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# The Influence of Digital Migration on the Performance of Media Houses in Brazil; Case study of Sistema Brasileiro de Televisão

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## Abstract

The research examined the perceived influence of digital migration on the performance of the media houses in Brazil. Specifically, the study wanted to investigate the impact of digitization on performance to Sistema Brasileiro de televisão. The study was anchored on the two theories, namely, the technology acceptance model and theory of innovation diffusion. The study concluded that digital migration was a hopeful incident to be adopted by the media houses although it had the hurdles of the high cost of procuring the digital facilities, lack of adequate information, technology experts, poor infrastructure in the country and the lack of regulatory legal framework on the use of digital platforms. The study also concluded that digital migration spurred productive information acquisition and news distribution within the organization. The study further concluded that the organization majorly depended on the internal product re-innovation to establish new products to the viewers. The study also confirmed the organization had ushered in a relook at the competitive service strategy to align it to the existing market situation. The study recommended that media houses always need to welcome the use of digital platforms to enhance their performance and enhance the cost-effectiveness. The study also suggested the government to implement strategies and policies that minimize unhealthy and unfair competition amongst the media houses to make the firms grow in their future digitization. Besides, the study recommended the media houses to continue espousing the digitization of its contents and training of the employees to improve the skills and competency, thus higher efficiency.

**Keyword:** Digital migration, Sistema Brasileiro de televisão, performance, media house, Brazil

### 1.1 Background of the Study

The digital revolution is not static and keeps on propelling each day. In this digitization World, the new dynamic innovation has displayed more comprehensive coverage and continuous changes to the media industry (Clarke, Lindquist & Roy, 2017). As indicated by Angulo, Calzada and Estruch (2014) the importance of switching from analogue to digital was to connect the entire society, even those who are in remote areas, to access the quality sound and pictures.

The digital migration influenced the performance of the media houses, both positively and negatively (Brandão, 2015). The digitization has made it easier for local video productions to be generated, thus improving the performance. However, the traditional companies have lost revenue in advertisements, especially from the newspapers and the print media, as many institutions turned to the digital form of advertisement, which is fast and reliable (Singh, Darwish & Potočnik, 2016). According to Khan and Aftab (2015), digital migration enhanced the development of new channels, which has increased the base revenue for many companies that are involved in the advertisement.

According to Witteborn (2018), digital migration is the transition from the weak analogue signals to more effective digital signals. More so, according to Matos (2015) the digital movement involves analogue link transformation to advanced digital or more digital satellite television in which the viewers may have quality and clear pictures from multiple channels. The TVs and the radio have been operating under the analogue signals for a long period and the signals were limited to cover a small geographical area. Papastathopoulos, Koutsouvelis, Cherian and Pech (2019) argued that the digital migration was initiated to counter the analogue transmission and, thus, consumers to have the quality and quantity content in viewership. The analogue systems keep running on a substantial bandwidth to transmit sound and picture data and were subsequently the motivation behind why the Digital Terrestrial Television (DTV) system was instituted with the goal that they may send signals to the remote areas and reduce the transmission range (Cabral, 2014).

The main idea of switching from the analogue to the digital was to increase the transmission of the wireless signals, unlike the analogue that transmitted the signals on a massive bandwidth (Herman, 2017). Further, the digitization has impacted how quickly news substance gets to the intended interest group. According to Galperin (2014), before the digital migration, people primarily depended on the papers for presentation and getting information about an event, which took much time to get to the intended audience. The transition to digitization has made it considerably progressively easy to introduce information continuously, raise to-date the breaking news and happenings contemporaneously (Ajibade, 2018). The media houses have benefited from the digital advertisement and the majority of the customers prefer the digital method because it is fast and most reliable compared to the traditional way, thus increasing the total revenues through the production of various products.

## **1.2 Research Problem**

Digital migration has dramatically changed the quality of the content, the signal and pictures and consumers have access to broader coverage of the information through a variety of TV channels (Clarke, Lindquist & Roy, 2017). The digital migration process has affected the performance of some of the media houses negatively since the majority of the audiences were not well informed and educated about the digital movement (Berger, 2012). The migration to digital was costly for buyers due to the purchase of decoders and the pay-to-watch programs, along with these lines instances of decrease in the TV group of viewers, which is not appropriate for advertisers and the promoters consequently a drop in the exhibition as far as performance (Belias, Koustelios, Sdrolias & Aspridis, 2015). Drop-in numbers of TV viewership reduced the advertiser's profits. Cardao-Pito (2017) reported that digital migration was costly and increased the chances of decline in TV viewers, which affected the media houses negatively and the total revenue was decreasing.

Also, the digital movement influenced the financial performance of the newspapers negatively and its income decreased (Bratton & Gold, 2017). Previous studies failed to examine the perceived influence of digital migration on the performance of media houses in Brazil. For instance, Papastathopoulos, Koutsouvelis, Cherian and Pech (2019) investigated the effects of digital movement on the financial performance of the newspapers in leading media houses in Greece and found digital technologies have negatively affected the financial performance of the newspapers. Cortada (2015) explored the effect of digitization on the performance of selected communication companies in Argentina and concluded that digital migration was positively related to the performance of the chosen telecommunication companies.

### **1.3 Research Objective**

To establish the influence of digital migration on the performance of media houses in Brazil

## **2.0 Literature Review**

### **2.1 Theoretical Review**

#### **2.1.1 Technology Acceptance Model**

Davis proposed the Technology Acceptance Model in 1989 (Davis, 1989). The theory points out that when a client is exhibited to innovation, a few variables will impact their choice concerning how and when they will utilize it the introduced technology. Hu, Chau, Sheng and Tam (1999) established that the model seeks to examine the factors that influence the acceptance of a new product in the market and it further develops that technology changes rapidly and developers must ensure the new systems, processes or products can be used with much ease. The model shows the acceptance of new technology is a function of easiness to use it.

The model is relevant to the current study since the adoption of digital television involved the acceptance of new technology in the system. Digital migration transmissions are changes that affected the transition from analogue to digital. Thus, its endorsement depends on the user's perceived usefulness that is a function of ease of use and perceived quality (Martínez et al., 2008). Viewing television in digital transmissions provides comprehensive content in terms of channels. The specifications within the model to assist media to acknowledge the significance of the digital movement stage to do the creative business systems. If the organization recognizes the innovation, they need to think about whether the change embraced has usability and is seen to be valuable.

According to Ajibade (2018), the TAM failed to consider other factors that affect the acceptance and the willingness to use technology such as education and age. Sun and Zhang (2006) reported that TAM failed to examine the influence of the attitude, norms and culture of the employees in the process of adoption of the new technology in which the management decides the technology to be adopted in the company without considering how the employees will react to the move despite the technology expected to improve the efficiency in production. Moreover, Calisir, Altin Gumussoy and Bayram (2009) argued that TAM is much applicable to individuals who want to use the technology rather than in the corporate environment that is made of many employees and requires integration with the ICT.

#### **2.1.2 Theory of Innovation Diffusion**

The theory was developed by Rogers (1995). The theory depicts innovation and creativity within an organization alters the method of production and improves the efficiency significantly within

a certain period of time (Rogers, 1995). The theory revolves around that the impression of progress is exceptional and that if and when the thought appears to be novel to the potential adopter, it is then should be considered as advance.

Besides, the diffusion theory establishes that innovation incorporates data, and hence, the reception will bring down the vulnerability within the institution. As per Rogers (1995), diffusion of a change is dependent upon five key highlights which incorporate its relative bit of scope, similarity, intricacy, trainability, and discernibleness. The innovation diffusion theory can be utilized to clarify process innovation where innovation is a segment. Hence, this theory is essential to the present investigation and the digital movement includes the reception of the change from the simple signals.

However, the theory fails to concentrate on the complex issues such as the cultural and political factors and the societies which are believed to be rational in the process of deciding on whether to adopt a new technology or not (Bradford& Florin, 2003). Thus, the diffusion theory has concentrated more on the innovation itself rather than the social-cultural factors associated with the technology and the consequences related to the introduction of the change in the industry (Minishi-Majanja&Kiplang' at, 2005). The technological innovations become successful when they appreciate and provide a beneficial role to the consumers and all the stakeholders.

## **2.2 Empirical Review**

Papastathopoulos, Koutsouvelis, Cherian and Pech (2019) investigated the effects of digital migration on the financial performance of the newspapers in leading media houses in Greece. The study used a case study in which the targeted population was 76 employees working in leading houses in Greek. The findings of the research established that the traditional media of communications, such as the newspapers and the print media have reduced their income since the inception of the digital form of communication. The study further revealed that most of the companies prefer advertising using the digital mode as it became the most used by the people hence reaches the targeted people very fast.

Salman, et al. (2011) examined the impact of new media on the performance of radio television Malaysia. The study utilized the descriptive research design. The findings of the study found that media houses have improved in their market coverage and many of the citizens can have access to services offered by the companies. However, the study also established that the performance of the traditional mainstream mass media such as the print media has dropped in their performance in terms of the market share as well as the size of the profits.

Tilley and Tonge (2013) conducted a study in the Netherlands to examine the influence of digitization and organizational performance in the case of Sanoma and Talpa Holdings. The findings of the study showed that digitization played an essential part in improving the competitive business strategy, which improved the financial performance of the companies.

Khan and Aftab (2015) examined how digitization has impacted the performance of media houses in the Indian economy. The targeted population was the leading media houses in India. The unit of analysis was the employees from the management department in Ananda Bazar Patrika Ltd, Indian Express Group and HT Media Ltd. The findings of the study uncovered that digital migration had influenced the performance positively. The media houses can spread the news very fast to the targeted audience; however, the old means of advertisement such as the newspapers have reported a decline in the performance. Khan and Aftab (2015) present the

methodological gap in that the study utilized the descriptive research design and the present study used case study design.

Cortada (2015) explored the impact of the digitization on the performance of selected telecommunication companies in Argentina. The study adopted a case study design. A census was conducted in the research and the total population was 61 employees from the management departments. The findings obtained showed that digital migration has changed on the performance of the telecommunication companies. The study concluded that the digital movement was positively related to performance.

A study was conducted in South Africa by Nkuna and Chiumbu (2017) to analyze the influence of digital migration on the performance Soweto TV. The targeted population was 117, but the study only sampled 43 respondents. The findings of the study revealed that moving from the analogue signals to digital transmission has actually caused both unfavorable and positive impacts on the performance of the media home. The study concluded that the financial efficiency of the organization had actually improved every year considering that the media has actually been included in developing new channels and dissemination of news. The study presents a methodological gap since the research used descriptive research design and the current research used a case study design.

### **3.1 Research Methodology**

The study adopted a case study design. According to Mugenda and Mugenda (2003), the case study design is fundamental and involves the process of interviewing the respondents to get the necessary information that is relied upon for the data analysis and making of the conclusions). The targeted respondents of the study were the managers in different levels of management. The units of observation were managers from the finance department, ICT department, human resource department and programs division department. The selected respondents were expected to record and write down information that was used later for data analysis. The report was interpreted utilizing the content analysis since it was qualitative.

### **4.0 Research Findings and Discussions**

#### **4.1 Challenges of Digital Migration**

According to the findings of the study, the interviewees indicated that media companies are experiencing a wide range of difficulties concerning the adoption and use of digital advertising.

*"Problems that faced the organization after the digital migration was the high cost of acquiring the digital facilities and lack of adequate information technology infrastructure in the country." ICT manager [Key Informant, 2019].*

Besides, the discoveries of the examination demonstrated that digital movement required the set-top boxes that made it critical to contend with contenders who had simple and less expensive set-top boxes. There was a lack of adequate regulatory legal framework on the use of digital platforms and the broader choice of TV channels led to the viewer's fragmentation, which hindered the organization from achieving its goals and the revenue from the advertisements went down.

*"It turned out to be simple for the contenders to enter the media business and contest successfully, there was a significant risk of substitute item, the aggressive contention had*

*expanded and it was easy for purchasers and this situation sponsors to drive costs down just like the change to a contender." Programs division manager [Key Informant, 2019]*

Bradford and Florin (2013) clarified another challenge of digital migration was that many staff of the TV channels does not have the imperative expert learning to work toward digital devices and some of them were not all around prepared to man the technology for maximal execution. In a related report by Brenner (2018) most of the inhabitant's in-country networks were not cable to handle the expense of electronic workplaces to equip them to see electronic material from digital TV. Just a couple of customers had the option to buy the set boxes and make the month to month membership that prompted an outstanding decrease in the TV crowd, which was bothersome for advertisers and the sponsors (Ilesanmi, 2015).

#### **4.2 Benefits of Digital Migration**

The study sought to establish the benefits of digital migration over analogue broadcasting in media houses. From the study findings, the interviewees indicated that the profits attributable to digital migration included expanded speeds in data dissemination, closer vicinity to their group of spectators, developed adaptability in news dissemination, expanded crowds and fast analysis on the nature of substance conveyed by the media houses.

*"The nature of our news inclusion has improved since the beginning of digital development," Programs division manager [Key Informant, 2019].*

Also, the findings of the study established that digital broadcasting has increased transmission networks by improving spectrum efficiency and the increase in transmission capacity that had raised the establishment and introduction of new channels that have allowed for the cropping up of multiple stations. The digital broadcasting allowed the implementation of single frequency networks instead of independent parallel analogue systems, which were more efficient than multi-frequency networks.

*"Digital migration has increased the sales in the organization as well as the market size through the introduction of new channels." Finance manager [Key Informant, 2019]*

The discoveries of the examination agree with the results of Eizmendi, Velez, Gómez-Ba'rquero, Morgade, Baena-Lecuyer, Slimani and Zoellner (2014) who revealed that various transmitters utilize a similar recurrence channel to transmit a similar TV administration and just a single recurrence channel is required to cover the administrative region in this way lessening capital use on conveying and keeping up discrete foundation and expanding velocity of Digital transmission. Moreover, Cloutier, Felusiak, Hill and Pemberton-Jones (2015) set up that digital TV will help offers of TV sets and digital video recorders and the Consumer consumption on digital hardware could prompt definite advantages regarding expanded time spent sitting in front of the TV and more popularity for digital substance, in this manner expanding the general execution of the media houses.

#### **4.3 Dissemination of News**

The investigation sought to establish the dissemination of news after the digital migration in media houses. According to the findings of the study, the news was gathered faster and was also disseminated quickly.

*“Since the beginning of digital migration, the news is accumulated quicker and disseminated rapidly, thus reaches the targeted audience within a short period.”* Programs division manager [Key Informant, 2019]

This means digital migration has empowered faster dissemination of news and the digital platforms are performing better in the organization. Leurs and Prabhakar (2018), in concurrence with the aftereffects of the investigation, found that the digitization procedure improves news revealing and dissemination and news detailing shows the inventiveness in transmitting and going over the news to the intended interest group.

#### **4.4 Competitive Business Strategy**

The respondents were asked whether digital migration has steered to relook at the focused business procedure to adjust in the present market situation. The discoveries from the examination uncovered that the organization had developed a new competing business strategy to align with the case in the market and be in a position to compete with other media houses in the country.

*“Digital revolution has introduced a relook at the aggressive business procedure to adjust it to the present showcase happening.”* Programs division manager [Key Informant, 2019]

The results implied that the digital progress had introduced another market mixture, which means the media houses have to develop new strategies that will match the market forces. Jabłoński (2018) argued that organizations go through viable intensity and an organization acquires an upper hand and shows its successful aggressive business technique when the organization exercises, plans and results are different from contending organizations and are adjusted to the current advertise circumstance. In addition, Brenner (2016) demonstrates that an organization has a focused business methodology when it has the component to escape the method for contenders by showing signs of improvement favors from clients and is likewise adjusted to current market settings.

#### **4.5 Profitability**

The respondents were asked whether, since the inception of digital migration, the profitability has improved.

*“The organization has been training employees to make them acquire skills necessary to use the technology introduced fully”.* Human resource manager [Key Informant, 2019]

Also, the interviewees noted the decline of income was attributed to the fact that the number of firms and individuals using the newspaper for advertising their products and services had continually declined over the years as most of them opted for internet-based advertising as a more convenient and cheaper advertising media.

*“The modern society is more familiar with social media and majorly relies on news from the internet to know what is happening and whether there is any breaking news.”* ICT manager [Key Informant, 2019]

The respondents further revealed that the association has a system of reduced expenses by maintaining a strategic distance from tedious assignments, improving coordination between exercises, open doors for differentiation of products and guaranteeing supply. To pick up end-client contact by mix is a path for another product to infiltrate a mature market since it is

conceivable to show the predominance of the products. Further, the development of the workers and the product re-innovation has empowered the organization to make a profit in the financial year 2018.

#### 4.6 Market Share

The study sought to examine whether media houses had an increase in market share since the inception of digital migration. According to the findings of the study, the market share of the media houses has increased since the commencement of the digital movement because of the development of the multiple channels.

*“Digital migration has influenced the media houses to develop new stations and channels.”* ICT manager [Key Informant, 2019]

Besides, the study found that the market share of the organization has been improved by the innovation to enhance viewer experience and increase the monetization potential of the digital offering and some of the strategies implemented included breaking news on digital platforms.

*“The organization has developed new features to the products offered to be attractive to the viewers and this has increased the market share significantly.”* Programs division manager [Key Informant, 2019].

This illustrated that the media houses were in a position to increase the number of new channels, which implies digital migration was responsible for the development of the news channels. The findings concur with the results of Leurs and Smets (2018) who found that a comprehension of execution is multi-pronged and measures the additional bit of space as far as the piece of the overall industry, return on the venture, deals development, and obviously, benefit as bookkeeping measures. Moreover, determinants of execution, similar to consumer loyalty combined with non-budgetary achievements like a piece of the pie, are fundamental in the general appraisal of efficiency, especially when one thinks about the privately run companies..

#### 4.7 Digital Migration and Organizational Performance

The digital migration at the media houses has enabled the organization to have creative information acquisition and the news has been gathered very fast and disseminated quickly to the targeted audience. *“Because of digital migration, the quality of news coverage has significantly improved, which has led the viewers to appreciate our services offered which has increased the market share across the country and to the region.”* Programs division manager [Key informant, 2019]. The viewer fragmentation steered up the establishment of various channels, which increased the competition level among the media houses and subsequently led to a decrease in the sales volume that has negatively affected the monetary performance and performance of the company gradually. In general, the news dissemination occasioned by digital migration has enhanced the overall performance of the media houses and according to human resource manager [Key informant, 2019], *“digital migration has empowered innovative data fastening and news scattering that has expanded the exhibition of the association.”*

The business strategy has helped the organization to improve its activities and enhance its business income. *“The digital change has introduced a relook at the aggressive business procedure inside the organization to adjust it to the present market situation and for what has to come.”* [ICT manager [Key Informant, 2019]. The media houses had been concerned with consistently embracing the changes occasioned by the initiation of digital migration and the

development has been successful in upgrading the usage of systems that had improved the sales revenue of the organization over time. Programs division manager [Key informant, 2019] reported that *“The competitive business strategies were essential and they led to developing the approach of the organization that has led to the improvement of the performance in the media houses.”*

The media houses has utilized the technology that comes with digital migration to increase more features to some of their products which has brought about growth in the level of viewership and, consequently, in the market share. According to Human resource manager [Key informant, 2019], *“the initiation of digital migration enables the organization to rely on the technology that has seen the introduction of the new products that satisfy the need of the clients.”* Further, the product re-advancement that had been occasioned by the digital movement had without a doubt associated with the plan of action, which had empowered the foundation of more brands for the media houses. According to the Programs division manager [Key informant, 2019], *“product-renovation occasioned by digital migration had notably improved the performance at media houses positively.”*

The digital migration was costly and it cut the capital base of the media houses and it influenced the exhibition of the association adversely. *“Due to the substantial cost of digital migration, there has actually been an incapacitating in the emphasis on aggressive business strategy,”* Programs division supervisor [Key Informant, 2019]. The media houses had been compelled to put resources into the preparation of the representatives to comprehend the activities of the digital stages, yet such progressions practically speaking yielded positive outcomes as the laborers could now chip away at the stages and help to improve administrations to increment in the development. ICT chief [Key informant, 2019] built up that *“given that the beginning of digital migration, the organization has actually had a hierarchical structure that supports the strategic techniques which enhances the performance’*. The digital migration had been related with the additional costs that had not been inviting to the association along these lines, causing the gainfulness of the association to vary after some time.

## 5.1 Conclusions

The study concluded that digital migration was helpful and it spurred productive information acquisition and news distribution. The study concluded that the quality of the news coverage had improved since the initiation of the digital migration and customers were contented with the services offered hence the increase in sales revenue. The study also concluded that digital migration enabled the establishment of many channels that have led to viewer fragmentation and thus increasing the performance.

The research study also concluded that since the inception of digital migration, media houses have introduced a relook at the aggressive organization strategy to change it to today market conditions. The examination likewise infers that the digital movement displayed another market mixture to the media houses, which stimulated it to develop new strategies to match with the market forces and remain competitive. Thus, aggressive business procedures occasioned by digital migration impacted the doing of the activities to all of the media houses.

## 6.1 Recommendations

The study recommended that media houses should continually grasp the utilization of the digital platforms to improve in its presentation and upgrade the focused business systems by stipulating

a critical system that is associated with the new market elements where watcher fracture has become a substantial concern. The essential system created ought to welcome the approach of everything being equal in the market and thus establish the best approach to outdo them and improve in its competitive advantage.

The study also recommended the media houses to maintain establishing more channels. Forming a variety of channels will expand the extension of the company. It will be able to access a variety of viewers and the market share and the growth of the organization will progress. Also, the study recommended the organization to be advertising most of its products using the digital platforms such as the social media considering most people have access to it. The research recommended that the government ought to implement techniques as well as policies that minimize undesirable as well as unjust competitors amongst the media houses to make the firms prosper in their future digitization.

The study further recommended that media houses should continue espousing the digitization of its contents and training of employees should be performed continuously to improve the skills and competency, thus higher efficiency. The study also recommended the organization to depend more on the internal product re-innovations than the external innovation and will increase its earnings in the long run.

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