital music transformation - A systematic literature review. *3rd International Conference on Information Technology, Information System and Electrical Engineering (ICITISEE)*. Yogyakarta, Indonesia, 43-48.
6. Colquitt, J.A. (2001). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, 86(3), 386-400.
7. Vicente, M.; Peiro, J.M.; Ramos, J.; and Moliner, C. (2006). Justice perceptions as predictors of customer satisfaction: the impact of distributive, procedural, and interactional justice. *Journal of Applied Social Psychology*, 36(1), 100-119.
8. Husin, N.; and Hidayanto, A.N. (2018). Impact of piracy on music sales in digital music transformation - A systematic literature review. *2018 10th International Conference on Information Technology and Electrical Engineering (ICITEE)*. Bali, Indonesia, 592-596.
9. Giuliana Isabella, G.; Mazzon, J.A.; and Dimoka, A. (2017). Impacts of product type and representation type on the perception of justice and price fairness. *Journal of Business Research*, 81, 203-211.
10. Poole, W. (2007). Organizational justice as a framework for understanding union-management relations in education. *Canadian Journal of Education*, 30(3), 725-748.
11. Silva, H.M.S.V., and Madhumali, K.P.W.C. (2014). Organizational justice and organizational citizenship behaviour: a study of public sector organizations in western province, Sri Lanka. *Kelaniya Journal of Human Resource Management*, 9(1-2), 1-14.
12. Philippe, A; and Siadou-Martin, B. (2007). Perceived justice and consumption experience evaluations: A qualitative and experimental investigation. *International Journal of Service Industry Management*, 18(5), 450-471.
13. Leyshon, A. (2009). The software slumps? Digital music, the democratization of technology, and the decline of the recording studio sector within the musical economy. *Journal of Environment and Planning*, 41(6), 309-1331.
14. Paradise, K. (2014). *Digital music streaming in the 21: The music industry becomes radio-active*. Master Thesis. Faculty of The College of Business, Florida Atlantic University.
15. Warr, R.; and Goode, M.M.H. (2011). Is the music industry stuck between rock and a hard place? The role of the Internet and three possible scenarios. *Journal of Retailing and* Consumer *Services*, 18(2), 126-131.

16. El Gamal, A. (2012). *The evolution of the music industry in the post- internet era. the evolution of the music industry in the post-internet era*. Bachelor of Arts. Department of Business, Claremont McKenna Colleges.
17. Hinduja, S. (2006). A critical examination of the digital music phenomenon, *Critical Criminology*, 14(4), 387-409.
18. Lampel, J.; Bhalla, A.; and Jha, P. (2008). Intellectual property rights and industry evolution: The case of the recorded music industry. *The Creative Industries and Intellectual Property*. London, UK, 1-19.
19. Tax, S.S.; Brown, S.W.; and Chandrashekaran, M. (1998). Customer evaluation of service complaint experiences: Implication for relationship marketing. *Journal of Marketing*, 62(2), 60-76.
20. Smith, M.D.; and Telang, R. (2009). Competing with free: The impact of movie broadcasts on dvd sales and internet piracy. *SSRN Electronic Journal*, 33(2), 321-338.
21. Koh, B; Murthi, B.P.S.; and Raghunathan, S. (2010). Shift in demand for music: causal effect of online music piracy and digital music on album sales. *Journal of Organizational Computing and Electronic Commerce*, 24(4), 366-387.
22. Styvén, M.E. (2010). The need to touch: Exploring the link between music involvement and tangibility preference. *Journal of Business Research*, 63, 1088-1094.
23. Dhar, R.; and Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, 37(1), 60-71.
24. Folger, R.; and Konovsky, M.A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, 32(1), 115-130.
25. McFarlin, D.B.; and Sweeney, P.D. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35(3), 626-637.
26. Chiu, C.M.; Chiu, C.S.; Chang, H.C. (2007). Examining the integrated influence of fairness and quality on learners' satisfaction and Web-based learning continuance intention. *Information Systems Journal*, 17(3), 271-287.
27. Sindhav, B.; Holland, J.; Rodie, A.R.; Adidam, P.T.; and Pol, L.G. (2006). The impact of perceived fairness on satisfaction: are airport security measures fair? Does it matter? *Journal of Marketing Theory and Practice*, 14(4), 323-335.
28. Smith, A.K.; Bolton, R.N.; and Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36(3), 356-372.
29. Maxham, J.G.; and Netemeyer, R.G. (2002). Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent. *Journal of Retailing*, 78(4), 239-252.
30. Lind, E.A.; and Tyler, T.R. (1988). *The social psychology of procedural justice*. New York; Springer.
31. Tata, J.; and Bowes-Sperry, L. (1996). Emphasis on distributive, procedural, and interactional justice: Differential perceptions of men and women. *Psychological Reports*, 79, 1327-1330.

32. Blodgett, J.G.; Hill, D.J.; and Tax, S.S. (1997). The effects of distributive, procedural, and interactional justice on post-complaint behaviour. *Journal of Retailing*, 73, 185-210.
33. Hocutt, M.A.; Chakraborty, G.; and Mowen, J.C. (1997). The impact of perceived justice on customer satisfaction and intention to complain in a service recovery. *ACR North American Advances*, 24(1), 261-270.
34. Mano, H.; and Oliver, R.L. (1993). Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research*, 20, 451-466.
35. Willem, A.; and Buelens, M. (2009). Knowledge sharing in inter-unit cooperative episodes: The impact of organizational structure dimensions. *International Journal of Information Management*, 29(2), 151-160.
36. Hair, J.; Black, W.; Babin, B.; Anderson, R.; and Tatham, R. (2010). *Multivariate data analysis*. Berlin, Heidelberg: Springer.
37. Chin, W.W. (1998). *The partial least squares approach to structural equation modeling. In G.A. Marcoulides* (Ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
38. Gefen, D.; and Straub, D. W. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the AIS*, 16, 91-109.
39. Hair, J.; Hult, G.T.M.; Ringle, C.; and Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling* (PLS-SEM). Los Angeles: SAGE Publications, Incorporated.
40. Hooper, D; Coughlan, J; and Mullen, M.R. (2007). Structural equation modelling: guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
41. Kline, R.B. (2010). *Principles and practice of structural equation modeling*. (3rd Edition). New York; Guilford Press.
42. Hellard, B. (2019). Apple music vs spotify vs deezer vs amazon prime music: spotify launches 'lite' app. Retrieved July 9, 2019, from https://www.cloudpro.co.uk/cloud-essentials/public-cloud/5270/apple-music-vs-spotify-vs-deezer-vs-amazon-prime-music.
43. PwC; and Nordicity (2011). Digital transformation of creative media industries: Opportunities for success and challenges. Prepared for: Ontario Media Development Media Corporation.