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Smart Government Initiatives: Identifying How Governments are Fostering Digital Change

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Abstract

The study has focused on the effectiveness of global digitalisation and the governmental initiatives with advanced technologies that are developing businesses in the global market by fostering digital changes. Besides that, the study has discussed all the necessary elements that are related to other factors of digitalisation that have negatively impacted the businesses of every country of the world in the previous decades. However, the new generation has evolved with advanced knowledge thus it leads them to develop smart technologies that help to increase the growth rate of every business in the world. Apart from that, digital engagement in businesses increases the productivity rate and decreases physical work. In this digital era, people are becoming more dependable on technologies and thus governmental initiatives help everyone to get more accessibility to new digital technologies that are changing the lifestyles of people in a digital way. Hence, all the important factors and benefits of digitalisation have been discussed in this study and the major factors of implementing the government initiatives have been evaluated throughout the study. Through the secondary qualitative research method, all the authentic and reliable data has been collected and through the thematic analysis method all the collected data have been analysed throughout the study.

Keywords

Advanced Technology, Digital Changes, Digital Transformation, Digitalization, Governmental Initiatives, Smart Government

INTRODUCTION

Background

Digitalisation is a process of changing businesses in a digital way using advanced technologies in this modern era. The whole world is evolving with new technologies every day and it is impacting the growth of businesses all around the world. Digitalisation provides digital technologies to businesses that help to change the old business models and establish new revenue [1]. The benefits of digital changes in businesses help to develop better growth in the global market as it provides the process of implementing advanced technologies in businesses. The role of technologies in digitalisation is huge and it influences the factors that have caused the implementation of digitalisation in businesses and impacted global business in a positive way. The global digital transformation rates through advanced technologies are increasing every year and in 2022, it has reached 1.6 trillion U.S dollars [2]. Considering all these aspects, this study has discussed all the aspects that are associated with the digitisation process and the government initiatives that have been adopted to foster digital changes in different countries all around the whole world.

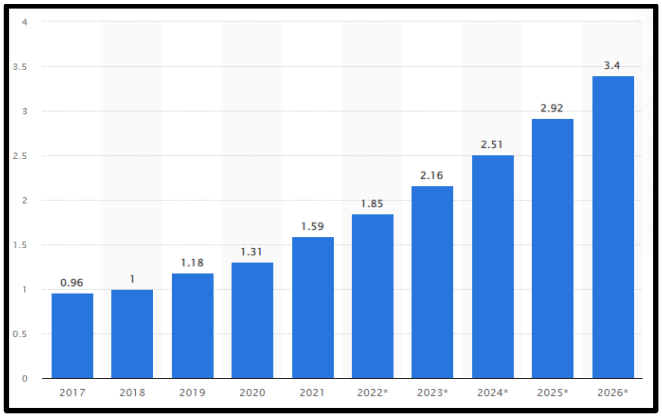

Figure 1: Digital transformation rate worldwide (2017-2026)[2]

Aim and objectives

This study aims to find out all the necessary aspects of digitalisation and the government initiatives that have been taken to foster digital changes all around the world.

Objectives

- To identify the aspects and factors of digital transformation in the contemporary scenario
- To explore smart governmental initiatives for fostering digital transformation
- To evaluate the impact of smart initiatives of the government for digital change

Significance of the study

There are different stages of digitalisation and this study has discussed the stages in detail to create a better understanding of the governmental initiatives about digitalisation in the global market. Advanced technologies

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play a huge role in the digitisation process and all the necessary elements of the advanced technologies of digitalisation have been evaluated here. Besides that, there is a detailed discussion about the benefits of digitalisation such as higher productivity, reliability in the business, increment of quality and many others that helps to establish betterment in the economic growth of the country in the study. Apart from this, the factors behind the implementation of digitalisation such as improving business strategies, increasing the usage of advanced technologies and many others in global businesses to develop a better understanding of the governmental initiatives about digitalisation in detail have been discussed throughout the study. Hence, the study has signified all the reasons behind the smart governmental initiatives that improve the economic growth of countries from all around the whole world.

METHODS

Research philosophy

Research philosophy helps to establish proper ways in which the collected data about the phenomenon will be analysed and used throughout the study. There are different categories of research philosophy and the ***interpretivism*** philosophy method focuses on an individual's beliefs and motivations and helps to analyse the data through social interactions [3]. The interpretivism research philosophy has been adopted in this study to analyse the gathered data that helps to understand the depth of the study and maximise the value of the collected data by evaluating it throughout the study.

Research approach

The research approach is a procedure that helps to gather and collect data for the study and helps to interpret the collected data to establish a better understanding of the study. Different types of research approaches help to interpret the data, among them the ***inductive*** research approach method helps to conduct the research process in a systematic way [4]. The inductive research approach method has been taken in this study to analyse the collected in a systematic way to carry out a proper understanding of the study.

Research design

Research design helps to clear out all the doubts about the collected data by analysing the gathered data in a systematic way. There are different categories of research design methods to conduct a proper understanding of the study but among them, the ***exploratory*** research design provides two different research methods such as primary and secondary [5]. The primary method helps to collect data through observation, interviews and surveys and the secondary method collects data through case studies and online sources. The secondary exploratory research design method has been implemented in this study to collect authentic data for the study.

Inclusion and exclusion criteria

The ***inclusion and exclusion criteria*** method helps to filter data from the gathered data to conduct proper outcomes [6]. This study, through the inclusion criteria, has included data from the journals that have published after 2018 and only authentic, reliable data has been collected as study materials. On the other hand, through the exclusion part, it has excluded the data of journals that have been published before 2018, also the doctoral dissertations and conference papers to conduct a proper study with authentic and relevant information.

Data collection technique

The data collecting method helps to collect data from different resources and the data collecting techniques help to collect authentic data to analyse the collected data to conduct a better understanding of the study. The ***secondary qualitative*** data collection method prefers to collect data from magazines, newspaper articles, studies, online websites and many other resources to conduct proper outcomes for the study [7]. This method suggests collecting data information from previous analyses and contradicting the collected data through analysis to conduct the best possible ways to increase the quality of the outcomes of the study. Hence, the secondary qualitative data collection method has been implemented throughout the study to establish better outcomes from the collected data materials.

Data analysis technique

The data analysis methods in the research process help to analyse the collected data from different resources in a strategic way. The thematic data analysis method closely observes the collected data and closely examines the data by dividing it into different themes to develop an easy way to understand the study in detail [8]. There are different categories of data analysis methods but among them, the thematic data analysis process has been conducted through this study to deliver a better understanding of the smart governmental digitisation initiatives. Apart from that, all the necessary ethical principles and considerations have been followed throughout the study and the ethical principles have helped to conduct an authentic research study.

RESULTS

Theme 1: Aspects and factors of digital transformation in the contemporary world

"Digital transformation" is the combination of more advanced and modern digital technology in order to change an entire sphere. It is highlighting a specific cultural change that needs organisations to constantly transform the different perspectives depending on several types of experiments [9]. In this recent decade, in order to keep pace with the current demand and development, digital transformation is highly essential. For all business criteria from small to medium to high, all the business organisations need digital change depending on the current market trends. It serves as a clear

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opportunity for an organisation to compete with other competitive business firms to keep stable the competition. In the case of experiments becoming more advanced, initiatives becoming complex, and looking forward to becoming crucial, digital transformation is the only area that is helping business organisations to become more active and capable of facing challenges.

The concept helps any sector to watch the subject in a far better way to increase value. However, digital transformation can be mentioned as an act of "revolutionising business methods" that is generated to take advantage of digital technologies. In order to prepare any object more scalable, accessible, and efficient, digital information is very helpful [10]. In the majority of cases, business organisations are utilising digital transformation to enhance, change, replace, and improve existing business techniques and present something unique and new. It is identified as a universal phenomenon that is majorly concentrated on modifying customers' experiences by changing something serious. Digital transformation is not about minor change but it is involved creating something big. In this current market, there are several techniques associated with the digital transformation process to ripe specific digital change and improve efficiency. Moreover, this opportunity serves as a long-term solution to make the business growth positive.

Theme 2: Role of technology in Smart Government Initiatives

In today's world, technology has become one vital developer for shaping any specific business structure. In order to drive efficiency and development in business models, technology has a highly insightful role. In this regard, the government also has a great role in leading and securing the living style of people across the world. Most countries have taken initiatives to prepare the projects of the ***"Smart Cities Mission"*** that have been implemented by the government. Based on technology, there are ***189.5 billion smart city initiatives*** have been projected in 2023 worldwide [11]. The ***"government digital transformation"*** is considered a continuing application of "modern-day technologies" [12]. This has been implemented to modify the government's performance and fulfill the requirements and expectations of today's citizens.

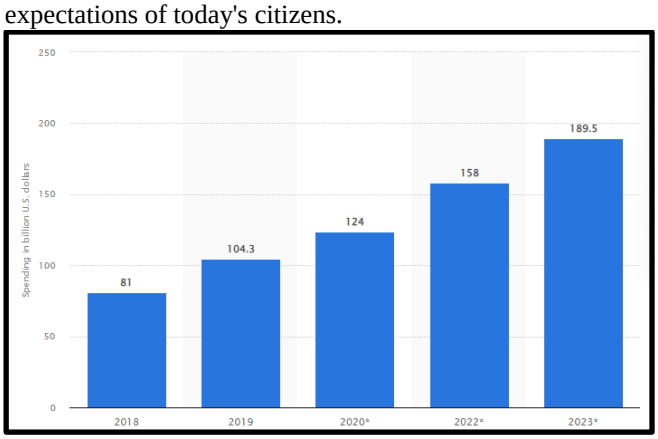

Figure 2: Smart city initiatives worldwide[11]

Nowadays, the government also has become more active and in this context, it also continues focusing on digital transformation in order that all the programs and services projected by the government can be more cost-effective. Many government-sponsored have invented different types of "communication programs" to make the digital transformation better to present the active environment [13]. The main intention of "Smart Government Initiatives" is to modernise the service processes and make the lifestyle easy and flexible for the people. Accompanied by the digital technology approach, the government can recognize the specific requirements of the citizens. As the government has faced several challenges during serving services to the citizens, digital transformation has made it possible for the government to make the entire system simpler and more flexible.

In addition to that, other developing programs have also been invented by the individual governments of individual countries to make the economy stable. Based on the digital advancement process, the government also has helped in-store the resources and apply them in the correct area [14]. Measuring growth and activity also has become so easy with the adoption of technology. ***"National Technical Information Service"*** is also an invention of the government that is engaged in providing standards and reference materials to secure the growth of the specific country by stabilising its economic growth. In this context, the ***"Science and Technology Livelihood Assistance Program (STLAP)"*** and the ***"MOST's Micro, Small, and Medium Enterprises Technology Upgrading Program (MSMEs-UP)"*** can be mentioned as important programs created by the government to make improvements widely.

Theme 3: Benefits of Digital Change

Digital transformation is not an easy method rather most people claim it is a complex method. It has several benefits that cannot be ignored in this modern age to meet the needs of the people.

- *Developed customer satisfaction*
- *Enables software monetisation*
- *Drives data-based insights*
- *Enables high-quality user experience*
- *Increases agility*
- *Encourages collaboration and improves communication*
- *Limits human error*
- *Increases operational efficiency*
- *Encourages an environment of employee excellence*
- *Enables future digital growth*

Since the development of lifestyle and mentality, customers' expectations and demand have also increased so much. In order to meet their expectation, digital transformation is the best option for robust digital strategies and tools. Along with this, digital change has made the process of "software-centricity" understandable as the majority of the businesses nowadays are dependent on a software-based approach [15]. Accompanied by digital

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change, the data collection and analysing process also has become easier. It also helps in clearing the revenue-generating insights to make a corporate decision.

Most high-valued organisations are engaged in serving experiences and digital transformation has made it possible to make an articulation on automation. Artificial Intelligence is one of the best examples of digital technology that has made most business work processes flexible [16]. The business work process and other organisational work processes have become more advanced with the collaboration of digital transformation. The people have become experienced with speed in this approach and are able to serve better. Moreover, the concept of digital change has provided a positive power to companies to face the anticipated challenges. In order to push innovation and promote the communication process more actively, the adoption of the digital platform is identified as necessary in this developing world.

Digitalisation process is capable of increasing the communication method which ensures enhancement of accountability, productivity, and creativity which ensures a balance of competitive advantage. Digital technology has transformed the work process less risky and smoother that is limiting human error [17]. The process of data entry has become easier and human efficiency has also increased. It does not encourage the change of organisation work culture but also supports employee motivation. A successful digital transformation is always focusing on the profits of going digital.

Theme 4: Areas of digital transformation

"Digital transformation" refers to the procedure of utilising digital technologies to prepare modified or new business processes. Knowing the goal of any project is necessary to recognise to ensure the requirement of digital change. In addition to that, before transforming the current work and improvement of work quality, digital transformation is the best option. There are numerous tools and techniques in any business to make a great change in the business structure [18]. In order to best fit the organisational objectives and news, digital transformation can be identified as a useful approach as it can make everything easy and flexible.

Sudden change in any organisation is always considered difficult and in this context after finding the right solution time to implement it in the correct order. It can be possible to complete within the collaboration of digital technological involvement. Several times, after implementing any strategy it needs to be properly monitored to identify whether the stagey proved right or not [19]. In this area, digital transformation is able to monitor the process for twenty-four hours. The majority of cases have proved that "business process transformation" can be daunting and complex and ensuring success there required a proper business model to adopt the digital technological transformation. Domain transformation is another area where digital change is considered essential as most business companies are trying to shift from the cloud. Under this process, most companies try to invent something own to conduct the business perfectly and make it competitive.

"Business model transformation" is another area where any specific company is engaged in changing at an exponential rate and concentrated on finite areas to deliver a better result. The process of digital transformation always desires deeper value depending on the invention of a new business model [20]. In addition to that, cultural transformation is highlighting the journey where an individual company decides to change the entire work culturally; the digital adoption is able to set new rules and regulations faster and more effectively. Accompanied by digital transformation, the workflow can be increased and the employee can focus on their work performance by developing knowledge and skills regarding the potential target.

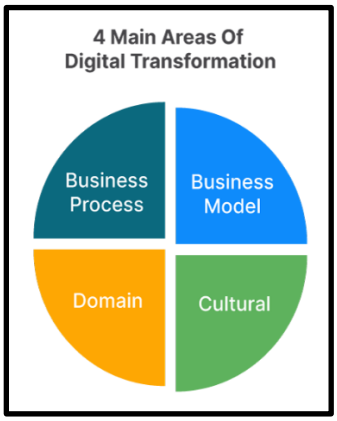

Figure 4: Areas of digital transformation [20]

Theme 5: Factors behind the implementation of smart government Initiatives-350

Business vendors are offering public, private, or hybrid cloud solutions for government data related to its administration, security, backup, or compliance, making the cloud for the government the newest big thing. "Smart governance" is primarily fueled by "e-government" and "public participation", especially in process of decision-making [21]. In addition to this, under the banner of e-technology and modern approaches, technology can be used to save and provide care for millions of people worldwide. All the e-Governance programs are implemented by combining the issues. In most countries, highly qualified and experienced advisors have been involved in the process of making online services to prepare the entire service system less risky.

The growing adoption of smart infrastructure all over the world has boosted the market for smart government. The invention of smart cities across the world is another initiative that has been implemented by the government to improve the living style of the people [22]. E-governance is identified as crucial for the continuation of the process of development and its infrastructure to shape economic growth. Thus, balancing the economic growth is also a requirement of getting and focusing on the implementation of smart government initiatives. It also has been found that most

public administrations continuously find to increase their connection between business and citizens and found the internet is the best approach. In this context, adopting instruments for analogous processes has been the key tool to motivate the application of the e-Government process.

DISCUSSION

Digital transformation helps to conduct more advancement with the usage of modern technologies to modify the old structures of the business and increase the business growth rate of every country from all around the whole world. There are different aspects of global digital transformation in these modern eras as the whole world is constantly changing and evolving with new technologies every day and people are becoming more dependable on these advanced technologies. Digitalisation in this modern age is mostly recognised as a vast developing digital world as it helps to increase the productivity growth of businesses from all around the world. Apart from that, it helps every organisation with different advanced technologies to fasten the development of the businesses and helps to maintain its position in the global market [23]. However, digitalisation is much more than only the implementation of advanced technologies in the business or upgrading the previous business plans or implementing changes in the business methods to maintain the position in the global market.

The governments of different countries from all around the world have already taken different initiatives to improve digitalisation and foster the advantages of digitalisation in businesses to improve the economic growth of their countries. The world is becoming more dependent on technology as the whole world is evaluating different advanced technologies in every section of its life. The advancement of technologies plays a huge role in developing business methods and helps to shape business structures. The governments of every country also play a huge role in leading and securing the business patterns with technologies and also provide betterment in the lifestyles of the common people by providing new technologies in the global market. Smart government initiatives help to develop new digitalisation waves in the public sectors and global businesses all around the world with the help of smart informative and communicative technologies [24]. In the previous decades, digital technologies failed to reach their potential but in this modern age with the help of upgraded strategies and knowledge, the technologies are vastly impacting the economic growth of every country all around the world.

Technologies that had been invented in the past decades did not have enough potential in establishing digitalisation waves all around the world but the technologies of this modern age have developed with innovative ideas and have enough potential that has already established many digitalisation waves around the whole world. This vast development through digital technologies in this age is called the digital era and this digitalisation process is a complex process. Every country around the whole world has benefited from the digitisation process and also the business of every country has seen a huge development with the help of digital technologies. However, digital transformation is a complicated and challenging process for every country and every business organisation in the world [25]. It is very difficult to implement new strategies and business methods in an organisation as it creates a challenging situation for every one of the work firms as it requires adaptation to new changes.

It takes a lot of time to adapt to the changes in the working process of the business but later on they benefited from the digitisation process. Considering all these factors and the benefits of the digitalisation procedure, the governments of different countries have made initiatives and strategies to increase business all around the whole world and also improve the productivity of these businesses which impacts the economic growth of the country positively. There are many different areas where digital transformation is majorly implemented to increase the business growth rate in the global market [26]. Apart from that, the major factors behind the implementation of smart government initiatives such as organisational growth, institutional improvement, development of proper strategies and many others factors impact the economic growth of the country worldwide.

CONCLUSION

This study has concluded all the important aspects of digitalisation and the impact of smart governmental initiatives that are fostering digital changes in world business. The effectiveness of advancement in technologies helps every business to establish better growth in their business and through these initiatives every country is emerging in global business with new technologies that are increasing the economic growth rate of every country across the world. However, there are some factors that have previously impacted the global businesses of the world but now in this digital era, every business has effective potential that has established the digital era globally. Hence, the study has conducted a clear vision of smart governmental initiatives with the help of advanced technologies to change the world in a digital way.

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