

PROPENSITY TO DIGITAL MUSIC ENTREPRENEURIAL DIFFUSION FOR RECORDING INDUSTRY UNDER COVID-19

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ABSTRACT

The fourth (4th) industrial revolution engenders the opportunistic discourse of the plausible amenities of the creative industry. The advent of technology underpins the reconfiguration of successful independent musicians to embrace the digital niche market. In determining the implications of the paradigm shift in supply chain music distribution from primordial analogue to advent digital, this study aimed to examine the extent whether the digital music distribution can be associated with putative digital entrepreneurial practices under Covid-19 pandemic, and to establish how the digital music diffusion influences the digital music consumption cycle in the extended global reach. An exploratory research design was adopted and univariate, and bivariate statistical analysis techniques were employed to analyses the data collected from 217 musicians. The study found that the online music stores better facilitate accessibility from disintermediation, also the predilection of digital music distribution inspires innovation in musicians and associated entrepreneurial practices, and its availability of digital music attracts a wider audience of fan economy and positive behaviorally music consumption cycle. The independent music production and creation drives the economic entrepreneurial dimension while technological advancements encourage quiddity of independent music distribution from push-pull paradigm. The study implies that the injunctive norm has a more effective impact on an individual's intention toward subscribing to the premium music streaming services provided the music platform and entrepreneur epitomize great extent of using technology and digital informative and intelligence.

Keywords: Digital Music Distribution, Entrepreneurship, Covid-19, Disintermediation, Music Distribution

JEL Classification: M15, M29, L26, L81

INTRODUCTION

Digital distribution of music has its origins in unauthorized file sharing in the late 1990s. Recent developments in digitally compatible audio formats, such as the Apple iPod, the Samsung Soundbar and the Dell Jukebox demonstrate the ever-increasing popularity, drive, and demand for media player formats. Up until 2007, South Africa (SA) recorded a steady increase in music revenue and prior to 2010, the country “had been climbing the world rankings physical format sales chart” (Vermeulen, 2014). However, Smirke (2014) notes that “while the adoption of digital and streaming services is helping to drive growth in countries like Argentina and South Korea; other countries like SA, Brazil and Mexico have experienced falling revenue from music sales”. Digital advances have altered the ways and means of the production, distribution and consumption of cultural and creative content, providing a range of opportunities but at the same time engendering challenges and concerns, as expressed by creators and artists (Hesmondhalgh, 2020) as well as rights owners and producers (Nordgard, 2021), and audiences (Snickars, 2016). These changes are connected to the independent record labels and a more nuanced approach to the economic and creative sustainability of on-demand subscription-based streaming, but also to the major labels (Nordgard, 2021). The resurgence in the creative industry relishes the chance

for the advent of digital music through the file sharing software, Internet connectivity, Personal Computers (PCs), jukebox software, portable MP3 players, and a volunteer community of users uploading and downloading, streaming digital content. The creative industry must valorise to create innovative impetus for economic growth and cultural entrepreneurship for the vitality of commercial value. The discourse of creative labour is mostly associated with job insecurity, low pay, longer hours, and self-exploitation (Haynes & Marshall, 2018, p.464) rather than longer-term music career prospects. It is against this background that this study investigated the impact of digital distribution channels on the evolution of the South African music industry. The objectives are to examine the extent whether the digital music distribution can be associated with putative digital entrepreneurial practices under Covid-19 pandemic and to establish how the digital music diffusion influences the digital music consumption cycle in the extended global reach. In recent years, the rapid development of smartphone technology like the Apple iPhone series and mobile network technologies such as 5G (the fifth generation of broadband cellular network technology) provides a hardware foundation for music streaming services (Ziegler et al., 2020). Moreover, emerging and popular music streaming services like Spotify, and Apple Music supported the software foundation on the propensity to enhance the fan economy.

LITERATURE REVIEW

Theoretical Framework

The growth of the Internet raises vital questions about how individuals decide whether and when to adopt an innovation, and how the innovation will be diffused among the population. Diffusion is “the process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003). The Diffusion of Innovation theory (Diffusion of Innovation, 2014) focuses on how, why and at what rate novice ideas and technology are disseminated across cultures and generations for music entrepreneurs to take an opportunity of digital distribution. The theory assists, as time passes, an idea or product gains market share and spreads in a specific social system. Chang, Yang, Jiaotong, Xu, Xiong & Jiaotong (2021) propose an integrated model called the Theory of Streaming Service Acceptance (TSSA), which can be used in the study of the streaming services, including the area of music. The Theory of Streaming Service Acceptance (TSSA) underpins the theory of Diffusion of Innovation, and it focuses on Attitude (ATT), Descriptive Norm (DTN), Injunctive Norm (ITN) and perceived behavioral control (PBC) and an affected factor Intention (INT) including the music industry. The study adopted three constructs (attitude, perceived behavior and injunctive norm) (except descriptive norm) that are associated with the intention of consumption in the streaming services. Cesareo & Pastore (2014) focus on attitude as a driving force used to forecast the individual’s intention of performing behaviors in the music field, including music piracy, streaming music advertising and subscription-based music services. Vamvaka, Stoforos & Palaskas (2020) add that affective attitude and perceived self-efficacy have a greater influence on entrepreneurial intention. Perceived behavioural control has external factors such as opportunities to become music entrepreneur and time for numerous diffusion of innovative technology (Pedersen et al., 2017), and internal factors such as personal skills to develop digital entrepreneurial persona and property from disintermediation (Xiao & Wang, 2020). The injunctive norm is “the perception that most people endorse or disapprove in a social group, which is specified what ought to be done” (Cialdini, Kallgren & Reno, 1990: 1016). The injunctive norm has “a more effective impact on an individual’s intention toward subscribing to the premium music streaming services than the descriptive norm” (Pedersen, Osilla, Miles, Tucker, Ewing, Shih & D’Amico, 2017: 5). Therefore, when designing and implementing marketing activities to encourage the adoption of paid streaming services, it is beneficial for marketers to use injunctive norm-based messages rather than those based on descriptive norms (Chang, Jiaotong, Xu & Jiaotong, 2021).

Impact of Covid-19 Pandemic

Covid-19 has disrupted the flow of materials, information, and funds in supply chains, the music industry has been disrupted with limited fans immersed in the performance space and live music experience. Covid-19 disease surfaced in Wuhan, Hubei province, China late last year in December 2019 (She, Jiang, Ye, Hu, Bai & Song, 2020; World Health Organisation Report, 2020). Its transmission is completely sporadic and difficult to contain resulting in less secure jobs, fewer savings, and fewer earnings in developing countries (Ahadu, 2020). Though there is a lot to learn about this virus, there had been other such diseases that had occurred before, such as SARs and Ebola outbreaks. Ebola outbreak occurred in Central Africa in 1976 reaching its peak level in West Africa between the period 2014–2016 (Senol & Zeren, 2020). The rapid increase in which the virus spreads has challenged the business norms and model as the music industry transforms to digital music production, distribution and consumption. In 2020, closures due to the pandemic accelerated digital consumption trends, reshaping consumer behaviour. The shift of everyday life into the digital world was the escalation of a long-term, slower-paced trend. Remote work and continuous restrictions meant that the role of streaming in music listening and cultural consumption became even more important. The music sector is vulnerable from embedded fans immersed and complexity in its environment demands digitisation on the underlying impact of this Covid-19 pandemic (Váradi, 2018).

Digital Music Distribution and Consumption Cycle

The digital music distribution system under Covid-19 must epitomize the centre and bridge between the music production, processing, distribution and consumption by providing optimization platform for digital distribution between downloading and streaming service platforms (Cui & Xie, 2020). At present, the innovation technology for efficient digital distribution is mainly to transform the school of thought regarding music technology and dovetail distribution and consumption with intelligence and informatization (Xiaoying, 2020). The optimal distribution and consumption process coupled by improved user experience should provide a modern development trajectory for the development of digital music industry (Chuanchuan, 2020). The injunctive norm has a more effective impact on an individual's intention toward subscribing to the premium music streaming services than the descriptive norm under Covid-19 (Pedersen, Osilla, Miles, Tucker, Ewing, Shih & D'Amico, 2017). In the 21st century, young people are the most likely to use a mobile phone to listen to music (IFPI, 2020), it is viewed as underpinning path towards music screaming experience from the impact of Covid-19. The performance space is influenced by acoustic characteristics as well as the performer, whose personality, expressiveness, and virtuosity create an artistic force field, which contributes to the completion of the musical communication process (Váradi, 2020).

The impact of Covid-19 shifts the consumption patterns and marketing strategies supported by the rapid improvements of Information and Communication Technology (ICT) and advent of Industry 4.0. Into digital music diffusion and tentatively towards entrepreneurial enticement. Identically, streaming music is “a digital sound uploaded in digital format and can be listened *via* music streaming services on the Internet. Precisely, the opposite word of streaming music is “downloading music”, and they are different business models for digital music suppliers and different approaches to obtain digital music for listeners” (Chang, et al., 2021). Streaming is becoming very big even at its infant phase. Streaming music refers to music streaming media continuously and simultaneously received by and delivered to a terminal user while running by an operator (Towse, 2020). According to Sinclair & Tinson (2017), music streaming service is a relatively new consumption pattern, particularly premium services, and “downloading music directly to store the music file in the user's own device after the user's one-time payment for a per song or per album means the downloaded music can be played without the Internet and transferred to other devices as the owner's willing” (Chang, et al., 2021: 3). However, streaming music is different because the user does not actually own the tracks. The

listener can subscribe to music streaming services over the Internet, either through Wi-Fi or mobile data and share the music library with other users.

The music and television streaming represent a mode of accessing content with some shared characteristics: abundant catalogues of content are made available on demand (Lüders, Sundet & Colbjørnsen, 2021). The e.tv (commonly referred to on-air as 'e') is the first and only privately owned free-to-air television station in South Africa, and it has crafted new scintillating music channel (24 hours Channel 135 (South African Music) and channel 136 (Soul Music) underpinning the fan economy. The public broadcaster (SABC 1) has collaborated with commercial radio station (Radio Metro) for tentative public immersed platform providing live experience with disc jockeying. In contrast, television streaming services compete on differentiated content (Johnson, 2019). All types of streaming services arguably offer "temporary and contingent on-demand access to vast content databases for a fixed fee paid on a regular basis, or for exposure to advertising, and through an internet-connected device" (Colbjørnsen, 2020: 5). The three main reasons for using streaming are the access to a wealth of musical content, the ability to choose the desired piece of music, and finally, its convenience (Váradi, 2021).

Decoupling Point on Push-Pull Supply Chain

Intermediation is a structural feature of the electronic marketplace and its role is not simply taken over by producers. Record labels have re-established themselves in the supply chain through reintermediation. At the same time, individual musicians have taken to developing their own fan base and publishing records without major record contracts, using efficacious digital distribution tools (Bernanrdo & Martins, 2013). According to Chaffey (2015); Simchi-Levi, et al., (2009) in a push-pull strategy the initial stages of a supply chain are operated in a push-based manner, while the remaining stages are operated in a pull-based manner. The interface between the two is known as the push-pull boundary or the decoupling point. Simchi-Levi, et al., (2009) note that the push-pull boundary is located somewhere along the supply chain timeline, and indicates the point in time when the firm switches from managing the supply chain using the push strategy to a pull strategy. SAmp3.com is a portal for South African music downloads, an online presence for musicians and a platform for the promotion of South African music in all its many forms and styles. The transformation from traditional ways of doing business to a progression towards digitalization has given birth to diverse electronic devices and products to enhance the audibility of media content. Parker, Van Alstyne & Choudary (2016: 78) identify a technology push effect that is described as "developments in technology including an increase in awareness of the MP3 standard, a rise in unlimited Internet and broadband and the proliferation of MP3 devices which are encouraging users to download more despite the downloading of free music." Hence in order for digitalization to be dispersed, significant speed and availability of Internet access, connectivity and bandwidth is required. The music industry's global shift to the decoupling point has resulted in a developmental digital supply chain creation, distribution, and consumption.

METHODOLOGY

This study utilized an exploratory design and a quantitative research approach. Quantitative studies are designed to evaluate objective data and rely on numerical and statistical data. Creswell (2014) describes quantitative research as a method used to test theories by examining the relationships among variables. This sampling technique is based on the judgment of the researcher regarding the characteristics of a representative sample. In addition to purposive sampling, snowball sampling offers a quicker and more efficient means to gather data. The snowball sampling was appropriate when it was difficult to locate the desired number of members of a particular population. A few people from the target population are requested to provide information on how to locate other members of that population whom they know. In this

way, they serve as informants and assist in identifying colleagues, acquaintances, or friends to improve the return rate. The positivism philosophy has been adopted to test statistical inferences and quantitatively analyze the data. The deductive approach has assisted to test the theory of diffusion for innovation. In order to compose, produce, record, and digitally distribute music, the artist or band needs to reside in an urban area. Urban areas are highly developed and offer efficient access to technology, infrastructure, business development, and professionals in the targeted industry, as well as wider audiences. According to Statistics South Africa (2014), KwaZulu-Natal has the majority of its population who has access to cellular phones (90.7%); while 24.6 per cent have access to computers, 78.5 per cent to television, 32.4 per cent to satellite television, 71.8 per cent to radio, and 32.6 per cent to motor vehicles. In this study, the researchers were guided by the theory of Diffusion of Innovation in reaching the targeted musician population in the Durban area. As noted earlier, this theory posits that in order to diffuse technology or the product, musicians need to reside in areas that have access to the resources required to do so. The RiSA website states that the association has 250 members in KwaZulu-Natal. Although the website does not list members per city, the researchers used deductive logical reasoning together with the theory of Diffusion of Innovation to support the sample size selected. This was achieved by taking into consideration that in order to digitally distribute music, musicians require access to technology-enabling equipment, devices, and bandwidth speed. These are available in an urban area such as Durban. A target sample of the respondents was determined from the estimated population of 250 (Sekaran & Bougie, 2010). However, the final sample was 217, which is almost 87 per cent of the total population. Information was gathered by means of a questionnaire with closed-ended questions. Saunders, Lewis & Thornhill (2016) describe closed-ended questions as questions where participants choose responses from a limited number of given alternatives. The three main sections of the questionnaire covered the respondents' biographical variables; dichotomous questions with options of 'Yes' or 'No' answers; and interval scale or rating questions using a 5-point Likert scaling method ranging from strongly disagree (1), to disagree (2), neutral (3), agree (4) and strongly agree (5). The questionnaires were administered personally and *via* electronic mail to Durban musicians.

DISCUSSION OF FINDINGS

Data analysis entails the application of reasoning to understand the data that has been gathered and involves breaking up the data into manageable themes, patterns, trends, and relationships. The data analysis techniques used were in accordance with the study's objectives. The data was captured using the Statistical Package for the Social Sciences (SPSS). In analysing the category of artists with a greater propensity to entrepreneurialism and economic dimension than romantic individualism, only 27 per cent of the sample belonged to a record label, while 55 per cent of the respondents considered themselves to be independent artists. Social entrepreneurs represent 17.1 per cent of the population while the remaining 0.9 per cent belong to the 'Other' category describing their creative nature of working practice and apathy towards digital music production cycle. The advent of fourth industrial revolution shows that digital music distribution by the artist is significantly higher (70%) than distribution by record labels (30%). The digital music distribution platforms seamlessly integrate for entrepreneurs, individual fans, supply chain partners and sponsors to synthesize the co-creation of music services and content for profitable pooling and sharing of revenues and experience. Musical entrepreneurs are inherently obligated to scalability and flexibility as the results of growth in scale of digital music and scope of global reach. The South African creative industry, music in particular, must absorb the opposing logics of stability as romantic individualism and flexibility as a commercial entity and entrepreneurship as a paradox of change. The results on the medium of distribution depicts that the least utilised distribution medium by musicians is traditional means (18%). The most common medium is electronic distribution (48%), however 34 per cent of the sample reported that they used blended means of distribution.

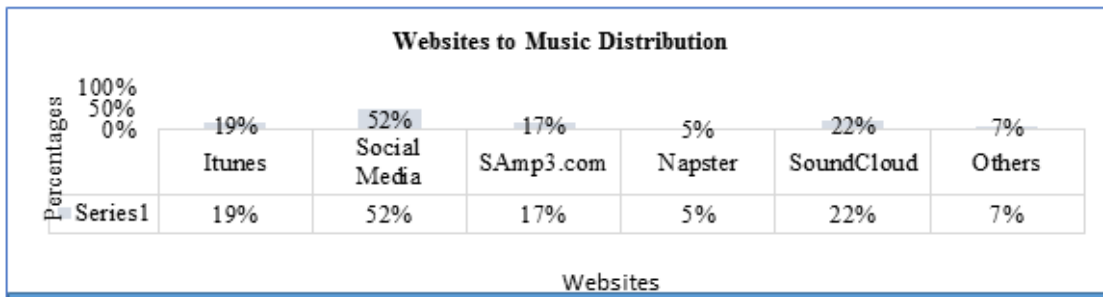


FIGURE 1
WEBSITES USED TO DISTRIBUTE MUSIC

Figure 1 shows that more than half of the respondents used social media sites (52%) to distribute their music, while 22 per cent used Soundcloud and 19 per cent used iTunes. SAmp3.com was not the most popular and was cited by only 17 per cent of the respondents. The new Napster, the first website which has created disintermediation in the music industry, is at the lower end of the scale (5%). Some of the ‘Other’ categories (7%) mentioned by respondents were YouTube, reverberation, amazon.com, bandcamp.com, cdbaby, and datafilehost.

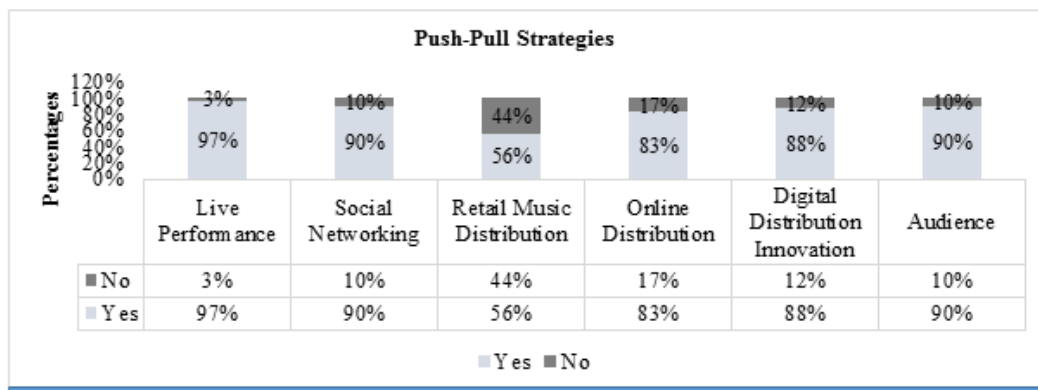


FIGURE 2
PUSH-PULL STRATEGIES

Figure 2 depicts the binomial test for the dichotomous questions. It shows that a significant number of the respondents (97%) used live music performances as a promotional activity. Similarly, the overwhelming majority of the respondents indicated that social networking mediums increase the market base for music distribution (90%), while 10 per cent did not find social networking relevant. Entrepreneurs continuously seek opportunities to harness the flexibility of digitizing, as an impetus for cost efficiency and global reach. The digital infrastructure is the underlying digital convergence. For non-virtual approaches, 56 per cent of the respondents indicated that retail music stores facilitate easy access to music distribution; however, a percentage (44%) did not agree with this statement. A large proportion of the respondents agreed that online music stores better facilitate access to music distribution (83%) while the remainder disagreed. Although services such as Spotify, Deezer and Apple Music are legally distributing music, other services create unfair competition. The exponential growth of digital music distribution is underpinned by the rapid penetration of smartphones, and embryonic streaming services such as Apple Music which are gaining a larger market share. Prominent players in South Africa include Google Play, Rara, Simfy Africa and Deezer. Underpinning this view, 88 per cent of the respondents agreed that digital music distribution

inspires innovation in musicians and 90 per cent felt that the availability of online music attracts a wider audience. Based on the analysis of push-pull strategies, the respondents were in general agreement on the strategies used in the music industry.

In the Likert scale analysis for supply and demand, approximately 77 per cent of the respondents asserted that digital music distribution methods have transformed the consumption of music and 79 per cent agreed that free online music leads to further music consumption. Half (50%) of the respondents were of the view that the current copyright laws adequately protect artists' music rights, although 30 per cent disagreed with this statement and 20 per cent remained neutral on this issue. Eighty per cent agreed that the adoption of complementary technology influences customers to listen to more online music as well as download more through modular technological devices such as smartphones. Forty-one per cent of the respondents agreed that the regulation and closure of various digital distribution services had reduced illegal downloading of music, while 19.8 per cent strongly agreed and 10.6 per cent disagreed. Finally, 67 per cent of the respondents agreed that access to a high bandwidth speed encourages downloads, while 77 per cent felt that technologically compatible media devices do so. Similarly, 74 per cent of the respondents concurred that technological advancements encourage independent music production. This confirms the previous results where 76 per cent of the respondents agreed that the Internet is critical in both the creation and promotion of music entrepreneurs. The digital music distribution system under Covid-19 must epitomise the centre and bridge between the music production and processing and distribution and consumption by providing optimization platform for digital distribution between downloading and streaming service platforms (Cui & Xie, 2020). At present, the innovation technology for efficient digital distribution is mainly to change the thinking of music technology and combine distribution and consumption with intelligence and informatization (Xiaoying, 2020). Vamvaka, Stoforos & Palaskas (2020) add that affective attitude and perceived self-efficacy have a greater influence on entrepreneurial intention.

Table 1
DESCRIPTIVE STATISTICS ON SUPPLY AND DEMAND

	Free online music	Music download	Indep. music	Complementary technologies	Digital music consumption	Devices	Band width speeds	Regulation	Copyright laws
N	217	217	217	217	217	217	217	217	217
Mean	4.09	4.08	4.06	4.04	4.02	3.97	3.8	3.68	3.32
Median	4	4	4	4	4	4	4	4	4
Mode	4	4	5	4	4	4	4	4	4
Std. Deviation	0.906	0.922	0.95	0.722	0.855	0.852	0.878	0.95	1.304

The factors considered depict possible concerns relating to digital music distribution among Durban-based musicians. The highest mean value ($m=4.09$ and standard deviation= 0.91) indicates that free online music leads to further music consumption cycle. Aligned with technological value, the second highest mean value ($m=4.08$ and standard deviation= 0.92) similarly shows that the majority of respondents felt that music downloads are influenced by modular technological developments, such as smartphones. Musicians' tendency to resort to independent music production and creation is reflected with a mean value ($m=4.06$ and standard deviation= 0.95), with the respondents confirming that technological advancements encourage independent music production. The mean value of 4.04 and standard deviation= 0.72 show that the respondents agreed that complementary technology adoption influences customers to listen to more online music. In keeping with bandwidth speed and compatible devices, the methods of distributing music have transformed the consumption of music ($m=4.02$ and standard deviation= 0.86). Complementing bandwidth speed, access to compatible devices ($m=3.97$ and standard deviation= 0.85) is significantly noted to encourage online downloads. Access to a high

bandwidth speed elicited a mean value of 3.8 and standard deviation=0.88, indicating that the respondents agreed that access to a high bandwidth speed influences online downloads.

The descriptive statistics (table 1) reflect that the majority of respondents indicated their concern surrounding the regulation of music distribution services with the second lowest mean value ($m=3.68$ and standard deviation=0.95). A similar cause for concern is related to the current copyright laws. Copyright laws provide adequate protection for musicians (lowest mean value of 3.32 and standard deviation=1.30). The global digital market is experiencing unprecedented levels of competition, with streaming services developing and extending their offerings around the world. These developments provide fans with a more varied, richer experience, and brings streaming to new audiences and territories (IFPI, 2017). In a digital world, the global music industry is confronted by illegal distribution of music that undermines investment and innovation by music companies. Policymakers need to address the value gap caused by such activities and to adopt legislation that allows such sites to be delisted. The value gap describes “the growing mismatch between the value that user upload services, such as YouTube, extract from music, and the revenue returned to those who are creating and investing in music” (IFPI, 2018). The result indicates that although respondents were in agreement that it does provide some protection, however the marginal result is a cause for concern among the respondents’ protection rights. The digital distribution of music has added value in the growth of the South African recording industry and the digital consumption and rapid delivery of music. Digital advances have altered the ways and means of the production, distribution and consumption of cultural and creative content, providing a range of opportunities but at the same time engendering challenges and concerns, as expressed by creators and artists (Hesmondhalgh, 2020) as well as rights owners and producers (Nordgård, 2021), and audiences (Snickars, 2016). Music streaming has become the dominant format for accessing and listening to recorded music, and consequently the main economic driver of revenue from recorded music. In doing so, the streaming format spawned significant economic change, turning the dramatic economic decline in recorded music revenue, into a long-awaited increase (Krueger, 2019; Hesmondhalgh, 2020). These changes are connected to the independent record labels and a more nuanced approach to the economic and creative sustainability of on-demand subscription-based streaming, but also to the major labels (Nordgård, 2021).

The inferential statistics presents the basis of all statistical analysis in this study, and it is at a 95 per cent confidence interval. In this case, the sampling distribution of the mean is normally shaped and is the reflection of the respondent mean. Data within a normal distribution possess values that are within 1.96 standard deviations of the mean. Consequently, the sample mean has a 95 per cent chance of being within 1.96 standard deviation errors from the true population. Cross-tabulation is performed to establish a relationship between two variables, and if so, the information can be represented in a two-dimensional frequency distribution by cross-tabulating the variables. A Chi-square test is a non-parametric test of significance that is useful when testing nominal data; is used to perform hypothesis tests about the variance. As a general rule for the Chi-square test, the decision rule is to retain the null hypothesis if $p>0.05$, and accept the alternate hypothesis if $p<0.05$. In this cross-tabulation, the Chi-square supports the results obtained from cross-tabulation and affirms the decision to retain the alternative hypothesis as $p<0.05$, indicating that there is an association between SAmp3.com (South African website used for music distribution) and digital music innovation.

Table 2
SAmp3.COM AND DIGITAL MUSIC INNOVATION

Does SAmp3.com Relate to Digital Music Distribution Inspires Innovation to the Musician?					
		Digital music distribution inspires innovation to the musician.			Total
		Yes	No		
SAmp3.com	Yes	Count	26	10	36
		SAmp3.com	72.20%	27.80%	100.00%

	No	Total	12.00%	4.60%	16.60%	
		Count	164	17	181	
		Samp3.com	90.60%	9.40%	100.00%	
		Total	75.60%	7.80%	83.40%	
Total		Count	190	27	217	
		Samp3.com	87.60%	12.40%	100.00%	
		Digital music distribution inspires innovation to the musician.	100.00%	100.00%	100.00%	
		Total	87.60%	12.40%	100.00%	
Chi-Square Tests						
		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
		Pearson Chi-Square	9.317 ^a	1	0.002	
		Continuity Correction ^b	7.706	1	0.006	
		Likelihood Ratio	7.72	1	0.005	
		Fisher's Exact Test			0.005	0.005
		Linear-by-Linear Association	9.274	1	0.002	
		N of Valid Cases	217			
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.48.						
b. Computed only for a 2x2 table						

H₀₁: The relationship between Samp3.com and digital music distribution does not inspire innovation to the musician.

H_{A1}: The relationship between Samp3.com and digital music distribution does inspire innovation to the musician.

Table 2 illustrates that 87.6 per cent of respondents agreed that digital music distribution inspires innovation in the musicians. The degree of freedom (1) and level of significance is determined based on the minimum expected count. The p value (0.002) is less than the level of significance (0.005). The Chi-square test (9.317) is more than the expected count (2.10). The decision to reject the null hypothesis and accept the alternate hypothesis is based on the strength of the relationship between Samp3.com and digital music distribution inspiring innovation in the musician. This infers that those respondents who distribute their music through Samp3.com believe that digital music innovation inspires innovative performance by the musician. Musical characteristics, concert venues, performers, and programming have gone through significant evolution; however, a live music event can always be understood as a stage for personal encounters and, therefore, as social space (Váradi, 2018). Musical performances and concerts are the result of a joint interaction between performers and listeners. New forms of cultural consumption and their convenience have raised the question as to whether concert halls will still be needed in the future, and whether the audience will take on the extra time and effort to be present in person at a musical artistic event (Váradi, 2021).

Table 3
MUSIC DISTRIBUTED MEANS AND MEDIUM OF DISTRIBUTION
Is the Means of Distribution Associated with the Medium of Distribution?

		Medium of Distribution			Total	
		Electronic Distribution	Traditional Means	Both		
Music is Distributed by	Myself	Count	83	24	44	151
		Music is Distributed by	55.0%	15.9%	29.1%	100.0%
		Total	38.2%	11.1%	20.3%	69.6%
	My Label	Count	22	14	30	66
		Music is Distributed by	33.3%	21.2%	45.5%	100.0%
		Total	10.1%	6.5%	13.8%	30.4%
Total		Count	105	38	74	217
		Music is Distributed by	48.4%	17.5%	34.1%	100.0%
		Total	48.4%	17.5%	34.1%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.769 ^a	2	.012
Likelihood Ratio	8.887	2	.012
Linear-by-Linear Association	8.184	1	.004
N of Valid Cases	217		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.56.

Ho2: There is no association between the means and the medium of distribution in the music industry.

HA2: There is an association between the means and the medium of distribution in the music industry.

A large portion of the sample (48.4%) stated that they distributed their music electronically; whilst 34.1 per cent distributed their music through both traditional means (physical music retailers) and electronic means. South African musicians has a habit of physically distributing music in dusty streets of townships, main streets of city centres and mini bus taxi ranks rather than creating the digital persona for digital entrepreneurship. The data also indicates that 17.5 per cent of the respondents distribute their music only through traditional means. The respondents that stated that they distributed their music themselves (69.9%) indicated that they used electronic means (38.2%); traditional means (11.1%); and both traditional and digital means (20.3%). Of those that distributed their music *via* their record labels, 10.1 per cent did so electronically; 6.5 per cent through traditional means and 13.8 per cent through music stores and online. The degree of freedom (2) and level of significance is determined based on the minimum expected count. The p value (0.012) is less than the level of significance (0.005). The Pearson Chi-square test (8.769) is more than the expected count (2.10). The results infer the strength of association between the means of distribution and the method of distribution Table 3.

The independence of entrepreneurial artists is crucial for disintermediation while the digital music distribution enhances their flexibility for economic dimension. The digital platforms extend a more global reach by utilizing the iTunes, SAmp.com, social media, Napster, sound cloud and others. Subscription services like Apple Music, Joox, Google Play Music, Tidal, Simfy Africa, Rara, iTunes, and Deezer are major companies in the market and are responsible for the majority of total digital sales. Subscriptions to streaming have grown to more than 250,000 revenue services, and the market is expected to grow strongly (IFPI 2017). The digital revenue growth has been underpinned by the growth in streaming and synchronization revenue, while physical sales revenue has declined rapidly. In South Africa, the physical market remains essential although physical sales are gradually declining. The emerging trajectories among multi-creation for Omni channel music distribution, social networking, music content-based information sharing has transformed the digital music industry by offering new information-based services. The digital distribution of music through SAmp3.com inspires innovative performances by the musician. The social networking mediums increase the market base for music distribution. Expanding technology-driven and knowledge-based environments demand higher levels of knowledge and a faster flow of information to tap into integrated technology in order to remain competitive. The exponential growth of digital music distribution is underpinned by the rapid penetration of smartphones, and embryonic streaming services such as Apple Music which are gaining a larger market share. Online music stores better facilitate accessibility, while digital music distribution inspires innovation in musicians and the availability of online music attracts a wider audience and music consumption cycle.

The extent whether the digital music distribution can be associated with putative digital entrepreneurial practices. The independent music production and creation drives the economic entrepreneurial dimension while technological advancements encourage independent music distribution and directly impacts the diffusion of digital music for fans and customer's digital consumption cycle. Complementing bandwidth speed, access to compatible devices is significantly noted to encourage online downloads. The digital environment facilitates both digital entrepreneurial practices and market-controlled communication, thus directly impacting

the diffusion of digital music and complementary technologies as well as new ideas and products. Souza & Baldanza (2018) confirmed that the wireless music experience can significantly enhance the positive impact of perceived usefulness and perceived entrepreneurial independence on perceived value and attitudes and purchase intention in the fan economy. Additionally, Haynes and Marshall (2018: 261) highlight the discourses of opportunism and entrepreneurialism as the contemporary music economy, ranging from social change context and technological dimensions. The propensity to entrepreneurial diffusion galvanises music entrepreneurs and/or independent artists to move away from traditional physical music distribution as music brick and mortar are ceasing to exist (closing shops) and abrasively adopt new digital distribution ideas, behaviour, or products. Jiang, Lin, Zhang, Zhuang, Jin & Lin (2021) accentuate on consumer confidence from social value that the procurement of digital music can resonate with their self-concept while emotional value entices the fans to the consumption of digital music (Lin, Wang and Huang, 2020). Epistemic value resonates with consumers believing that they can experience the sense of innovation or knowledge from the consumption (Hesmondhalgh, 2020).

The digital content market is undergoing an evolution in networking and digitalisation technologies. The social media are media for social interaction (customer-customer interaction and participation) become a major focal reason for the music industry to adopt the pull strategy (Chaffey, 2015: 7) to encourage positive engagement with artists and their brands. Shaw & Sergueeva (2019) added the advantages of virtual products, and digital music characteristics (price, diversity, audition, and entertainment) into the rational behavioural model with perceived entertainment significantly affect consumer buying behaviour (Zhang and Wang, 2019; Lin, Wang & Huang, 2020). Interactions may occur on a business site, social networks and other third-party sites such as Apple Music, Joox, Google Play Music, Tidal, Simfy Africa, Rara, iTunes, Spotify, SAmp3.com and Deezer”.

CONCLUSION

This study attempted to examine the extent whether the digital music distribution can be associated with putative digital entrepreneurial practices. The study discovered that the independence of entrepreneurial artists is crucial for disintermediation while the digital music distribution enhances their flexibility for economic dimension, digital revenue growth from the growth in streaming and synchronization revenue as the physical sales revenue has declined rapidly. The emerging trajectories among multi-creation for Omni channel music distribution, social networking, and music content-based information sharing can transform the digital music industry by offering new information-based services. Expanding technology-driven and knowledge-based environments is underpinned by the rapid penetration of smartphones, and embryonic streaming services. In keeping with bandwidth speed and compatible devices, the methods of distributing music can transform the consumption of music confronted by illegal distribution of music that undermines investment and innovation by music companies.

The second objective attempted to establish how the digital music diffusion influences the digital music consumption cycle in the extended global reach. The digital music distribution platforms seamlessly integrate for entrepreneurs, individual fans, supply chain partners and sponsors to synthesize the co-creation of music services and content for profitable pooling and sharing of revenues and experience. Musical entrepreneurs are inherently obligated to scalability and flexibility as the results of growth in scale of digital music and scope of global reach. The South African creative industry, music in particular, must absorb the opposing logics of stability as romantic individualism and flexibility as a commercial entity and entrepreneurship as a paradox of change. Based on the analysis of push-pull strategies, digital music distribution methods have transformed the consumption of music.

The reliability of a research instrument is determined using the method of internal consistency. Respondents were asked to rate 22 variables on a 5-point Likert scale where 1 indicated ‘strongly disagree’ and 5 ‘strongly agree’. Cronbach’s Alpha was used to test the

reliability of the instrument and also depicts the internal consistency of the study. It generally ranges between 0 and 1, and a value closer to 1 indicates a higher degree of internal consistency. This study has a high degree of internal consistency. Cronbach's Coefficient Alpha value (0.826 on 22 items) indicates the level of internal consistency by showing a construct validity where the constructs are measured with sufficient reliability. Internal consistency is discussed in terms of the interrelatedness among the items in the study. However, interrelatedness of items does not indicate one-dimensionality and homogeneity. The reliability statistics generated from the SPSS indicate that the instrument has a moderate level of internal consistency for reliability as suggested by the Cronbach's Alpha. Furthermore, the questionnaire had a high level of inter-item consistency (Cronbach's Alpha=0.826), implying that it has a high level of reliability. Item statistics indicate that item reliabilities ranging from 0.7 to 0.95 have acceptable Alpha values. Therefore, the researchers infer that the instrument is reliable in relation to the dimensions of digital music distribution, namely, supply and demand (0.671 on nine items) and competence and capability (0.634 on six items). The reliability of each dimension relating to digital music distribution was also assessed. The dimensions of digital music distribution have strong to very high levels of reliability. The reliability statistics range from 0.634 to 0.671, indicating that the items used to measure the dimensions of the study have internal consistency and are hence reliable. The study indicates that digital music production, distribution and consumption have been adopted by a considerable percentage of musicians. It would be critical to investigate the extent of regulatory improvement and compliance while developing a viable system to curb the dilemma of copyright. The theory of Diffusion for Innovation laid an underlying foundation of this study cogitating on how, why and at what rate novice ideas online downloading and streaming services are disseminated across cultures and generations for music entrepreneurs to take an opportunity of digital distribution under Covid-19 pandemic. The underpinning theory of Streaming Service Acceptance (TSSA) focuses on attitude, injunctive norm and perceived behavioural control on this study and an affected factor intention to use digital platforms including the music industry. These theories contextualised the study on the constructs of digitisation, disintermediation, and push-pull system in the confinement of entrepreneurial and technological framework, and the univariate and bivariate methods produced the results that defined this study.

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