



Digital Transformation and Organization Performance

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ABSTRACT

The rapid growth of digital technology has significantly impacted the global economy, affecting the competitive advantage of states and institutions. Digital transformation aims to adopt digital methodologies in critical sectors like health, education, justice, social security, energy, financial services, and transportation. This approach accelerates data, exploits artificial intelligence, and innovates, enhancing performance efficiency, transparency, and reducing bureaucracy. Organizational performance is crucial for achieving market and financial objectives, and the creation of a digital mindset is key to success. Digital transformation involves using technologies like cloud computing, artificial learning, and IoT to enhance business processes, customer experience, and streamline procedures. It offers benefits such as improved operational capacity, premium services, streamlined procedures, and reaching a wider audience.

Keywords: Digital transformation, organization, performance, artificial intelligence.

1. Introduction

The accelerated growth of digital technology the evolution of devices, machinery, and smart systems, and the increased ability to process data and artificial intelligence have led to unprecedented shifts in the production process, contributing to revolutionary changes in the global economy (Jones, et al.,2021). There is no doubt that the expansion of growth and development and the subsequent unprecedented transformations in the economy in its various sectors and the labor market have had the greatest impact on the competitive advantage of states and institutions alike as the most important drivers and incentives for growth for public sector enterprises and sincere to ensure efficient and effective access to products and services delivered by them and to broaden their beneficiary base (Kolasani, 2023). Digital transformation works to adopt critical sectors such as health, education, Justice, Social Security, Energy, Financial Services, Transportation, and others on working methodologies based on digital technologies by accelerating data, exploiting artificial intelligence technologies, and innovating, enticing products and services and providing new channels to improve performance efficiency by reducing time, reducing cost, and achieves greater flexibility and creates new opportunities Zhai, et al.,2022).

Digital transformation also helps enhance transparency, reduce bureaucracy through simplifying procedures, corruption, and tax evasion (Ponti, et al.,2023) as well as expand and spread more widely, contributing to a larger segment of beneficiaries, being one of the most important drivers and stimuli of the digital economy (Polyakov, & Kovshun, 2021).

2. Literature review

2.1. Organizational Performance:

Organizational performance means the extent to which the company is successful in achieving its market and financial objectives, in other words indicates theoretical performance elements that enhance performance in modern organizations. (Chavez, et al. ,2017, Taouab, & Issor, 2019).

One of the biggest challenges to performance management is the integration of different aspects of organizational performance such as organizational culture, leadership, work environment, change, innovation, learning, and individual performance, and linking all these elements to comprehensive strategic initiatives (Tolici,2021).

2.2. Importance of Organizational Performance

Organizational performance is the most important factor that organizations seek and strive to achieve through the implementation of innovative strategies and practices (Abualoush, et al.,2018, Ali, et al., 2022). In today's business environment, organizations face a lack of capacity to radically reform their organizational structures in response to the change in ART and staff and management mindsets (Rimita, 2019). The speed with which organizations make decisions is critical for them to remain viable and sustainable, as the increasing use of technology affects how organizations and individuals deal with

their functions (Miceli,2021). As a result, the future workplace must promote models that free work from time and space constraints (Kelliher, et al.,2019). The creation of a digital mindset as an essential component of organizational culture is key to improving the success of organizations' digital transformation (Imran et al,2021).

2.3 Digital Transformation Concept:

The concept of digital transformation is linked to how organizations use the power and potential of technology such as cloud computing and intelligence, artificial learning, and IoT techniques to enhance business processes and customer experience or create lines and methods (Zaki, 2019).

Digital transformation is also defined as the process of a company's transition to a business model based on digital technologies in innovative Products and services, providing new channels of revenue and opportunities that increase the value of its product. (Minh, et al., 2021)

Digital transformation is the use of new digital technologies, social media, mobile phones, or compact hardware to enable key business improvements such as improving customer experience (Schneider & Kokshagina,2021) and streamlining processes or creating new business models (Schneider, & Kokshagina, 2021). Digital transformation is intended to pursue organizations' strategy and develop innovative and flexible business and operating models by investing in technologies, talent development, process reorganization, and change management to create new value and expertise (Bresciani, et al.,2021)

2.4. Benefits of Digital Transformation

Digital transformation has multiple benefits for all clients and organizations (Soto, et al.,2023 Gökalp, & Martinez 2021, Perkin, & Abraham, 2021, Aldoseri, et al,2023, (Nadkarni, & Prügl, 2021)

- Improve operational capacity by reducing cost and effort.
- Provide premium services with innovative specifications.
- Streamlining operational procedures to improve client and client services.
- Reaching a wide audience contributing to spread and expansion.

2.5. Types of Electronic Services:

1. Information Services:

Provide information about the institution, a description of the service, and the requirements for obtaining or inquiring about it without interaction between the beneficiary and the destination Jevans, et al,2020).

2. Interactive services by providing the beneficiary with the environment of the electronic form through electronic channels and then sending it electronically with the inquiry and follow-up of the request but requires the beneficiary to review the application to complete the application Pramanik, et al.,2019).

3. Procedural services:

allow the beneficiary to inquire and follow up on the request so that the entity carries out the service in full procedures within the front until the service is terminated without the need to review the beneficiary for the face and the interaction is in two directions from the beneficiary to the side and vice versa (Payeras, et al.,2019).

4. Integrative services:

The beneficiary enables the beneficiary to environment the electronic form through electronic channels and then send it with the possibility of inquiry and follow up the request. The beneficiary carries out the service in full its procedures inside and outside the side through integration with other third parties until the separation of service without the need to review the beneficiary's headquarters (Cauffman, & Goanta, 2021).

2.6. Technological Tools

There are many technological tools associated with digital transformation, including:

·Big Data Analytics

These data, which exceed the capacity of regular database software to collect, store, manage, and analyze them, regulate large random data and place it in the form of a valuable knowledge base (Duan & Da Xu, 2021)

·Artificial Intelligence Artificial

One of the innovations that works is to use the computer's ability to simulate human intelligence by building software that can do what people do and requires human intelligence (.Maliha,et al,2021).

·Computing Cloud:

One computer software that allows data and applications to be stored for users where once data is entered it backups data against loss and so it is used widely and increasingly (Akhtar et al,2021).

·Blockchain Technology:

·Chain Block is a technology that has been the product of technological advancement by creating a chain between several customers that enables them to conduct transactions without requiring a broker such as a bank or electronic payment network and all data and records that are traded within the chain that can be updated or changed except with the consent of all customers within the chain and that these processes are encrypted in a way that enables no party to deal only the dealers within the chain (Raja, & Muthuswamy,2022).

·Learning Machine is an AI activity.

One of the activities of AI is that the presence of the Internet, the spread of data, and the speed with which it is processed and stored in similar ways to humans has made machine learning an important component of the modern environment, which depends mainly on information produced through the processing of data within the organization and the extent of its accuracy and its clear expression of the performance (Mishra& Tyagi, 2022).

2.7. Digital Transformation Steps

Digital transformation begins by building a digital strategy and improving the status quo that can be achieved through current digital capabilities and determining the best business structure for the organization's digital marketing activities (Warner & Wäger,2019), thereafter the requirements are defined investing plans,

while identifying the barriers to digital integration to make a comprehensive and well-structured plan for all circumstances and to drive the transition to the desired path (Butt, 2020).

Finally, the existence of change management for digital transformation is a key requirement for reaching strategic objectives (Hanelt, et al,2021).

2.8. Digital Transformation Strategy

Delivering a digital transformation strategy is a response to the challenges of managing the growing landscape of digital initiatives and related infrastructure (Brunetti, et al, 2020). That demands coordinating, prioritizing, and implementing pre-digitization efforts and as a long-term goal controlling its journey to achieve the desired future state of digital transformation.

The digital transformation strategy goes beyond resource digitization to include transformation of key structural and organizational aspects and use of advanced information technologies or value creation aspects including key products and services in modified or completely new business models. (Yeow, et al, 2018).

Regardless of industry or company digital transformation strategies can be analyzed through four dimensions: Using techniques, changes in value creation, structural changes, and financial aspects. (Tekic, & Koroteev, ,2019).

digital transformation strategies are classified into two critical dimensions (Baumann & Peter, (2019):

Use of digital technologies the level of mastery of digital technologies relevant to the sector in which the company competes) is high or low.

Business model readiness for digital operation: Business model readiness level for digital operation high or low

However, although the formulation and implementation of the digital transformation strategy is a major concern for many organizations that existed before the digital transformation, the question of how to develop such a strategy remains open Chantias, et al.,2019).

Digital Transformation Features

Digital organizations can have some distinctive features of information systems strategies) Chantias et al., 2019(

1. The digital transformation strategy is business-centered and customer-oriented in its perspective rather than A business-centric customer-oriented digital transformation strategy rather than focusing on the perception of information technology as a prerequisite in a digital technology transformation strategy
2. All parts of the Organization have often been affected by changes resulting from digital transformation.
3. The digital transformation strategy has been developed by different stakeholders within the organization and can even be formulated "bottom-up" by opening strategic processes up to the entire organization
4. Developing a digital transformation strategy requires distinct governance structures but they must be constantly redeveloped.

Barriers to Digital Transformation

Many factors impede digital transformation (within organizations, including lack of competencies and potential capabilities, the lack of the budgets allocated to these programs limits and security risks as a result of the use of technology means is considered one of the biggest barriers especially if assets are of high value (Kraus, et al.,2021).

3. Conclusion:

The huge development of information technology and artificial intelligence systems has led to time shortening, cost reduction greater flexibility and efficiency in the production process, and significant capacity in data processing. These developments are undoubtedly widening the scope of development, change, and unprecedented transformations in the economy, the labor market, and the industrial sector (Harahap, et al.,2023). Digital transformation is one of the most important drivers and catalysts of growth in major companies and government departments, thus ensuring their continuity in a critical circle that compels companies to develop innovative solutions to competition (Ko, et al.,2022). The policy and implementation of the digital transformation strategy have become a major concern for both private and public institutions and one of the most important technological developments To achieve many advantages and benefits resulting from the application of digital technology in all aspects of the internal and external environment where the importance of digital transformation lies in the achievement of high-quality service, To save expenses by improving the efficiency and effectiveness of performance, as well as achieving the principle of transparency and combating corruption by reducing reliance on the human element, over the past period as an urgent result of keeping abreast of the technological development occurring and the need for the necessary technological skills to deal with such developments and to bring more positivity and accuracy. Digital is increasingly recognized as a serious influence around the world on how a business is run and how successful it is (Shaughnessy,2018), transforming data from paper to CNC digital image and having a direct impact on both individuals and every aspect of their lives (Felsberger, et al.,2022).

Acquiring digital skills is becoming a prerequisite for individuals, industries, and governments. There are many techniques associated with digitization (Vasilev, et al.,2020); They include - but are not limited to - big data analyses, artificial intelligence, supply chain technology, and robotic process.

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