

# DIGITAL TRANSFORMATION OF BUSINESS CHALLENGES AND ISSUES IN DEVELOPING COUNTRIES

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**ABSTRACT:** The digital transformation of business is now part of the strategic concerns and challenges of all companies in developing countries, regardless of their size, their activities, their human resources, their production processes, and their IT systems, as well as their marketing. The purpose of this digitization is to enable companies to integrate with technology, and transform their economic environment, their business relationships, their working methods, and their business prospects. These transformations inevitably impose new challenges on leaders, government, and businesses. This study focuses on the true meaning of digital transformation, the difference between digitization, digitalization, and digital transformation. In addition, this paper analyses the digital transformation of business challenges and issues in developing countries.

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**KEY WORDS:** *digitization, digitalization, digital transformation, digital business transformation, issues and challenges, developing countries*

## 1. INTRODUCTION

The digital transformation of business is now part of the key concern and opportunities of all companies in developing countries (Larsson, 2018). Companies are currently at the heart of the digital transformation process to adapt the development of new technologies (Opoku Mensah et al., 2019). Digital transformation is about changing our analog to digital platform while changing existing business models, leadership, and governance processes (Gatautis et al., 2017). We can experience this transformation as an unknown and sometimes mysterious and uncertain world of science fiction, but we also see ourselves as passionate innovators and creators, a tremendous opportunity to solve the world's most pressing problems and a huge potential for a whole new era of prosperity and economic growth.

Digital transformations in the companies are directly or indirectly linked to the integration of people, the digitization of technologies, the redefinition of the hierarchical structure, the professionalization of employees and the implementation of projects. Digital integration is possible if there is a common internal vision; it always starts with a clear vision of the company's manager, without which it would be difficult to complete the digital transformation. There is a strong desire to work

in collaboration with the digital world and its developments, and therefore to pool many internal skills on innovation projects.

Digital transformation relies on the challenges identified by the company. Digital transformation concepts must also focus on the transformation of knowledge, products, and processes as well as any other organizational elements that are affected by digital technologies. Thus, digital transformation strategies will therefore represent a central concept within the company and will be used to coordinate, prioritize and implement digital transformation (Sousa & Rocha, 2019).

## **2. LITERATURE REVIEW**

Technology is a major challenge for companies and all sectors of activity. It is essential and unavoidable for a company to succeed in its digital transformation. Digital business transformation is a more complex adventure for companies, although it is a necessity. Since it is a whole set of internal services, it constitutes a common vision of the challenges of this digital transition that everyone must have, but above all, integrate it. It offers you growth opportunities, prospects in promising markets and increased competitiveness and productivity.

Digital transformation is currently taking place in a wide range of sectors, including health, banking, industry, real estate, and telecommunications. They promote innovation strategies, improved designs, and new business models, as well as methods to create value on the Internet for organizations.

Digital transformation, also known as "digitalisation", is characterized by new opportunities for value creation for companies and by the instantaneous nature of exchanges between human beings. This transformation is described as a combination of three phenomena: automation, dematerialization, and reorganization of intermediation schemes.

The developing countries face enormous challenges such as lower internet access and connectivity, mobile services usage being driven to voice instead of data consumption, millennials' limited access to and contact with technology, and less access to banking and electronic payment services. The adoption of digital transformation in public and private sectors is a necessity to enhance the digital economy (Schallmo & Williams, 2018).

### **2.1. Historical Look at Digital Transformation**

The 1980s marked the advent of micro computing and client/server infrastructures. The 1990s saw the implementation of the Web. The 2000 millennia have been the years of controlling computer data in terms of transport flows and transfers. The years after 2010 are years of digital in terms of portable computing technology that allows new uses and generates new data to manage. From 2000 until now, the growth of smart devices and social media led to a significant change in communication methodologies with companies as well as in customer expectations in terms of speed and multi-channel availability (Brennen & Kreiss, 2014).

### **2.2. Digital Use at The Heart of A Digital Revolution**

Technological advances and its accessibility to the largest number of people in the world make it possible to satisfy different needs in an increasingly fast and

efficient manner. People in developing countries are mainly equipped with smartphones. Connected objects bring real innovative solutions in many professional sectors.

Sending emails or posting on social networks such as Facebook has become commonplace. Messages are sent in real time via Messenger, WhatsApp, and virtual dating groups. We never had as many ways to inform and communicate, and as many knowledge sharing channels, as technology as we have today.

### **2.3. Digitalization, Digitization and Digital Transformation**

Digitalization, digitization, and digital transformation are three expressions that we have been using for many years, but often in the wrong direction. A reflection on the differences is provided in the following sub-sections because they are so important.

#### **2.3.1. Digitization**

Analogue information in all its forms (text, photographs, voice, etc.) is converted into digital information using appropriate electronic devices (such as a scanner or specialized computer microchips) so that the information can be processed, stored, and transmitted by digital circuits, equipment and networks (Steinhubl & Topol, 2015). According to Degryse (2016), digitization is the process of changing data into a digital form that can be easily read and processed by a computer.

#### **2.3.2. Digitalization**

Digitalization has been recognized as one of the most important trends that will change society and business in the short and long term. Digitalization will have a major impact; it has often been compared to the industrial revolution by some authors (Deloitte et al., 2013). Digitalization is a fundamental evolution of operations and business models based on new knowledge acquired through value-added digitization initiatives (Schallmo & Williams, 2018).

#### **2.3.3. Digital Transformation**

Digital transformation can be defined as changes in the ways of working, functions and services offered by the adoption of digital technologies in a company or in the operational framework of the company. In real terms, there are many obstacles to digital transformation. According to Henriette et al. (2015), a digital transformation project is the implementation of digital capabilities to support business model transformations that impact entire organizations, particularly processes, operational resources, and internal and external users. This is a profound change in working habits and methods, based on cooperation and intensive interaction.

In short, digital transformation involves digitization to digital business, and requires digitalization, in which the cornerstone of digital transformation and digitization is, of course, digital data, which translates into information, knowledge, intelligence, actions and changes in the business model (Clerck, 2017).

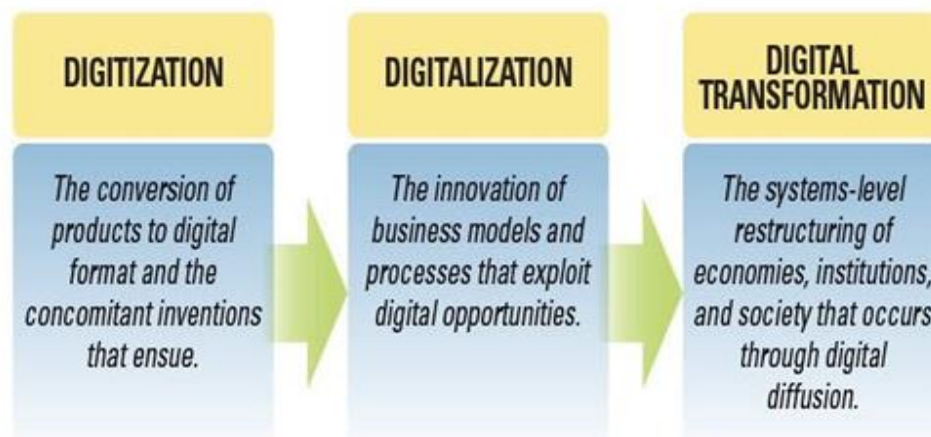


Fig. 1. Digital transformation process (Clerck, 2017).

#### **2.4. Digital Transformation of Business Models**

Digital transformation is an important facilitator of innovative business models. It provides new opportunities to develop products, to find customers, to create and deliver value and to generate income. All of that can be integrated to digital transform of a business. The level of digital transformation is linked to the change in business model, both marginal and fundamental. Within the level of novelty, the customer is the reference unit, but it can also affect its own business, partners, industry, and competitors (Schwertner, 2017). For the digital transformation of business models, catalysts, or technologies (e.g., big data) are used to create new applications or services (e.g., forecasts on demand). These tools require skills that enable the collection, exchange, and analysis of data, which companies must be able to use to calculate and evaluate options. The options are then used to initiate new processes within the business model. The digital transformation of business models is based on a strategy that includes a series of tasks and decisions that are all linked to each other in a logical and temporal context. It addresses four target dimensions: time, finance, space and quality (Schallmo et al., 2017).

#### **2.5. Real Mechanism of Digital Transformation of The Companies**

True digital transformation is your company's ability to react, and successfully use current and future new technologies and procedures. In general, this requires the adoption of mechanisms that allow your company's managers and employees to study, on an ongoing basis, experiment and use new technologies strategically and on an ongoing basis (Nadeem et al., 2018).

Everything new in the digital age represents an equal threat and opportunity, and as a fight, the company most capable of reacting quickly with concentrated force wins the title of "New Devices, New Networks, New Capabilities". The company that avoids and dodges punches without a proactive strategy only delays its inevitable defeat.

Most traditional companies are stuck in their old habits, isolated, slow to react and bogged down in their old processes. Slow decision-making is due to hierarchies

that have expanded over time, creating internal silos of people and procedures, with processes that complicate consensus building and even less achievement of collective objectives.

The real digital transformation is about removing these barriers, removing the constraints imposed by an aging logic, and leveraging technology to create new revenue streams, reduce costs and improve the user experience. A successful digital transformation begins with a series of small changes that accumulate until the organization can respond to larger demands.

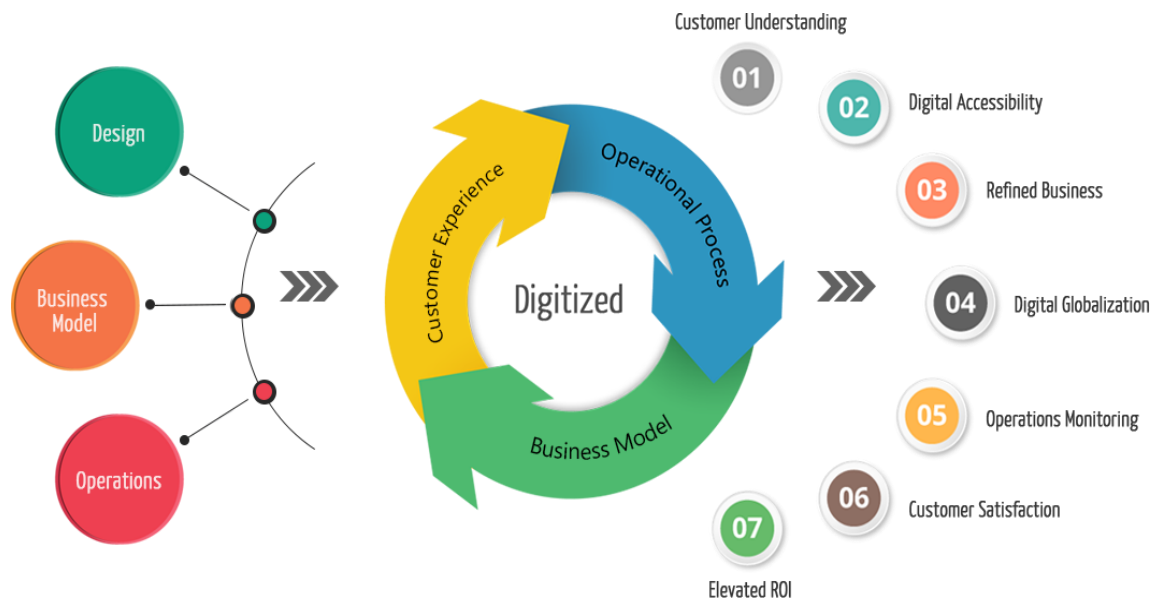


Fig. 2. Digital transformation process codershive.com (Yakob, 2009)

## 2.6. The Advantages of Digital Transformation of Companies

The digital transformation of companies has become unavoidable, whether in terms of competitiveness or the evolution of their activities. These are the radical changes adopted at all levels of companies to follow the integration of technological innovation and the development of its tools and processes (Sousa & Rocha, 2019). There are many advantages of digital conversion for companies such as gain of market share, leadership gains, gains in quality and competitiveness, greater visibility, an irreproachable and controlled e-reputation, and automation of business processes to improve performance.

The question today is not whether digital brings you all the benefits, but how your business is adapting to keep pace with the world's technological acceleration and rapid growth. To face these technological evolutions, have you thought about establishing a customer-oriented culture at all levels of your company? This culture contributes to the capacity for innovation not only of all the company's employees, but also of partners and consumers. In all company departments, resources, processes, and products are impacted in an increasingly digital world. A major advantage of digital is that it is possible to analyze new trends and consumer data in real time with consumer's prior consent, which is a real revolution in the way companies and products are created today (Kane, 2019). In the context of compliance with the RGPD (general regulation on data protection), this personal data is the property of the users who have strong control over it. They are sensitive

and cannot be used without the full consent of these people (Götz & Jankowska, 2018).

In addition, this digitization also makes it possible to recruit new talent according to vacancies that will be more qualified, resulting in a growth in skills and professional development while finding the right balance during this transition period (Nielsen & Verbeke, 2020).

### **2.7. The Challenges of Digital Transformation of Companies**

The digital transformation depends closely on the issues identified by your company and its industry. You must define an operational plan between three to five years with quantitative and qualitative objectives to be achieved, but also the available means to be implemented to achieve it. You will also need to measure results through key performance indicators (KPIs) (Nielsen & Verbeke, 2020). For large organizations, the plan will consist of analyzing their objectives, then implementing operational strategies, and then deploying their Data Warehouse according to their leadership. In a way, it is about regulating the ambition of your company or organization and equipping yourself well. These companies, with a tendency to expand internationally, are rather opportunistic in their transformation. By succeeding in yours, you will be able to increase your revenues by 20% during the first three years (Attaran & Gunasekaran, 2019). Despite the aversion to change, the main barrier to the success of the digitalization of the company, reactions and feedback are positive overall, especially when this major change project is supported by all employees concerned (Pichugina & Okręglička, 2020). As for the impact of digital technology on the work environment, it has enabled most employees to become more efficient and mobile thanks to remote virtual collaboration anywhere in the world. However, the digitalization of your company allows your employees to evolve quickly and increase their employability (Vey et al., 2017).

### **2.8. Challenges and Issues of Digital Transformation in Developing Countries**

Throughout the digital transition, developing nations have far more to gain and lose, particularly in the way workforce are produced. It can influence processes, procedures, business practices and the implementation of technologies. Old workforce development solutions can no longer be efficient. These nations could be affected by the possibility of slow or inadequate implementation of new technology (Hanna, 2017).

The rise of the fourth industrial revolution (Industry 4.0) presents developing countries with potential threats (Savinova et al., 2020). They need to be seen in light of current attention effectively paid to the influence of technology in development. Many developing economies have acknowledged the potential to implement advanced technology as a key factor in the process of industrial development in the last few decades (Fokeer, 2019).

In developing countries, the digital transformation of businesses often faces the problems of limited internet access and connectivity, and use of mobile services is driven by voice rather than data consumption. Governments of developing countries have a major challenge in encouraging the acceptance of emerging

technologies and facilitating digital adoption by communities and businesses (Gonzalez et al., 2017).

Furthermore, digital transformation is not evenly distributed worldwide since it requires workers and consumers to gain access to digital technology, mostly with internet being the most necessary tool (Hinton, 2020). In 2019, the world achieved a landmark when half of the global population is connected to the internet. However, fewer than 20% of people in developing countries use the internet, compared with 90% in developed countries (Toby Phillips, 2020). This gap clearly indicates that developing countries are at risk of being left behind in the technological transformation as the rest of the world continues to develop.

Moreover, the adoption of digital transformation is also one of the many problems facing developing countries. For instance, digital transformation requires considerable improvement in operational capabilities, creativity in systems, and institutional training. There is also a vital need for ICT industry leadership and operational capabilities to develop and execute digital transformation strategies (Hanna, 2017).

### 3. CONCLUSION

Digital business transformation is a key factor in the evolution of organizations. Companies need a digital transformation business plan that is carefully designed to avoid waste and hidden costs. They need to think about their competitive advantage and how they want to use it to create digital offerings for their customers. The digital transformation is above all a transformation that goes without saying, a profound change that implies an opening and an evolution towards different modes of functioning and communication.

Digital transformation depends not only on the challenges identified by the company itself but also on the field of activity to which it belongs. In developing countries, the digital transformation of businesses often faces the problems of limited internet access and connectivity and adoption of digital transformation.

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