أثـر التـحول الرقـمي عـلى كفـاءة المـؤسـسـة
(المؤسسة التعليمية نموذجاً)

أ. د. زينب توفيق عليوة

كليـة الاقتصـاد والعلـوم السيـاسيـة - جامعـة المستقبل في مصر

The impact of digital transformation on the institution's efficiency (Educational Institution as a Model)

Prof. Dr. Zeinab Tawfik Elewa

Faculty of Economics and Political Science
(Future University in Egypt (FUE

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Prof. Dr. Zeinab Tawfik Elewa
Faculty of Economics and Political Science
Future University in Egypt (FUE)

Abstract

Egypt has adopted a strong strategy and course of action to transform existing government services and the societal ecosystem into a digital ecosystem based entirely on data, by automating all government procedures and presenting them through a digital computing system without human intervention, in order to provide government services faster and simpler, which is called transformation Digital.

This process includes a wide range of transformations to restructure systems, processes, and enterprise data, with a focus on improving efficiency and enhancing innovation. These transformations were not limited to technology only, but included the use of data, analytics, automation and integration between digital systems, improving customer experience and digital interaction, in addition to organizational and administrative change to achieve radical improvements in performance and provide new value to customers, as digital transformation has become vital for companies and institutions in all sectors in a world where there is increasing reliance on technology to improve operational efficiency, reduce costs, improve customer experience and open up new opportunities for growth and innovation.

Therefore, this research paper addressed the dimensions of digital transformation, which were represented in: the importance of digital transformation and the challenges it faces, its components, the steps for its implementation, the most important strategies followed by companies and institutions for digital transformation, the risks of digital transformation and how to confront them, and the process of automation and integration between digital systems that follows, then how to benefit from digital transformation in the educational process.

Keywords:

Digital transformation, Technological innovation theory, Adoption and diffusion theory, Systems theory, Organizational change theory, Epistemology, Automation, Digital systems, Sustainable Development, International cooperation, educational process.

Introduction:

Digital transformation has become vital for companies and institutions in all sectors, in a world where there is increasing reliance on technology to improve operational efficiency, reduce costs, and open new opportunities for growth and innovation. Accordingly, this research paper will address the dimensions of digital transformation, which are: the importance of digital transformation and the challenges it faces, its components, and the steps for its implementation, the most important strategies followed by companies and institutions for digital transformation, the risks of digital transformation and how to confront them, the subsequent automation process and how to integrate digital systems in promoting sustainable development and international cooperation, and then how to benefit from digital transformation in the educational process, as follows:

First: The importance of digital transformation:

Digital transformation means using digital technology to transform activities, processes, and business models to provide new value and improve efficiency. Its importance is evident in: Digital transformation helps companies and institutions improve efficiency and productivity by automating and simplifying processes, as digital technology reduces the time and effort required to complete tasks, allowing employees to focus on more valuable activities; Digital transformation also gives companies a competitive advantage by offering innovative products and services, improving customer experience and increasing the speed of response to changes in the market, as companies that effectively adopt digital transformation can stay ahead, outperform their competitors, explore new markets and provide innovative solutions to traditional challenges, which can be the key to long-term success.

However, there are challenges facing digital transformation such as: resistance to change, especially from employees who are not accustomed to new technologies; implementation costs that may require large investments in technology and infrastructure which burdens companies especially small and medium-sized ones; digital technology may also open

the door to security and privacy risks especially cyber-attacks that can cause significant losses to companies; also some digital transformation projects require updating or restructuring the existing infrastructure which can be complex and costly. By following a set of strategies and procedures, digital transformation risks can be effectively addressed, as will be mentioned later.

Second: Components of digital transformation:

The most important components of digital transformation are: collecting and analyzing data to enable companies to understand customer behavior, identify market trends, and make informed decisions that help guide business strategies; cloud technology allows companies to access technological resources via the Internet instead of investing in traditional infrastructure allowing companies to focus on innovation; artificial intelligence and machine learning that help automate complex processes and analyze data quickly and accurately, enabling companies to improve productivity and reduce errors; as well as the Internet, which connects devices to each other and allows data to be collected and analyzed in real time for use in many areas such as inventory management equipment monitoring and improving logistics operations; in addition to cybersecurity which becomes more important with digital transformation to protect companies' data from cyber threats and ensure the security of all digital operations.

Third: Theoretical and historical foundations of digital transformation:

Digital transformation is the process of adopting digital technology to improve performance, efficiency and productivity in institutions and societies, as digital transformation is affected by several theoretical and historical foundations, the most prominent of which are the following:

1- Theoretical foundations of digital transformation:

(1)Technological innovation theory: This theory explains how technological innovations lead to radical changes in economic and social structures such as the Internet, artificial intelligence, and the Internet of Things, such as changing traditional ways of working.

(2) Adoption and diffusion theory: This theory focuses on how individuals and organizations adopt new technology, as the adoption stages start with innovation and then spread among users until the technology becomes part of daily life.

(3) Systems theory: This theory considers the organization as a system affected by internal and external factors, as digital transformation requires adapting to these factors and adopting technological solutions that ensure the balance of the system and improve performance.

(4) Organizational change theory: This theory studies how organizations can manage change and transformation, as digital transformation requires changes in organizational culture and administrative structure.

(5) Knowledge theory: This theory focuses on how to manage knowledge within organizations using digital technology, as knowledge management includes collecting, analyzing, and disseminating information effectively.

2- Historical foundations of digital transformation:

(1) The First Industrial Revolution (late 18th-early 19th century): It was the start of the adoption of technology in industry with innovations such as the steam engine.

(2) The Second Industrial Revolution (late 19th-early 20th century): This period witnessed the spread of electricity and mass production technology, which led to major transformations in production and distribution.

(3) The emergence of computing and the Internet (late 20th century): The invention of the personal computer and the development of the Internet enabled the exchange of information in an unprecedented way and facilitated business, educational and entertainment processes.

(4) Digital transformation in the 21st century: The spread of smartphones, cloud computing and artificial intelligence helped promote digital transformation in all sectors of life, as digital transformation became a necessity for business competitiveness and for achieving sustainable development.

Fourth: Steps to implement digital transformation:

1 -Planning is the first step in digital transformation, which includes assessing the current situation and setting future goals, as companies must analyze: strengths and weaknesses; opportunities and threats; and identify areas that can be improved through digital technology.

2 - Based on the assessment, companies choose the appropriate technology for their needs, which includes cloud computing platforms, analysis tools, and artificial intelligence, so that investments are consistent with the company's strategic goals.

3- Companies ensure that their employees are equipped with the skills and knowledge necessary to use this technology effectively, as the presence of technology alone is not enough; This is done through training and development programs that can help enable employees to take full advantage of new digital tools.

4- Updating and developing the current infrastructure to support digital transformation, such as improving networks, updating devices, or adopting new management systems, so that the infrastructure is flexible and scalable to support future innovations.

5- Measuring the success of digital transformation and adjusting strategies based on the results, using key performance indicators to measure progress and identify areas that need improvement.

Fifth: Digital Transformation Strategies:

Digital transformation strategies are the plans and procedures followed by companies and institutions to transform their business models and operations using digital technology, with the aim of improving efficiency, enhancing innovation, and providing new value to customers. The following are some of the basic strategies for digital transformation:

1- Defining a clear digital vision and strategy by clearly and unifiedly defining the goals of digital transformation across the organization and developing a strategic plan that includes the goals, stages, and resources required to achieve digital transformation.

2- Focusing on the customer experience by collecting and analyzing data to understand their needs and expectations, then designing easy-to-use interfaces and providing personalized experiences for them.

3- Investing in appropriate technology such as updating old systems and adopting modern technologies such as cloud computing, artificial intelligence, and the Internet of Things, then using data analysis tools to understand the market and guide strategic decisions.

4 - Adopting a culture of innovation and change by encouraging employees to present new ideas, embrace change, and provide training programs to develop employees' skills in digital technology.

5- Enhancing cooperation between departments by forming work teams that include members from different departments to ensure effective cooperation and linking different systems and applications within the organization to ensure a smooth flow of data.

6- Applying automation in operations using digital technologies to automate routine and repetitive processes to improve efficiency, reduce errors, and use artificial intelligence to analyze data and automate decision-making.

7- Enhancing cybersecurity by implementing security policies and procedures to protect sensitive data and information, educating employees

about the importance of cybersecurity, and training them to deal with potential threats.

8- Cooperating with technology and consulting companies to benefit from their expertise and technologies, in addition to participating in industrial alliances to share knowledge and best practices.

9- Measuring performance and continuous adaptation by identifying key performance indicators to measure the success of digital transformation, then monitoring results and analyzing data to identify areas that need improvement and modifying strategies and tactics based on actual analyses and results.

10- Achieving a balance between technology and people by ensuring that digital transformation serves people and does not replace them, while preserving human values and developing leaders capable of leading digital transformation and adapting to technological changes.

Examples of implementing d igital transformation strategies include: "Amazon", which adopted strategies based on big data analysis to improve customer experience and p rovide personalized recommendations; and "Netflix", which relied on intelligent data analysis and machine learning to provide personalized c ontent to subscribers; And General Electric, which has applied the Internet of Things in its industrial operations to improve efficiency and provide new services. By following these strategies, companies can achieve a successful digital transformation that enhances their competitiveness and drives them towards sustainable innovation.

Sixth: Automation in the context of digital transformation:

Automation means using technology to perform business processes and routine tasks without h uman intervention with the aim of improving efficiency and acceler a ting operations. Automation relies on a set of technologies such as: artificial intelligence, machine learning, software robots, and the Inte r net of Things. There are some key points about automation in digita l transformation such as: Automation reduces the time spent perfo r ming routine and repetitive tasks, allowing

employees to focus on more complex and strategic activities. Through process automation, human errors that occur as a result of fatigue or forgetfulness can be reduced, which leads to improving the quality of work and increasing accuracy. Automation helps reduce operational costs by reducing the need for human labor to perform routine tasks.

Thanks to automation, tasks can be performed faster than they were possible manually, which leads to improving the speed of service delivery and increasing customer satisfaction; Automation involves the continuous collection and analysis of data, providing valuable insights into the performance of operations to help make informed decisions. Automation can ensure compliance with internal policies and procedures and external standards, which helps achieve regulatory compliance and reduce legal risks. Automation allows companies to scale their operations more easily, as automated systems can handle large increases in workload without the need for significant increases in human resources.

Examples of automation in digital transformation include: Robotic Process Automation, which is the use of software to mimic and implement repetitive human activities in digital applications; Artificial Intelligence, which is the use of algorithms to analyze data and make decisions based on patterns and extracted information; Internet of Things, which is the collection and analysis of data from connected devices to make automated decisions or improve operations; and Customer Relationship Management, which is the automation of processes related to tracking and interacting with customers to provide an enhanced and personalized experience. Automation is thus a key factor in digital transformation, contributing to improving efficiency and productivity, reducing costs, and enhancing companies' competitiveness.

Seventh: Integration between digital systems in digital transformation:

Integration between digital systems in digital transformation is the process of linking different systems and applications within the organization, so that they work together in a coordinated manner to

exchange data and implement operations smoothly, with the aim of creating an interconnected technical environment, where information is exchanged between different departments and tools without obstacles, which enhances operational efficiency and supports making decisions based on comprehensive and integrated data.

The importance of integration between digital systems is evident in: The smooth flow of information between different systems, which ensures that the correct data reaches the people or systems that need it at the right time; It reduces the need for manual data entry, which reduces errors and ensures higher accuracy in the data used in different operations; It allows different departments within the organization to work together more effectively by accessing the same information and resources; It also provides a comprehensive and unified view of data across different systems, which helps managers and decision makers make decisions based on accurate and up-to-date data; New systems or applications can also be easily added to its infrastructure without the need to rebuild everything from scratch, which supports rapid growth and innovation.

Examples of integration methods and techniques include: APIs that allow systems to communicate and exchange data in a unified and secure manner and can be used to link different applications, whether internal or external; web services, which are technologies that enable data exchange between systems over the Internet, supporting integration between various applications; the enterprise service bus, which acts as an intermediary that facilitates communication and integration between different systems within the organization; data integration platforms from multiple sources that collect, transfer, transform and merge them to create a unified view of data across the organization; and cloud computing, which provides built-in integration tools that facilitate the connection of different applications and services. Integration faces several challenges, such as: Dealing with a variety of systems and applications with different interfaces can be complex; Securing data as it moves between different systems requires the application of strict security policies; Ensuring that different systems are compatible with each other requires continuous

technical efforts; and system integration requires periodic maintenance and updating to ensure the continuity and effectiveness of integration.

However, there are several benefits to integration in digital transformation, the most important of which are: Integration can support the automation of processes, which reduces the need for human intervention and improves efficiency; and enables immediate interaction between systems, which helps improve the speed of response to customers and partners; By integrating different systems, companies can provide innovative services that combine multiple data and capabilities. Therefore, the integration of digital systems is an essential element in digital transformation, as it enables organizations to fully benefit from technology to improve operations, increase efficiency, and enhance the ability to innovate.

Eighth: Risks of digital transformation:

Despite the many benefits of digital transformation, it may come with a set of risks, the most prominent of which are: The increasing reliance on digital technology makes companies more vulnerable to cyber-attacks, as data breaches lead to financial losses and a bad reputation; Collecting large amounts of personal data can violate individuals' privacy if not processed properly; Digital transformation may replace some traditional jobs with technological ones, causing unemployment for some workers; Investing in digital technology can be expensive, and companies may not achieve the expected return on this investment if it is not implemented properly; Companies may face internal resistance from employees who are not prepared to adapt to technological changes; Digital transformation can complicate business and operational processes, requiring continuous training for employees and maintenance of more advanced systems; Some companies may not be equipped with the digital infrastructure necessary to support digital transformation, which requires significant and costly improvements, and companies that cannot quickly adapt to digital transformation may find themselves unable to compete in the market. Companies can effectively deal with the risks associated with digital transformation and ensure the desired benefits by following a set of strategies as follows:

1- Enhancing cybersecurity by ensuring that all programs and systems are updated with the latest security patches and training employees on best cybersecurity practices such as identifying fraudulent emails while using protection technologies such as firewalls, antivirus programs, etc.

2- Protecting privacy by developing clear and strict privacy policies on how data is collected, stored, and used and using encryption to protect sensitive data whether in transit or at rest.

3 -Managing job transformation by providing training programs to help employees acquire the required digital skills and use technology to create new job opportunities instead of laying off workers.

4- Managing costs by setting a detailed budget for digital projects, anticipating unexpected expenses, and implementing small pilot projects to test the technology before expanding it.

5 -Dealing with resistance to change by involving employees in the transformation process through continuous communication and providing the necessary support and incentives for employees to encourage them to adopt the changes.

6- Simplifying systems by choosing appropriate technical solutions for the size and nature of the business to avoid unnecessary complexity and providing continuous training for employees to ensure their full understanding of the new systems.

7- Improving infrastructure by assessing the current infrastructure and identifying gaps that need improvement, in addition to investing in the information and communication technology necessary to support digital transformation.

8- Staying competitive by monitoring market shifts, quickly adapting to technological changes, and stimulating innovation within the company to develop new solutions and competitive services.

Ninth: The contribution of digital transformation to promoting sustainable development and international cooperation:

1 -Digital transformation can play a vital role in promoting sustainable development in several ways, including:

(1) Digital technologies such as the Internet of Things and big data analysis can improve the efficiency of resource use and reduce waste, such as using smart sensors to monitor and control water consumption more accurately, as enhancing transparency in government and corporate operations facilitates combating corruption and improving accountability.

(2) Digital transformation can stimulate innovation by providing technological platforms for start-ups and entrepreneurs to develop innovative solutions to environmental and social challenges, as reducing costs and improving access to global markets supports sustainable economic development.

(3) Digital technology can facilitate access to education and knowledge through e-learning platforms and online educational content, which enhances awareness of the importance of sustainability and supports the development of the skills needed to participate in the digital economy.

(4) Using technology in agriculture to improve productivity and reduce environmental impact, as precision agriculture techniques can be used to monitor and care for crops, which reduces the use of pesticides and fertilizers.

(5) Enhancing health services through ICTs such as telemedicine and electronic health records, which improves access to health care and reduces the need for transportation and associated environmental resources.

(6) Developing intelligent transportation systems that reduce traffic congestion and carbon emissions, such as self-driving car technologies and ride-sharing applications.

(7) Using smart city technologies to improve the management of urban services, such as waste management, smart public lighting, and smart public transportation systems, which contribute to reducing energy consumption and enhancing quality of life.

2 -Digital transformation can also contribute to enhancing international cooperation thanks to modern technology and digital infrastructure through:

(1) Online virtual meeting platforms such as Zoom are an effective way for international institutions to hold remote meetings and conferences, which facilitates cooperation and coordination without the need to move. Applications such as WhatsApp can also enhance instant communication between international teams, which facilitates the exchange of information quickly and efficiently.

(2)Cloud computing technologies allow for secure storage and sharing of data between international parties, which facilitates access to vital information and data for cooperation in various projects. Open online platforms can enhance cooperation in the fields of research and development by exchanging codes and developer ideas.

(3) Universities and international organizations can offer online educational and training courses to reach a global audience, which contributes to capacity building and enhancing knowledge and expertise across borders. Organizing online conferences and seminars can also bring together experts from different countries to exchange knowledge and ideas in various fields such as health, environment, technology, and sustainable development.

(4) Allowing research teams from different countries to work together simultaneously by using common digital platforms to collaborate on scientific research and technical projects such as cooperation in developing vaccines or environmental projects. Artificial intelligence and big data analysis can also be used to support international research projects by analyzing shared data and extracting results faster and more accurately.

(5) Facilitating international trade through e-commerce platforms that allow companies to sell their products globally, which enhances economic cooperation and creates new opportunities for global markets, as well as facilitating international financial operations through digital banking systems and cryptocurrencies.

(6) Using digital systems to exchange intelligence information between countries to combat common security threats such as terrorism and cybercrime, and international cooperation in the field of cybersecurity to confront common cyber threats and enhance digital defenses.

(7) Using digital technology to develop early warning systems for natural disasters such as earthquakes and hurricanes, which allows countries to coordinate faster and more effectively in responding to crises and improving the distribution of humanitarian aid by using digital applications and systems to coordinate efforts between international organizations and affected countries.

Tenth: Benefiting from digital transformation in the educational process:

The application of digital transformation in education can provide opportunities to learn modern digital skills such as smart learning, artificial intelligence, and data science, where students can acquire skills in dealing with technology and stay informed of the digital developments witnessed by societies and the labor market. Thus, digital transformation can revolutionize the educational process by improving the learning experience for students, facilitating the management of educational processes, and enhancing communication and interaction between teachers and students. Here are some ways in which digital transformation in education can be benefited from:

1- Improving the learning experience by using artificial intelligence technologies to analyze student performance and provide personalized educational content based on their needs and levels. Interactive learning also leads to the use of multimedia such as: videos, educational games, and simulations to make learning more interactive and attractive.

2 - Access to diverse educational resources by providing digital libraries that include a wide range of books, articles, and research that can be easily accessed, and online courses that enable students to enroll in online courses from global universities and educational institutions.

3 - Mobile education, which is represented in developing educational applications that can be used on smartphones and tablets, allowing students to learn anytime, anywhere, and using educational games that motivate students and help them learn in fun and effective ways.

4 - Improving the management of educational processes by automating administrative processes such as registration, scheduling, and evaluation to save time and effort, in addition to using data analytics to evaluate student performance, identify areas that need improvement, and provide detailed reports on student and teacher performance to help make informed decisions.

5 - Enhancing communication and interaction through virtual classes using platforms such as Zoom to conduct online classes and direct interaction between teachers and students, as well as creating online forums and communities where students and teachers can exchange ideas, information, and discussions.

6 - Encouraging continuous learning and professional development by providing training and development courses and organizing interactive seminars and workshops to exchange knowledge and experiences online for teachers to improve their skills and knowledge.

7 - Promoting inclusiveness and accessibility by providing "open-source educational materials" that everyone can access without restrictions and developing educational tools and technologies that support people with special needs such as screen readers, in addition to taking advantage of virtual reality to add information on top of traditional educational materials.

Thus, with the digital transformation, the student will become a component of the educational process, not the affected one; the online

education model will be assembled online or offline; experiences based on application, inspiration and courage will be designed for students; a common mind and discipline will be created around education independent of time, place and device; the teacher will no longer be a self-sufficient element of knowledge and will start directing the student to the source of qualified and diverse information; the student will learn at his own speed and not at the average speed of the class; exam results can be extracted in a short time and students will be able to access the test results in the online system and make their school choices available through the same system; correct success statistics for students will be held and presented for the benefit of the use of the necessary institutions throughout the country.

Therefore, educational institutions that cannot determine their place in the world of digital transformation will leave their students poor in the future social, economic, and cultural life. A generation ago, teachers thought that what they taught would last a lifetime. Today, educational institutions must prepare students for ever-changing economic and social lives, for professions that do not yet exist, for technologies that have not yet been invented, and for solving social problems that we do not yet know about.

There are many examples of digital transformation applications in education, including: the "Khan Academy" platform, which includes a wide range of free online educational courses covering multiple subjects; "Google Classroom" is a tool that helps teachers create and manage virtual classrooms and facilitate communication with students; and the "edX" and "Coursera" platforms provide free courses from global universities, allowing students to access education from anywhere in the world. Using these methods and technologies, digital transformation can improve the quality of education, make learning more interactive and inclusive, and enable students and teachers to take full advantage of modern technology.

Conclusion:

Digital transformation is the process of using digital technology to radically transform activities, services, and businesses. Digital transformation is an ongoing journey that requires a long-term commitment from companies. By adopting digital technology and developing the appropriate organizational culture, companies can improve efficiency, enhance innovation, and deliver new value to their customers. Despite the challenges facing digital transformation, its significant benefits make it a necessary investment for companies seeking to succeed in the digital age. Some of the findings and recommendations that can enhance the chances of success in implementing this transformation can be presented as follows:

Results:

1- The study indicated that digital transformation contributes to improving operational efficiency and increasing productivity by adopting technologies such as automation, artificial intelligence, and data analysis, which helps reduce costs, improve the quality of products and services, and improve customer experience by providing fast services, as digital technology can analyze customer data to provide customized services that better meet their needs.

2- Digital transformation opens up new horizons for innovation in business models, such as providing new services or converting traditional services into digital platforms, which helps companies survive and enhance internal cooperation between different teams within companies through virtual collaboration tools and digital communication platforms.

3- Despite the benefits of digital transformation, it faces challenges related to security and privacy, so organizations need to adopt strong strategies to protect data and ensure compliance with legal orders related to privacy, which requires a change in organizational culture and adopting new mindsets that accept innovation and change, training employees in digital skills, and enhancing awareness of technology.

4- Digital transformation can lead to major changes in the labor market, including the disappearance of some traditional jobs and the emergence of new jobs that require high technical skills, which requires governments and companies to invest in education and training to qualify the workforce for these changes.

Recommendations:

1- Start the digital transformation by setting a clear and specific vision that inspires all employees and directs efforts towards specific and measurable common goals for each stage of the digital transformation by encouraging a work environment that supports innovation, accepts change, and motivates employees by appointing qualified leaders to manage the digital transformation.

2- Provide ongoing training programs to develop employees' skills in digital technologies by assessing their current capabilities, identifying areas that need improvement, developing, analyzing, and evaluating available technological solutions, and choosing the most appropriate ones according to needs and goals.

3- Design processes and services to be geared towards meeting customer needs and improving their experience by collecting and analyzing customer data to provide customized solutions, improving services, identifying routine and repetitive processes that can be automated, and applying artificial intelligence technologies to analyze data by cooperating with technology and consulting companies to benefit from their expertise and technologies.

4- Enhance cybersecurity by developing and implementing strong security policies and procedures to protect sensitive data and information, and training employees in dealing with potential threats by identifying key performance indicators to measure the success of the digital transformation, monitoring them regularly, analyzing the results, and adapting to changes based on the data and information extracted.

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أثر التحول الرقمي على كفاءة المؤسسة
(المؤسسة التعليمية نموذجًا)

أ. د. زينب توفيق عليوة
كليـة الاقتصـاد والعلـوم السياسيـة
جامعـة المستقبل فى مصر

ملخص

تبنت مصر استراتيجية ومسار عمل قويين لتحويل الخدمات الحكومية القائمة والنظام البيئي المجتمعي إلى نظام بيئي رقمي قائم تمامًا على البيانات، من خلال ميكنة كافة الإجراءات الحكومية وتقديمها عن طريق منظومة حوسبية رقمية دون تدخل بشري، وذلك لتقديم الخدمات الحكومية بصورة أسرع وأبسط، وهو ما يطلق عليه التحول الرقمي، الذي يشمل مجموعة واسعة من التحولات لإعادة هيكلة الأنظمة والعمليات وبيانات المؤسسة، مع التركيز على تحسين الكفاءة وتعزيز الابتكار. هذه التحولات لم تقتصر على التكنولوجيا فقط، ولكن تضمنت استخدام البيانات والتحليلات والأتمتة والتكامل بين الأنظمة الرقمية وتحسين تجربة العملاء والتفاعل الرقمي بجانب التغيير التنظيمي والإداري لتحقيق تحسينات جذرية فى الأداء وتقديم قيمة جديدة للعملاء. حيث أصبح التحول الرقمي أمرًا حيويًا للشركات والمؤسسات فى جميع القطاعات فى عالم يتزايد فيه الاعتماد على التكنولوجيا لتحسين الكفاءة التشغيلية وتقليل التكاليف وتحسين تجربة العملاء وفتح فرص جديدة للنمو والابتكار. ولذلك تناولت هذه الورقة البحثية أبعاد التحول الرقمي التي تمثلت فى: أهمية التحول الرقمي والتحديات التي تواجهه، ومكوناته، وخطوات تنفيذه، وأهم الاستراتيجيات التي تتبعها الشركات والمؤسسات للتحول الرقمي، ومخاطر التحول الرقمي وكيفية مواجهتها، وما يتبع ذلك من عملية الأتمتة والتكامل بين الأنظمة الرقمية، وكيف أن التحول الرقمي يساهم فى تعزيز التنمية المستدامة والتعاون الدولي، ثم كيفية الاستفادة من التحول الرقمي فى العملية التعليمية.