

The Role of Digital Economic Transformation in the Rise of Emerging Countries

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Abstract:

The purpose of this study is to shed light on the statement of digital transformation and its entry into all fields and economic activities, and to give examples in which digital transformation enters. The most important conclusions were that digital transformation increases the revenues of governments, institutions and companies and reduces costs and expenses. Furthermore, it works on the renaissance of these economies. In general, the researcher recommends that governments must speed up the provision of electronic services to citizens and work to increase these services and work as platforms for government electronic services to increase the activation of partnerships between the public and private sectors. As well, it is importance the use of modern technology in the light of these developments, as well as a plan and vision must be made for the coming years and benefit from developed countries in this field.

Keywords: Digital Transformation, Emerging Countries, Digital Economic.

Jel Classification Codes : E01; E19

1. Introduction

In the twenty-first century, Digital Transformation (DT) has shown to be a powerful tool for every developing country to improve and accelerate its growth (Inel 2019, Mahaldar & Bhadra, 2015, Berman, 2012). In general, DT has become an important sector in the global economy because it supports operations in a wide range of industries, including manufacturing, trade and commerce, finance, health, and education (Fossen & Sorgner, 2018). In other words, digital era reorganize entire economic activities in any sector based on digital intelligence derived from data (Rwigema, 2020).

The digital transformation is critical issues in achieving emerging economies' vision. The environment and social aspects, and the management of innovation and creativity related to digital transformation, call for a transformation to digital systems, and the transformation to a digital society benefits the macroeconomic indicators of the state. Furthermore, through the transformation of all transactions in the country to become electronic, and this serves the citizens and the investment files by attracting and encouraging investors to launch their projects. In general, digital system achieves the ease of electronic procedures and transactions and thus puts the economies within the competitiveness in the global economy to keep pace with the technological and technical development that increases of the competitiveness of developing economies on the map of the global economy (Manda & Backhouse, 2017).

2. Problem Statement

The rapid development in the world, especially the technical, technological, and finally digital development, has led to an increase in reliance on it to accelerate and develop the economy. Therefore, DT modernized it and introduced everything new to increase its effectiveness and competition to economies, provide job opportunities, and expand the economy. The idea of this research is the renaissance of the economies of developing countries and digital transformation. Therefore, the researcher states the following question=

Can digital transformation work on the renaissance of developing economies?

3. Objective of the Study

This research aims to shed light on the concept of digital transformation, its inception and development, and its importance in its fields and dimensions. As well as this study aims to focus on reviewing the most important matters related to economies that seek to adopt digital transformation, and it also aims to draw attention to development in government and private institutions and the most important issues that benefit the government and the economy, society, and the role of digital economic transformation in its development.

4. Importance of the Study

This research derives its importance by reviewing the theoretical framework of digital economic transformation and emerging economies. On the other hand, this study highlighted clarifying the relationship between them in accessing knowledge of how to exploit this digital economic transformation in the renaissance of the economies of developing countries.

5. Study Methodology

The research relies on the Approach Descriptive Analytical for the subject of the study, as this approach is applied in many research and studies, especially those dealing with social phenomena, by looking at a number of research and studies published in specialized scientific journals and journals, as well as published on the Internet.

6. Theoretical Framework

The digital economy now has a widespread impact on the economy as a whole (Pilat & Criscuolo, 2018) leading companies to transform and adopt new competition rules, to understand the role of information systems in these changes. The role of information systems is characterized by the development of information technology infrastructure, the expansion of organizational information systems and digital platforms and the development of new information technology capabilities (Bouwman et al., 2018, Delmond et al., 2016).

6.1 Digital Transformation (DT)

Digital Transformation has recently become one of the most popular terms. Therefore, researchers have attempted to define and explain the concept of Digital Transformation. This argument emphasizes the need of identifying Digital Transformation because there is no formal categorization in academic literature, and its borders are frequently obscured (Reis et al., 2018). For example, Westerman et al. define DT as the use of the technologies to dramatically increase an organization's performance. Stolterman and Fors consider that the improvements that digital technology produces or impacts in all parts of human life are referred to as digital transformation. Furthermore, Solis et al define DT as the adjustment of technology and business structures, or new investment in them, to have better engage digital clients at every touchpoint in the client service lifecycle.

From here, the researcher considers that digital transformation: is the use of technology to develop all economic sectors through the exploitation of available resources and the greater activation of linking work inputs in all sectors and processing them quickly and working to give outputs that serve everyone by maximizing revenues and reducing costs and expenses to maximize income.

6.2 Significant and Advantages of Digital Transformation

Growth of technology and an increasingly unpredictable social and economic context are making its mark on an unprecedented scale in the world today. With the growing difficulty and complexity of change, hence the need to accept it and seize the opportunities it presents. Digital transformation is required not just for the economy, but also for society as a whole, because of changes brought about by the emergence of digital technologies (Jurčević et al., 2020, Galindo-Martín et al., 2019). Digital Transformation has many and varied advantages, not only for customers and the public, but for the government, institutions and companies as well. Table 1 surmises the significant and advantages of DT that suggested in the literature.

Table 1: Significant and Advantages of Digital Transformation

Number	Suggested advantages of digital transformation
1.	DT greatly saves cost and effort, improves operational efficiency, and regulates it in all areas and services provided by the government to citizens or by companies and institutions to their clients.
2.	DT works to improve quality and simplify procedures for obtaining services provided to the public.
3.	DT creates opportunities to provide distinguished and creative services different from the traditional ways of providing services
4.	DT contribute to creating a state of satisfaction and acceptance from the public towards the services of the government, institution or company
5.	DT helps decision makers in governments or institutions to monitor performance and improve the quality of their services
6.	DT analyze data and information that will facilitate decision-making and define goals and strategies.
7.	DT helps governments, institutions and companies to work on increasing the reliability of the data and information provided to the beneficiaries, and strengthening the relationship by increasing the quality of the service provided.
8.	DT help expansion and spread in a wider range and reach a larger segment of customers and the public, not only in a local scope, but enable it to expand in a regional and international scope through various applications and channels.
9.	Providing optimal services to service recipients from beneficiaries in government fields and citizens in both education through the use of distance e-learning, education through the Internet, discussions, video preservation and retrieval, and electronic examination mechanisms, which saves effort and time for both the teacher and The student and increase the suspense of the study process.
10.	Providing better health services without keeping papers, treatment on the national number, and dispensing of medicines as well as through a store of information about patients and their conditions without incurring them to wait, go and travel long distances.
11.	Providing better services through banking services by paying bills of water, electricity, telecommunications bills and other monitoring of debit and credit movements at the expense of bank customers.
12.	Providing export and import services, monitoring customs data, payment of financial receipts and customs clearance.
13.	Monitoring the tax accounts of the taxpayers, paying the balances on them, and taking patents without incurring the trouble of moving for that.
14.	Improving customer service through better communication makes it easier for them to choose products and modify the service they want and work to know their satisfaction with the company's products to develop its business in line with the desires of customers.
15.	Various government departments to rationalize resources, make optimal use of them, reduce expenditures, and achieve financial savings as a

result.

16. Feedback to the company by investing in the areas desired by customers.

*Source: Author's literature survey

6.3 Strategies, Challenges, and Examples of Digital Transformation

In the long run, governments and institutions must build their organizational capabilities that make the process of change simpler, faster and better. This can be done by developing a strategy based on an open platform that supports design principles and continuous change processes, and then fosters innovation based on these. The platform, allowing the provision of new services based primarily on this platform.

- Digital business strategy.

Work must be adopted through the transformation of digital work and take advantage of technological works that serve governments and institutions through decisions that protect this work and seek to develop and adopt them as a strategic goal.

- Human resources=

Human Resources It is difficult for organizations to implement digital transformation without it. It must be provided along with qualified cadres able to use and analyze data to make effective decisions, and planning and implementing visions requires human competencies and scientific and practical experiences with a belief in change and development=

- A culture of creativity:

The talents of the existing cadres, especially the creative ones, must be supported through creative ideas and culture by working to increase productivity and break free from tradition and routine that frustrates the distinguished=

- Technology:

Technologies Digital transformation is built using an array of devices, data, storage, and software that operate within technology environments and information centers that allow the use of all assets with uninterrupted operational efficiency. It also requires ensuring an appropriate level of service for the organization's personnel through professional teams responsible for managing the technical system and network infrastructure, whether this system is local or cloud.

- Data and Analysis:

Institutions are supposed to carry out the efforts of managing and analyzing data on a regular and effective basis in order to provide qualitative, reliable and complete data with the provision and development of appropriate tools for statistical analysis, data search and prediction of the future. The data must also be monitored on an ongoing basis to ensure its continued flow and benefit from it in line with the organization's goals and expectations.

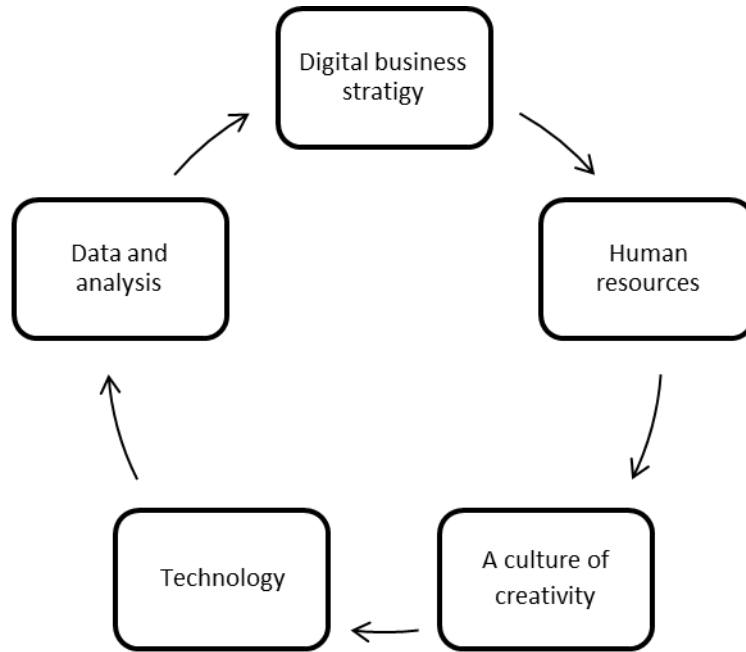


Figure 1: Digital Transformation Strategies

Table 2 shows the challenges posed by the digital transformation process within countries, institutions and companies.

Table 2: Challenges of Digital Transformation

Number	Suggested challenges of digital transformation
1.	Lack of competencies and capabilities in governments and institutions that are able to lead digital transformation programs.
2.	Absence of the idea of change within governments and institutions.
3.	Lack of budgets and financial capabilities of infrastructure for these programs
4.	Fear of information security risks because of using technological techniques.

*Source: Albar (2018)

It can summaries the examples of wide uses of digital transformation in different activities as follow:

- Governmental sector: It provides inquiries to the public and electronic services, but it is limited in the fields of import, export, patents, extracting and replacing personal and family documents, driving licenses, and others=
- Industry sector: the industry advances by offering several products at lower costs, greater customer satisfaction, achieving their desires, and better managing their resources=
- Communications sector: providing all services to customers through websites that communicate with customers around the clock, and providing all that is new in technology=
- The toy industry sector: It now provides its services through selling to customers and promoting operations through the Internet, especially for children=

- The Automotive Sector: It is providing larger and broader services in the form of robots that drive cars.
- The transportation sector: it provides the dates of transportation between cities and the movement of buses through digital transformation, internet sites, and purchasing tickets, inquiring about the cheapest means of transportation and comparing several means.
- Banking sectors: they provide electronic transfer services, account statements, and bill payment through customers' bank accounts without low costs or commissions.
- The commerce and restaurants sector: shopping and purchasing operations have spread and even ordering fast food through reservations and electronic payment at the local, regional and international levels.

7. Literature Review

Małkowska et al. (2021) conducted a study to show the impact of digital transformation on European countries. The findings of this study show the impact of technological change on the economy and society in EU countries classified by similar levels of development, such as those with high, medium, and low performance. This has aided in identifying the level of technical cohesion attained by each nation group, as well as recognizing the digital divide across EU Member States. This study is unique in that it uses a multi-stage, multi-criteria analysis based on cluster analysis and the TOPSIS approach, as well as a comparative analysis of the influence of technological breakthroughs on EU countries' society and economy. This study builds on previous research by focusing on the use of a wide range of indicators in a holistic viewpoint that includes three dimensions: societies, economies, and businesses. The findings provide useful information for assessing technological advancement in European countries.

Hai et al., (2021) investigated about opportunities and challenges of digital transformation for leaders in the emerging countries in response to Covid-19 pandemic. This study concludes that while digital transformation might be challenging, it is critical to recognize and adapt for leaders thought innovation that promotes successful digital transformation across countries, particularly in emerging markets.

In a recent study conducted by Tiutiunyk et al. (2021) to examine the impact of digital transformation on macroeconomic stability over EU countries, it proved that a link between the economy's level of digitalization and macroeconomic stability indicators.

Schilirò (2021) conducted a study to examine the spread of the digital economy and identifies the capacities and readiness of economies to embark on the digital transformation process. The study investigates the effects of digitization and digital technology on the labor market and future employment opportunities. COVID-19 and digital transformation have challenged employees' preconceptions about how they work by requiring new duties and skills. Although there are counterbalancing influences, the study highlights that any process of automation entails the substitution of machines for labor and results in the displacement of workers. Simultaneously, digital transformation and related processes provide chances for new tasks and duties to be created. The success of a fair and inclusive digital transformation, on the other hand, depends on the collaboration of government, business, and citizens.

Rwigema (2020) conducted a study titled by "Digital Technology and its Relevance to Political and Social Economic Transformation. Case Study of East African Community Region". The goal of this research was to evaluate the impact of digital technology on political and social economic transformation in the East African Community (EAC). The study discovered a

considerable disparity between digitization and ICT adoption in the East African region from 2000 to 2019. The study's findings revealed that certain businesses, particularly those that had implemented new technological management approaches, had adopted new information technology and developed connections across all EAC member nations. Despite the fact that some nations, such as Burundi and Southern Sudan, had not fully developed their technical infrastructure, we discovered that some businesses and individuals in such countries had invested in adequate information technology and were ready to employ it. The findings of this study revealed that using cutting-edge technology to promote cross-border trade enhanced the volume of trade between member nations.

Aly (2020) conducted a study to examine the relationship between digital transformation (as a one facet of the fourth revolution and AI trends) on one side, and economic development, labor productivity and employment on the other side in a group of developing countries using feasible generalized least squares method (FGLS). The findings suggest that the digital transformation index has a favorable link with economic development, labor productivity, and job employment.

Mićić (2017) conducted a review of Europe's digital transformation and high-tech sector, as well as a comparison of EU and Western Balkan regions. The researcher conclude that the implementation of digital technology into business, known as digital transformation, leads in profound changes in the way the world conducts business, communicates, and evolves on a national and worldwide basis. Furthermore, there has been an increase in high-tech public spending, which is linked to an increase in the demand for high-tech and the necessity and benefits it offers to economic development.

8. Conclusions

The digital transformation has become one of the syndromes of the twenty-first century, and therefore this matter must be taken seriously in these developing countries and work during the coming period firmly to reach the development of all activities and services provided to citizens and customers for governments, companies and institutions alike. Therefore, the use of a clear plan and vision to advance all areas related to digital transformation is a critical issue in the renaissance of countries, especially developing ones. On the other hand, the use of digital transformation reduces costs and expenses in all economic activities. As a result, digital transformation enhances productivity, increases efficiency and effectiveness of the processes provided to the public and customers.

9. Recommendations

Undoubtedly, the rapid progress in digital transformation in all directions indicates that we must develop our capabilities. Accordingly, the researchers recommend:

- Governments must speed up the provision of electronic services to citizens and work to increase these services=
- Creating platforms for government electronic services to increase the activation of partnerships between the public and private sectors.
- Exploiting the uses of technology in the hands of citizens and raising the capabilities of the economic sectors and infrastructure to receive these services=
- Encouraging and supporting young people in creativity and innovation in the field of digital transformation and adopting them to reach optimal services for the public=

- Strengthening partnerships between communications and governments and the use of modern technology in light of these developments=
- A plan and a vision for the coming years should be made, and developed countries should be benefited in this field=
- Experience should be exchanged with developed countries, and new electronic services should be launched every year=
- Laws, instructions and regulations must be enacted in line with this digital transformation, by increasing tax exemptions for software, electronic platforms, and electronic commerce, especially local=
- Business incubators must be built based on digital transformations to support the competitiveness of local industries.
- Adopting ideas that increase the efficiency of government work in all sectors and economic activities.
- Working to accept the new work environments by adopting the remote work environment.

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