

The transformation towards a digital economy is an effective mechanism to achieve the goals of economic diversification Analytical theory study

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Summary:

The study aimed to highlight the role that the transition to the digital economy can play in achieving the goals of economic diversification, and this is in light of the catastrophic failure achieved by most of the policies and strategies followed in order to achieve this, as the transition to the digital economy is one of the most important modern strategies aimed at developing the performance of economic sectors To achieve this study, the descriptive analytical approach was followed, which is the appropriate method for this study.

The study concluded that there is a great effectiveness for the transition to the digital economy and the use of technology, digitization and knowledge in achieving the goal of economic diversification and raising the competencies of economic sectors aimed at diversifying the export sector and sources of income.

Keywords: digital economy, digitization, information and communication technology, economic diversification.

Jel Classification Codes :A1, O14, O33

Résumé:

L'étude visait à mettre en évidence le rôle que la transition vers l'économie numérique peut jouer dans la réalisation des objectifs de diversification économique, et à la protéger face aux défis qui entravent la réalisation des investissements dans ce domaine. La transition vers l'économie numérique n'est pas l'une des stratégies les plus importantes permettant de développer les activités économiques, car elle donne à ces activités une opportunité de croissance et d'expansion à la lumière de la situation économique actuelle.

La conception technologique devrait contribuer à faciliter l'accès à l'information et à la communication entre les différents secteurs, ce qui valorise ces activités et les aide à faire face aux défis économiques.

Mots clés : économie numérique, documents, intégration de l'information et de la communication, diversification économique

Jel Classification Codes :A1, O14, O33

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I-Introduction

Achieving the goal of economic diversification is one of the most important economic objectives pursued by all governments, aimed at reducing reliance on oil prices. This involves the challenges associated with the volatility of oil prices, as it is difficult for countries that heavily depend on oil exports to withstand these fluctuations.

Furthermore, economic diversification can help in addressing the other challenges that countries face regarding their ability to withstand price volatility in oil. This is especially important for countries that are subject to oil price fluctuations.

Therefore, the objective of economic diversification is pursued through various means, whether politically or economically, regardless of the current political situation or regional policies.

Thus, if we consider the various issues related to economic diversification and its objectives, the following main question arises:

What are the mechanisms for transitioning to a digital economy in achieving the goals of economic diversification?

I.1. Concepts Around Digital Economic Transformation:

Digital transformation is one of the vital trends dominating the economic and social landscape in the modern era. This concept refers to the use of digital technologies to improve processes and services, enhance experiences, and achieve innovation across various fields.

I. 2. Definition of Digital Economy:

First: Definition of the Digital Economy

A collection of definitions for the digital economy was presented, emphasizing its three fundamental aspects (Al-Alami, 2013):

The term depends on three main dimensions:

1. **New products:** These are products that did not exist before, which belong to a group of known products characterized by high quality and sophistication (digital and virtual), or that are enhanced by their digital characteristics.

2. **Tools and interfaces used:** Which are involved in the framework of electronics and transitioned to the electronic state (digital or virtual).

3. **Systems and networks:** These are the devices and means that integrate physical devices and social networks with electronic and technological systems, and their effects on users.

The tools of data storage and transmission play a fundamental role in digital products, which may contain private information related to the digital products offered by various entities.

4- Digital transformation is a way of doing business. It involves shifting the way work is organized to improve thinking and enhance productivity, facilitating the use of modern digital technologies to significantly enhance the services provided in a faster manner (Abdul Salam Said, 2019).

5- It is also a well-conceived plan to modify and develop the behavior of employees through understanding their impact, behaviors, and the ways they work, utilizing technology. This involves changing the systems in place and the organizational structures to facilitate the development of human resources and achieve the objectives of organizational goals ; (Al-Najjar, 2006)

6- The goal of digital transformation is to identify and develop ways to improve understanding and thinking in the workplace and to adapt to the needs of employees. It aims for greater

flexibility and efficiency in the management of the new technological data (yahyaoui Al-Jabri, 2018)

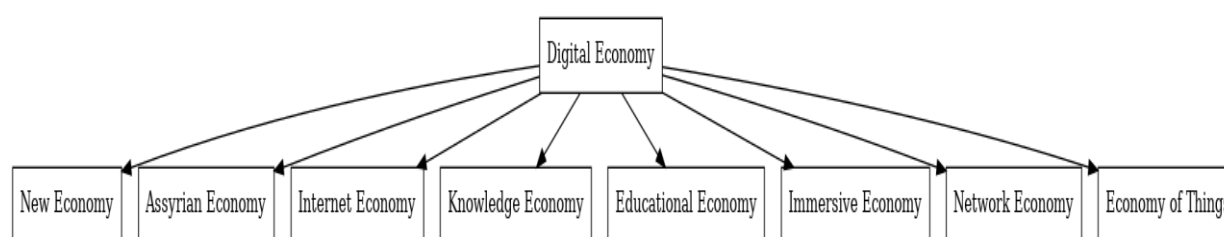
7- Digital transformation can be defined as an economy that relies on the advantages of digital technology, utilizing information systems. It describes the new revenue streams for modern innovations (Faraj Taher, 2010)

8- It emphasizes the ongoing integration and coordination between technologies, information, and communication systems in facilitating processes. This helps achieve transparency, profitability, and efficiency across all economic sectors (Abdul Rahman Muhammad Suleiman & Abd el hafid Ahmed Kassem, 2020)

9- Digital transformation describes the process by which companies can implement new business models to enhance their value-based services through innovations and modern technologies.

The digital economy in the context of digital transformation includes its various dimensions, which are illustrated as follows:

Figure 1: Digital Economy Labels



Source: Khaled Al-Aridi and Raneem Awwad, **The Impact of the Digital Economy on Economic Growth Indicators: An Analytical Study of Selected Developing Countries in Light of Digital Transformation.** Master's Thesis, Higher Institute of Administrative Development, Syrian Virtual University, 2020, p. 5.

II. Characteristics of the digital economy:

Most researchers agree that the components of the digital economy differ from traditional economic components, as they rely primarily on information technology, communication systems, and the development of communication networks. (Ragheb Al-Najjar, 2004)

1 The digital economy provides information for decision-making:

The digital economy provides information on how to determine informational needs by selecting the appropriate sources for essential and valuable information. This involves managing sources and the flow of information in a more efficient and impactful way, taking into account various types of information. (Ben Dineya and Bouker, 2016, p. 69).

2 Ease of access to information sources:

The success and growth of the digital economy rely on the ability of individuals and institutions to participate in various networks of information and different internet platforms. (Al-Baali, 2004, p. 12).

3 Competition and market structure in the digital economy:

Most economists believe that the components of the digital economy differ across the scope of markets, as the market structure differs depending on the application of information technology and the development of information systems in the economy. This applies to both the international and local digital economy levels. (Khader Abbas & Mustafa, 2020)

4 The future of the digital economy:

The application of information and communication technology plays a fundamental role in increasing economic growth rates, investments, and electronic trade at both domestic and international levels. (Bin Danidina & Bouakaz, June 2018,)

III. Drivers of the digital economy

The Reality of the Digital Economy: There are many drivers and incentives that pushed the digital economy to further development and advancement, including:

1. The cultural, social, and political environment plays a prominent role in the emergence of the digital economy and its various implications. The digital economy will control more than it does now.
2. Multinational companies control the levels of technological value in the world, especially information and communications technology. Therefore, one of the main drivers of the digital economy is information and communications technology, which is viewed from a single angle.
3. The contemporary scientific and technological revolution naturally links the concept of the digital economy and technology. Therefore, technology is the main engine of this economy as it constitutes the main image of the requirements of knowledge that lead and reserve the development of the world and achieve the dimensions of sustainable development ((Al-Alami, 2013)).

IV. The Importance of the Digital Economy:

The digital economy plays a prominent role in economic means as a major factor in achieving full benefit from the following elements:

1. The digital economy expands markets and the emergence of new markets over time, whether through electronic commerce and various electronic transactions in the banking or non-banking field ; (Lazrak, 2015)
2. The digital economy expands traditional markets through electronic communication
3. The digital economy expands cooperation between dealers through direct electronic communication between them.
4. The digital economy expands the exchange of information and knowledge between dealers, as well as clarifying the decisions taken, which leads to the accuracy of the information.

A. The Role of the Digital Economy in Achieving Economic Growth:

The digital economy has intertwined relationships that contribute to the growth of the global economy. It regulates the economies of countries competitively, and hence the role of countries in supporting individuals and institutions economically locally and globally is evident in the following elements:

1. The digital economy includes the role of electronic programs that deal with electronic programs and applications, as well as electronic books and electronic libraries. This leads to the emergence of the digital economy that provides services such as electronic banking and the emergence of electronic currency. All of this leads to the emergence of digital societies.

2. **Consumers:** The digital economy is characterized by a large number of consumers, as each consumer enters the electronic network and then visits the available electronic stores. This is due to the ease of searching and finding the desired goods, as there is a large number of goods available for sale.

3. **Goods:** Goods are the products offered on the internet. Marketing and advertising are done electronically, especially for goods that do not have a physical presence, such as software. Examples include Amazon.com and Yahoo. The market is characterized by high freedom of entry and exit due to the absence of high entry barriers. (Bakhta ben tahar, 2019)

4. **Organizations responsible for the infrastructure:** These organizations operate the networks responsible for providing electronic programs, computers, and the internet. They provide the infrastructure necessary for the digital economy to function efficiently and effectively.

5. **Supporting technologies:** These are the economic activities that support and use electronic business operations and electronic commerce. They include the infrastructure of wired and wireless communication networks, industrial applications, electronic payment services, web design and hosting services, and consulting and advisory services.

B. Factors contributing to the digital economy: The shift to the digital economy requires the necessity of self-definition. This can be achieved through the following factors:

○ **Information and communication technologies:** The presence of a digital infrastructure, such as computer hardware and software, and media equipment, is essential for preparing and processing data and operating information systems. This includes a set of integrated tools aimed at collecting, storing, processing, and transmitting data in a way that can be understood by the human mind. These tools are used in various places and are integrated into a complete system that has a positive impact on the environment and its components and discusses global markets. (Umm Al-Khair & Boufateh, 2019)

○ **Education and the information society:** Education is considered one of the forms of investment in human capital, as it is one of the most important factors in economic development. In this context, the education system that includes the use of modern technologies and the internet plays a significant role in this development. It helps in the transfer of knowledge and skills necessary for the labor market, which requires the use of these technologies. It also helps in the development of human resources, which is the main factor in the development of the information society. (Boujhaish & El Bashir, 2017)

The digital economy necessitates focusing on enabling individuals to develop their creativity, innovation, and software development capabilities

○ **Research and Development:** The transition toward a digital economy requires increasing the proportion of spending on research and development projects as a percentage of gross domestic product, considering it one of the indicators of the digital economy and a key factor in advanced countries. This is where governments and the private sector share responsibilities.

In these countries, spending on research and development projects is considered an investment that is expected to yield returns within five years or less. Typically, government and private sector funding is split over a five- to ten-year period, ensuring a high return on investment in research and development, thereby making a significant contribution to the digital economy

C. Steps Toward Digital Transformation

Digital transformation is defined as the process of transitioning government sectors or companies to a model based on digital technologies by innovating products and services and providing new revenue streams that enhance the value of their products (Al-Boushi & Jamilo, 2019)

1 Strategic Transformation

Digital transformation technology requires a clear vision and a starting point. This involves rethinking the methodology and identifying new technologies that help achieve the goals.

2 Adopting a Culture of Change

This refers to transforming the traditional hierarchical structure into small, organized teams empowered to make decisions. It requires fostering collaboration between employees in development, information technology, and strategic units to deliver improved services. The transformation of the institution's culture and work environment represents the first step toward achieving positive contributions to the implementation and success of the digital transformation program.

a. The Human Element Makes the Difference

The human element is a crucial factor in the digital transformation process and in raising the digital intelligence of the institution. Therefore, leaders must empower employees with management tools and help them develop their individual skills. A lack of competencies and sufficient skills is considered one of the primary obstacles to achieving the goals of transformation and realizing the desired outcomes.

b. The Institution Surpasses Traditional Hierarchies

Transitioning from traditional hierarchical structures to unified operational methods requires extraordinary capabilities and continuous development to maximize the effectiveness of collaborative entities. Encouraging teamwork across organizational projects is essential. Without this, the traditional hierarchical model will remain a significant barrier to digital transformation, especially if the concept of teamwork is not implemented effectively.

c) Governance and Evaluation:

The importance of governance and evaluation in the field of digital transformation lies in utilizing the capabilities of human resources to achieve high-quality performance. These capabilities are based on knowledge, integrity, and global ethics, which help reduce issues like corruption, favoritism, and bias.

3. Changing the Cost Model:

It is possible to drive innovation because the difference will involve taking creative steps to innovate new processes that help address challenges. Cloud services can have a positive impact in terms of costs because they allow the modernization of infrastructure without requiring significant investments. Additionally, long-term purchases and upfront costs are avoided, enabling the implementation of more projects by providing immediate access to resources at any time and from any device.

4. Starting a Business with Flexibility:

Some institutions and companies prefer to handle licenses and individual projects directly with fewer intermediaries, preferring business flexibility. In this regard, the **DevOps** system stands out, as it allows companies to provide secure and reliable program updates for internal teams and clients.

5. Following the Advancement Process:

When a company fully adopts digital transformation for its commercial activities systematically and adheres to transformation steps, profit margins improve. This process requires setting specific criteria to measure and evaluate progress.

Through this, it becomes clear that the process of digital transformation for commercial companies and government institutions takes place via proposed public steps based on strategies for a comprehensive digital transformation project. This project is to be adopted and referenced. In this context, it is considered a broad endeavor by most commercial companies, governments, and Arab countries, particularly in recent times.

Thus, following proper and systematic steps will lead to success, enabling the production of businesses that align with client demands and the requirements of rapid digital mobility.

D VIII. Digital Transformation Models

The administration is working to develop models for the transition from traditional to digital organizations, and the following models are clarified to explain these concepts: (Qaaloul & Talha, 2020)

1. Technical Model: This involves transforming conventional operations into digital ones by utilizing research on the organization's processes.

2. Behavioral Model: This focuses on individual behavior, emphasizing the impact of organizational and environmental changes to a greater extent than behavioral variables.

3. Social Model: This is particularly important for understanding the requirements for implementing transformations. It addresses the discrepancies between technical frameworks and organizational programs when executing operations to transform.

4. Company Model in Information: This model emphasizes participation in one of the local networks or international networks to ensure complete reliance on achieving transformation.

5. Model for Analyzing Organizational Strengths: This model is based on building information systems to support decision-making, which facilitates managing weak points and seizing global market opportunities. This model relies on strategic planning in the context of organizational performance and aims to identify opportunities for cooperation within a single partnership.

6. Management of Data Sources: This involves managing the integration of data into the organizational processes and systems.

7. Model for Financial Transition: This model evaluates the capabilities of financial institutions against the framework for transformation.

8. Model for Resulting Transactions: This model focuses on the analysis of the data and relations derived from primary sources to facilitate activities.

9. Dynamic Transition Model: This model depends on facilitating rapid interaction between organizations and the environmental fluctuations related to technological advancements.

10. Cost and Value Model: This model focuses on comparing the costs of transitioning to established technologies and evaluating returns.

11. Comprehensive Transition Model: This model offers a philosophical framework for the integration of technological advancements into all management and operational processes.

12. Model for Evaluation of Investments: This model outlines how to transition financial situations and evaluate the system to adapt to informational technology and communication requirements.

13. Aspects of Transitioning to an Informational Technology Model: This section explains the strategies to expedite the transition to technology solutions and seeks innovative approaches to exchange information effectively.

E. Forms of Economic Transition

- ✚ **E-commerce:** This is an outgrowth of technology and services aimed at accelerating trade and providing mechanisms for exchanging information. It involves internal company operations and other related companies from the perspective of the company and customers (Mustafa Kafi, 2017)
- ✚ **Digital Marketing:** The use of digital technologies, particularly in creating, distributing, and exchanging products and services to meet customer needs and enhance competitive advantage in organizational functions and processes (Aalal, 2014)
- ✚ **E-Governance:** E-governance is defined as the process capable of involving all administrative bodies and activities of the institution, relying on modern technologies to achieve the main goals of effective and efficient administration, and facilitating the procedures needed to achieve quick results and maintain quality standards . (Jassim Al-Ahbab, 2018)

X. Aspects of the Digital Economy: The digital economy is characterized by its ability to affect various industries, as companies minimize their costs and enhance their effectiveness in each sector, where the benefits are reflected in the economy and its components.

- The new pressure on the job market may result in a specialized sector, where it diminishes the job opportunities for individuals without the most suitable skills. This sharp increase in demand for e-services highlights the necessity of e-governance systems, transforming the community into a digital community, and extending the limits of governance. (Al-Ghairi & Abd al-Rahman, 2020)

- The policies for e-governance must preserve society's values and integrity. It is essential to ensure that technology does not advance at the expense of ethics, and a prudent approach should be taken to ensure that the digital economy provides better quality at lower costs.

- Governments must focus on the development of electronic governance and marketing strategies, utilizing various technological means to enhance the performance and communication of governmental entities with the public.

F. Disadvantages of digital transformation

A set of policies for the digital economy is mentioned from its : (Ali Saadi Abdul Zahra, 2021)

1. The laws and legislations related to it have many factors that contribute to the significant development of digital economies in various countries, and it is imperative that most Arab countries progress in the development of these legislations while enhancing the principles of this sector in strengthening trust in e-commerce and online banking, and maintaining quality standards.

2. One of the reasons for the rise of electronic crimes, which are often difficult to detect and establish accountability, is that the digital economy has presented one of the greatest challenges to the need for adequate oversight.
3. There are many job opportunities in the digital economy that require new skills, but this shift may overshadow the opportunities available for those lacking the required competencies.
4. The technology of electronic communication opens the door to many possibilities for consumers, presenting dozens of advertisements on social media platforms. This continuous exposure can lead to the consumer feeling overwhelmed, often resulting in decisions that do not align with their actual needs. (Umm Al-Khair & Boufateh, 2019)

I. The Second Topic: The Importance of Digital Transformation in Achieving Economic Diversification

After the pandemic's profound economic impact, the need for digital transformation has become crucial for diversifying economies and enhancing resilience. Many governments have adopted initiatives to promote digital transformation, focusing on various economic sectors to improve performance in achieving diverse economic outputs.

Several studies have highlighted the role of digital transformation in rapid transitions in the Arab world. It has been noted that ministries and institutions assist in accelerating digital transformation efforts, as evidenced by recent reports. Such transformations are expected to contribute significantly to achieving the set developmental goals and enhancing annual financial performance targets. (Abdul Rahman Muhammad Suleiman & Abd el hafid Ahmed Kassem, 2020)

The study emphasized the need to focus on the sectors that drive economic diversification and on digital payment services. The current trend in promoting these services is expected to increase GDP by 0.5% (El Masry, 2023)

Moreover, it highlighted that the digital transformation will play a major role in developing technologies and will shape the trajectory of economic diversification. The methodology for digital transformation has become crucial for aligning technology with various sectors and enhancing their performance towards economic diversification. (Hamidouch & Omani, 2018)

Utilizing technology and advanced communication tools will help raise the efficiency of services provided to citizens. This will also allow for better evaluation of government policies concerning the digital economy while monitoring the potential sectoral outputs expected to arise from these transformations.

In comparison to other sectors, the digital economy has witnessed remarkable growth, contributing significantly to the GDP and showing resilience amid crises. Moreover, the share of the digital economy is projected to increase significantly to reach around 95 billion dollars by 2025, contributing about 93.8% of the projected growth.

"And the social, economic, and environmental aspects highlight increased opportunities to access high-quality health and educational services, preferably above the limits of carbon emissions." (El Masry, 2023)

V- Conclusion:

The world has become a battleground for diverse transformations that have contributed to changing concepts and administrative styles. These transformations are shaped by technological advancements and globalization, affecting all areas of research. The most significant challenge faced by global economies is the transition towards an economy based on knowledge and information, which is essential for achieving growth in various sectors.

The digital economy is gaining momentum, as its characteristics enhance the ability of economies to adapt to new conditions and challenges. This new framework was a crucial step toward developing technologies and improving the utilization of information and communications technologies to enhance the effectiveness of sectors crucial for economic diversification.

The effective management of electronic commerce and digital markets requires new strategies that can harness the potential offered by the digital economy to promote the complexities of diverse sectors. Moreover, addressing the challenges of transformation and development requires substantial investment to facilitate widespread participation across all sectors.

This transformation is now integral to enhancing competitiveness and aligning with global trends, as countries strive to capitalize on technological advancements while ensuring sustainability and inclusiveness within their growth agendas.

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