

A THEORETICAL FRAMEWORK OF DIGITAL MIGRATION AND COVERAGE OF DIGITAL TELEVISION SERVICES IN UGANDA**^{1,*} Bob Rich Mwecumi Muhereza, ²Jonathan Serugunda and ³Rita Bayiga Makumbi**^{1,3}Ndejje University, Uganda²Makerere University, Uganda**Received 11th April 2022; Accepted 20th May 2022; Published online 16th June 2022**

Abstract

This article covers information society theory in the context of an actual investigation of digital migration and television service coverage in Uganda. The primary goal of this paper is to investigate the theory and demonstrate how it pertains to the case study. A conceptual overview of Theory and the Information Society is offered for this aim. The role of theory in research is also explored, as is the importance of a theoretical framework in empirical study. The Information Society Timeline is presented, highlighting significant advances in Information and Communication Technologies (ICTs) since 3,500 BC. The study conceptualizes digital migration and the coverage of digital television, as well as providing context for digital migration. Finally, the article explores five conflicting theories for the migration of digital television services and their coverage. These are the theories of communication, actor network theory (ANT), adaptive structure theory (AST), agenda setting theory, and information society theory. The article concludes with the following recommendations: 1) Theory should be at the forefront of empirical research due to its advantages, and 2) the Information Society Theory is the most appropriate theory for the study of Digital Migration and Television Coverage in Uganda. Also 3) Due to the ubiquity and pervasiveness of information artifacts and technology, the Information Society Theory has a number of contributors. However, Fritz Machlup's 1962 article, 'The Production and Distribution of Knowledge in the United States,' is a seminal addition to the theory of the Information Society. 4) Fritz Machlup's (1962) Information Society Theory highlights the necessity for more public and private sector investment to realize the economic potential of digital migration.

Keywords: Digital Migration, Digital Migration in Uganda, Information Society, Information Society Theory.

INTRODUCTION

This paper examines the Information Society Theory and how it applies to a study on Digital Migration and Coverage of Digital Television Services in Uganda. The central aim of the study is to investigate the contribution of digital migration to coverage of digital television services in Uganda. As noted in several policy documents and reports from the International Telecommunications Union (ITU), digital migration was conceived as a Godsend to significantly improve access to television services across the world. Preliminary findings of the study indicate that this goal is yet to be achieved. Based on recommendations by studies that emphasize the need for empirical research to be grounded in theory, the study examined competing theories to select an appropriate theory. Thus, a systematic evaluation of existing theories led to the Information Theory as the most suitable of theories to analyze digital migration and coverage of digital services in Uganda.

Conceptual Overview

Information Society refers to a society that has experienced an information revolution whereby information and the technologies that disseminate information have become ubiquitous. As noted further on in the paper, information technologies and the economy of information have transformed society and not the least within the television broadcasting industry. Consequently the shift from analogue to digital broadcasting fits in with the trajectories of transformation within the Information Society.

A theory is an overview of a phenomenon that explains how or why the phenomenon occurs (Rengasamy, 2016). Thus, theorizing is a systematic process of developing and organizing ideas to explain phenomenon. A theory then reflects the total set of scientifically testable, interconnected ideas formulated to explain these phenomena (White and Klein, 2002; Doherty, Boss, LaRossa, Schumm and Steinmetz, 1993).

Rationalizing Theory for Research Purposes

Theory can be traced to Ancient Greek Philosophy in which leading philosophers explained life through a set of ideas and concepts (Graham, n.d.). Although no specific dates can be put on when theories emerged, the theoretical boom began when a certain kind of philosophical interrogation surfaced inside a wide variety of disciplines (Hunter, 2006). As such theory emerged from internal conversations and dialogues within disciplines as theorists sought to respond to each other over time (Williams, 2019). The relevance of theory in empirical research has been stressed by Kawulich (2009) and Grant and Osanloo (2014) who consider theoretical frameworks as the most important aspects of the research process. Guildford College (n.d.) notes that theories reflect previous study and analysis that has been conducted in your field. They propose explanations for phenomena that occur in an area of study. Over time, theories are reexamined, refined and sometimes discarded in favor of new ones, always with the purpose of providing ever more accurate explanations for the dynamics that operate in our world. According to Abraham (2008), despite suggestions that some research should not be theory driven, all research should be theory based. This emphasis on theory driven research acknowledges the advantages of theory on the research landscape. Research has advantages for the

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growth of discipline, guiding research and practice, curriculum development, evaluation and help develop effective instructional tactics and strategies. Building a framework of theory for a given study starts with the subject of study. It then includes the identification of elements of the theory to see how it applies to the study and how the different elements interact to make sense of knowledge to be produced. One of the aspects of a theoretical framework is the critique of the theory to assess its strengths, limitations, gaps, central questions and areas for further testing (Silva & Sorrell, 1992). Two questions posed by Lederman and Lederman (2015) guide the formulation of a theoretical framework, namely: 1) what is the problem or question being investigated, 2) why is the approach to solving the problem or answering the question feasible? (Lederman and Lederman, 2015). By answering these questions, researcher can find suitable theories for the empirical investigations they undertake. Analysis of competing theories that seem to offer insight into the relationship between digital migration and coverage of digital television services, resulted in our selection of the Information Society Theory as the most appropriate theory to explain this relationship.

The Information Society

It would be difficult to speak about Information Society Theory without conceptualizing the Information Society. The features and characteristics of this society form the main scope of analysis for the Information Society Theory. According to Gouveia (2003), the Information Society refers to a growing high technology, materially affluent service society where, information rather than raw materials or energy is the dominant technology. It is a society of the most advanced stage of an economically developed society where the main activities and institutions are based upon the use and development of information and communication technologies. The Information Society features knowledge-intensive, knowledge-generating and knowledge based activities. However, society has always been an information society although the infrastructure on which informative thrived was rudimentary. Digital migration is a concept related to the realm of information and communication technologies. Since the development of television in the early twentieth century, the medium has been affected by economic, cultural and technological factors. Television has not only survived the vast social changes, it has adopted new technologies to reach to more viewers through the passage of time. In this new technological era of the Information Society, information is expected to be transmitted more easily via television broadcasting services because of the technological infrastructures that have been put in place. The Information Society Theory was born out of a realization that society can be governed by information and different modes of communication. There have been many attempts to define the term Information Society, some of which may prove invaluable to our conceptualization of Information Society Theory. There are mixed perspectives on the emergence of the information society. The term has been in use since the 1970s but has gained in popularity and is now widely used in social and political policy of the contemporary age (Scott and Marshall, 2009). Another view has it that the information society emerged towards the end of the twentieth century, whereby information began to play a dominant role in the economic, social, cultural and political life of all countries (Moore,). The term information society has been proposed to refer to the post-industrial society in which information and technologies of information play a pivotal role.

The information society has five characteristics: the technological, economic, sociological, spatial and cultural (Nath, 2009). Innovations in technology have revolutionized our life, while the economy has become ever reliant on information and communication technologies. Similarly at a sociological level, information and communication technologies have redefined occupations and how we interact socially. Spatially, information technologies have interconnected local and global spaces, enabling to world to exist more as a global village. Finally information technologies have become cultural artefacts defining and redefining elements of modern day culture. Moore (n.d.) assigns three main characteristics to information societies: 1) information is used as an economic resources, 2) information is increasingly being used among the general public and 3) there is the development of an information sector within the economy. Similarly because the Information Society is based on information and a well-developed network of services, it has had tremendous effects on society. It has affected all spheres of society: education, health, cultural institutions, whose members either receive or provide information, transferring their knowledge as a service (Isachenko, 2018). In the ongoing study, the effects of the Information Society are restricted to the television industry, where digital migration has been the buzzword in television transmission throughout the last ten years.

A Timeline of the Information Society

A Timeline of the Information Society showcases that while the concept is a relatively new terminology, in practice the Information Society has been here throughout the transformation of mankind. The Information Society has evolved from the early days of writing in 3,500 BC to the development of Internet Protocol Television in recent years (see Table 1 for a Timeline of these developments).

Conceptualising Digital Migration and Coverage of Digital Television Services

As noted in the timeline of the Information Society, digital transitions and migration took place in the early twenty first century, with the transformation in television broadcasting technologies. Digital broadcasting is a mode of broadcasting that uses digital technologies to reach users of content from content providers. It is expected to play a key role in the social, economic and cultural development of countries (Freideric, Wahome and Graham, 2018). According to Jack (2008), the technological characteristics of digital television (DTV) define the concept and render it a better option than analogue television. Thus, digital television comprises several different international broadcast standards such as ATSC, OpenCable, DVB, and ISDB. Digital broadcasting is viewed as a superior mode of broadcasting in comparison with analogue broadcasting. It features high resolution, Dolby Digital Surround Sound (AC-3), and a better visual and audio quality (Comstock and Sharrer, 2003). Digital migration came to refer to a time bound global shift to digital broadcasting through a deliberate and systematic process by which broadcasting services offered on analogue networks are transferred via digital distribution to recipients of these services (MoICT, 2009). The rationale behind the migration process according to Aaronson (2018) is to replicate all analogue signals on digital networks using a robust digital infrastructure.

Table 1. A Timeline of the Information Society (Source: Secondary Data)

Period	Developments in Information Society
3,500 BC-1,450 BC	Written Communication in Samaria, Egypt, Minoa and China
1AD	Printing Press in China
1450	Johannes Gutenberg's Printing Press in Europe
1837	The Analytical Engine, electronic like computer for calculations and basic decision making
1851	Microphotography
1920s	Microform
1924	Cable Radio
1920s-1930s	Television (W3XK Mechanical Television)
1928	Television (first broadcast from WRGB TV formerly W2XB or WGY TV)
1938	Electronic Television Sets
1939-1945	World War II electronic computers developed for the military
1945	Microfilm photography proposed by Fremont Rider for storing printed works in libraries.
1945/1947	Transistor/Optical Amplifier, both used for computers and fiber optics
1947-1949	Magnetic core memory
1948	Analogue Cable TV
1950s	Color Television (CBS-1951, RCA-1953)
1960s	Computer to Computer networking (APRANET)
1950s-1970s	Mainframe computers
1962	Satellite TV
1970s	Personal Computers (e.g. Apple)
1972	Fiber optic cable, the basis of the internet
1974	Internet
1980s	Smaller, less expensive computers emerge making it easy to access, share and store information
1980s	Sony HDTV Technology
1980s	Smart TVs (TV and Internet)
1991	World Wide Web
1995	IPTV
2000s	Digital Cable TV
2000s	Digital transitions and migration

Countries that embrace digital broadcasting enhance access to information and knowledge believed to be a stepping stone to social and economic development. Moreover, digital broadcasting surpasses analogue, its predecessor with a quality signal on audio and video, presence of more content providers and efficient utilisation of spectrum. Coverage of Digital Television (TV) services is defined as the geographical area covered with digital TV signals streaming in the right broadcast quality. The broadcast range is the service area that a broadcast station is able to reach. It is generally the area in which a station's signal strength is sufficient for most receivers to decode it. The primary service area is the area served by a station's strongest signal (Sussan & Acs, 2017).

Background to digital migration and coverage of digital television services

Along with the developments of mechanical and electronic television, and color television, digital migration is one of the most important phases in television broadcasting history. According to Brice (2003), digital migration was the long predicted transformation in television that came sixty years after the introduction of analogue television, and thirty years after the introduction of color television. Although there were preparatory activities between the International Telecommunications Union (ITU) and member states, the shift was so significant that many countries still seem ill prepared for it because of its vast set of requirements. By 2022, several countries register shortcomings in the implementation of the policy with resource constraints being one of their most pressing challenges.

The roll out of digital migration

The deliberation on the migration from analogue broadcasting to digital broadcasting was initiated long before the 1990's in symposiums organized by the International Telecommunications Union (ITU).

The ITU coordinates the use of radio spectrum and assigns satellite orbits globally as it develops policy and standards that guide the improvement of telecommunications infrastructure. Many countries signed a resolution on the 16th June, 2006 at an international ITU conference in Geneva to migrate from analogue to digital broadcasting by 17th June 2015. Given the technological aspects of digital migration and the implication of digital migration in the information age, the Information Society Theory explored further ahead was adopted.

Applying theory to debates on digital migration and coverage of digital television services

A number of theories can be considered to examine this relationship between digital migration and coverage of digital television services. These are the communication theory, Actor Network Theory (ANT), Adaptive Structuration Theory (AST), Agenda Setting theory and Information Society Theory.

Communication Theory

Communication theory was proposed by S. F. Scudder in the year 1980. It states that all living beings existing on the planet communicate although the way of communication is different. In broad terms, communication theory attempts to explain the production of information, how this information is transmitted, and the methods used to convey it, and how meaning is thereby created and shared (Brossard & Lewenstein, 2010). Much as the theory explains mobility of information which is central to the concept of digital migration, it is too general to diligently inform and guide this study; for instance, the communication theory simply describes the transmission of information from the first party to the second party; the first party being the sender and the second party being the receiver. This lacks specificity.

Actor Network Theory

Actor network theory (ANT) emerged during the mid-1980s, primarily with the work of Bruno Latour, Michel Callon, and John Law. The Actor-Network Theory provides a lens through which to view the role of technology in shaping social processes (McLean & Hassard, 2004). Attention to this shaping role can contribute to a more holistic appreciation of the complexity of digital migration in coverage of digital TV services in Uganda. These philosophical underpinnings have important implications for what ANT can (and cannot) do for organization studies. ANT's commitment to realism, positivism and conservatism makes it valuable for the task of conducting detailed empirical studies of digital migration (Latour, 2005). ANT relies on a naturalizing ontology which departs from the principle that radical thought must seek to denaturalize social reality, thus limiting its empirical relevance; which the researcher suggests, make ANT poorly equipped to address some of the key questions that would enable a critical account of digital migration especially in Uganda that has little infrastructure and a small formal sector, as such theory was not suitable for this study.

Adaptive Structuration Theory (AST)

Adaptive Structuration Theory (AST) was inspired by Anthony Giddens's concept of structuration. AST was developed by Marshall Scott Poole based on the work of Giddens, Robert McPhee, and David Seibold. Poole took a critical approach to the linear models of communication and determined that group dynamics are too complicated to be reduced a few propositions or a predictable chain of events. Poole believes that group members affect outcomes and calls his theory adaptive because he thinks that group members intentionally adapt rules and resources to accomplish goals. AST is an approach for studying the role of advanced information technologies in organizational change. The theory seeks to understand the types of structures that are provided by advanced technologies and the structures that actually emerge in human action as people interact with these technologies (Griffin, 2012). The conflation of structure and agency is the main criticism of structuration theory; this conflation reduces the analytical perspective because it leads to a non-gathering between concepts such as interaction and social system; this gives the explanatory powers needed to explain and justify digital migration. It is more appropriate to distinguish between people and society features. Basically, human agent change their interpretation of rules and resources based on their interaction with others in addition to their interactions with structures, this level of analysis is omitted in structuration theory as such it was not suitable for this study.

Agenda Setting Theory

The Agenda Setting theory of mass media communication attempts to determine how the popular agenda of the media affects society and attempts to explain why mass media has gained so much power over the thoughts of people everywhere. The Agenda Setting Theory was first discussed "during the 1968 presidential election" (McCombs 1993). According to McCombs, "Agenda Setting is a robust and widespread effect of mass communication, an effect that results from specific content in mass media" (McCombs 2004). The Agenda-setting theory contrasted with the prevailing selective exposure hypothesis, reaffirming the power of the press while

maintaining individual freedom. The Agenda Setting Theory has gone beyond its original limits to include the mass media and public agenda and may partially help explain a few aspects of digital migration and coverage of digital TV services since television is a sub set of mass media. However, the theory is not adequately interpretive because theory focuses on the media and their filtering of information and more of a mass communication than a dynamic mode of communication which digital television has become.

Information Society Theory

After passing through the scrutiny of epistemological criticism and confronted by new thinking, those theories presented weaknesses and inconsistencies. The Information society theory proved to have the greatest applicability and relevance among the considered theories as far as this study was concerned.

Information Society Theory

According to Audenhove (2003), the Information Society Theory has a long and diverse history and the rebound of the theory since the beginning of the 1990s was in response to the new developments in the Information Society. This was driven by the spectacular technological innovations in the area of ICTs. The central idea of the Information Theory is that new possibilities in information processing, storage and transmission lead to the spread and use of ICT applications in almost all corners of the economy and society.

Despite the wide range of contributors to the Information Society Theory, Fritz Machlup (1933) is mostly credited with pushing the frontiers of theoretical analysis on the Information Society. While he is not assigned the formation of the concept, Machlup is known for having popularized the concept of the Information Society to the extent that he is seen as a leading proponent of Information Society Theory. Machlup's work initially concerned a study of the effects of patents in research. Situated in the framework of knowledge production, Fritz Machlup (1962) completed his study titled 'The Production and Distribution of Knowledge in the United States.'

Machlup's research drew more attention to the evolving nature of society where information was more than ever before beginning to take center stage. He proposes a dialectical relationship between knowledge production and the development. To settle the question of what is knowledge or true information, Machlup argues further that knowledge came from both productive and unproductive sorts. For example: what is taught at school, printed in books, magazines and newspapers, broadcast over radio, or produced on television, is knowledge of many sorts. In his study, Machlup recognized that knowledge had become an industry and he coined the term 'the knowledge industry'.

In his work, Fritz Machlup identified five sub-sectors of the knowledge sector which were: information technologies, mass media, education, research and development and information services. All of these occupied chapters in his final report and book (published in 1973) from the study. Machlup noted that in 1959, at least 29% of the Gross National Product (GNP) in the United States had been produced by the knowledge industry.

According to Princeton University Press (n.d.), Machlup's book marked the beginning of the study of the postindustrial information. Although initially focused on studying the patent system, Machlup concluded that the system was only a small portion of the 'knowledge economy.' Thus, he extended his research to cover information dissemination and included advertising, stationery and typewriters and advertising, anything that involved in telling anyone anything.

By centering the discussions on knowledge from an economic standpoint, Machlup brought to fore the notions of production, distribution and consumption or demand and supply of knowledge. This specific point becomes invaluable for this study on Digital Migration and Coverage of Television Services in Uganda. While the policy of digital migration was being introduced, the process appeared to be a mere conformity to international statutes rather than a development of business prospects and the economy. The demand and supply constraints and possibilities played a secondary role. The potential of digital migration as an economic process with profound benefits in the growth of consumers and suppliers of digital television services was underplayed. This is evident in the level of investment that was undertaken during the digital migration process. Today, digital migration remains lagging behind in implementation because investment was not sufficient. Using Machlup's theory and studies on the knowledge economy, there is a need to rethink the axis of production, distribution and consumption of digital television services in Uganda.

In 2012 the government of Uganda made a clear attempt to increase coverage of digital TV services through operationalization of digital migration involving moving from analogue to digital broadcasting; this happened after government appreciated the importance and advantages that accrue to a country after increase of coverage of digital TV services as indicated in the Uganda Communications Commission's 2nd National Electronic Media Performance Study (2012). This process focused on the cost of acquiring digital infrastructure, raising consumer awareness, promoting the subscription payments option, digital proficiency and ensuring availability of different content providers in different regions. Digital broadcasting was expected to ensure improved picture and sound quality, quality and quantity of signals and spectrum efficiency.

The Ministry of Information Communication Technology (MoICT) annual reports (2017;2018), Internal Auditors Annual Report (2017) and Auditor General's Annual Reports (2017;2018) point to a slowdown in improvement in access to digital services possibly as a result of minimal investment by the MoICT. This is further compounded with the information that only phase I and II of the migration process was completed serving mainly Kampala and only 11 remote sites resulting in a situation where 50% of Uganda remains in "darkness" or not receiving digital TV services. Content delivered to the public is not as diverse as initially planned because the number of content providers remains few possibly due to the high initial investment and transmission costs. The Standard Digital signal remains inferior to global standards. Special interactive services to cater for the people with visual and audio impairments such as audio description and subtitling all remain on paper (Ministerial Policy Statements MoICT for FY 2018/2019). If the above-mentioned short comings are not effectively, definitively and efficiently addressed, the situation

may worsen and eventually lead to the stalling of the expected progress of access to digital services. Fritz Machlup's study and theory comes in handy because by emphasizing the relevance and nature of the constituents of the Information Society, he gives the impetus to government and other researchers to pay further attention to the knowledge industry as an organizational premise and economic resource for the Information Society. Gradually, policy initiatives that sought to develop the Information Sector emerged.

There are several take homes from Machlup's work and other contributors to the Information Society Theory. Information Society Theory helps to explain the role of information and information technology in society (Freeman & Soete, 2014). With the integration of the Internet into societal use, information society theory can help explain progression of the digital migration and eventual coverage of digital TV services. Machlup (1962/1973) emphasizes the need for information services to be regarded as economic sites with potential to contribute to economic development but also which need adequate levels of investment.

The major shortcoming in Machlup's Information Society Theory, is that it over emphasizes economics as the lens with which to view the Information Society. It can be argued that the Information Society goes beyond economic aspects and also covers the sociocultural and political uses and impacts of Information and Communication Technologies. Other contributors to Information Society Theory highlight its benefits and primacy on the landscape of social analysis. Van Audenhove & Nulens (2002) for example argue that conceptualisation of the theory that has taken centre stage in the current discussions is hinged on remarkable technological innovations like digital migration and its multitude of benefits encapsulated in the term "digital dividend" or in the context of this study coverage of digital TV services. Theoretical contributions from other proponents of the Information Society Theory have been criticized by Garnham (2000) for their simplistic technological determinism; however, the theory still greatly helps explain digital migration and how it relates to coverage of digital TV services. Previous scholars like Garnham (2000); Webster (1995) seem to have neglected explaining how Information society theory means for developing countries in terms of coverage of digital TV services. The gaps in the published literature on the said theory remain and how it explains how digital migration impacts on coverage of digital TV services. In conclusion therefore, by analysing current authors' accounts several gaps still remain that his study hopes to bridge.

The insightful, intense and focused analysis plus critique of Information Society theory has been moved from the periphery and moved very much to the centre by scholars of Information and communication technology (Webster, 2015). The Information society theory raises questions which are unavoidable for anyone who wishes to understand the relationship between the structures and processes of social communication such as digital migration and social structure and processes that are made possible by coverage of digital TV services. The theory helps expound the role played by information and information technology in society (Freeman & Soete, 2014). The information society theory took centre stage to throw light on the shift from analogue into digital technologies also known as digital migration and helps explain dispersion of information through coverage of digital TV

services (Calhoun, 2014). In recent years, World powers are grappling to bend the evolution of the information society preferably in their direction. US-companies such as Microsoft and Oracle Corporation have down the years succeeded in creating huge markets for new services and technologies such as digital TV technologies (Mansell & Steinmuller, 2000). There is real fear that Europe and other regions, could in the long run, be kicked out by being leveraged out by the strategy employed by US-companies (Van Audenhove, Burgelman, Nulens & Cammaerts, 2014).

Much as the Information society theory explains many aspects of how digital migration and other ICT advancements have shaped society, a number of questions remain that this study hopes to address. For example, how much advance in terms of ICT advancement like migration should happen for Uganda to qualify for information society status? Is this advancement in ICT is required in order to identify an information society qualitative, quantitative or both? Will coverage of digital TV services happen when all Ugandans own a digital television? Currently scholars like Dertouzos(1997); Negroponte (1995); Kranich (2004); who champion the notion that technology such as digital migration is central to information society theory are not able to furnish us with anything approaching the answers we seek. The study hopes to bridge these gaps. Theoretical knowledge may not be a new way to try to explain research problems, but it is arguable that its significance has accelerated in recent times and therefore we base this study on the Information Society Theory.

Conclusion and Recommendations

This study analyzed the Information Society Theory as a premise for studying Digital Migration and Coverage of Television Services in Uganda. The study seeks to understand whether Digital Migration as a technological development in the global and local Information Society and which was expected to lead to a massive transformation in television broadcasting, has increased coverage of television services in Uganda Primarily by situating theory, in this case the Information Society Theory at the forefront of empirical research, the paper concludes like many likeminded studies that without theory, it is an insurmountable task to appreciate and analyze empirical data. In addition, the paper concludes that the selection of theory is an important part of the research process, and improper selection of theory would undermine the methods and analytical outcomes of the research. It is therefore recommended that prior to any empirical study, researchers to spend some time examining research that can be applied to the research. From the discussions on the application of Information Society Theory to Digital Migration and Coverage of Television Services in Uganda, it was concluded that this theory is applicable to the study. This is because it emphasizes the significance of technologies of information and also explains the economic aspects of these technologies and information. It is then recommended that studies on the impact or challenges faced by new technological formations in society, should embrace the Information Society Theory, because it gives a holistic perspective of the information society. The study further concludes that there are several contributors to the Information Society Theory because of the ubiquity and pervasiveness of information artefacts and technologies. However, it was also concluded that Fritz Machlup's (1962) work 'The Production and Distribution of Knowledge in the United States' is major contribution to

Information Society Theory. Thus, it is recommended that Machlup's theory should be a starting point for analysis on the Information Society. Based on the findings of Fritz Machlup's (1962) Information Society Theory, it was concluded that there is need for more investment by the public and private sector if digital migration is to realize its economic potential. Given the numerous reports by government agencies about the slow pace of digital migration and its effects on the coverage of digital television services, more investment should be made. Considering that government may be having competing priorities, Public Private Partnerships (PPPs) may be one alternative for ensuring that there is commensurate investment in digital migration.

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