



## DIGITAL TRANSFORMATION: FACTS FROM A SAMPLE OF LIBYAN COMPANIES

## DIGITALNA TRANSFORMACIJA: ČINJENICE IZ UZORKA LIBIJSKIH KOMPANIJA

Shokri Alghemi, *Faculty of Technical Sciences, Novi Sad*

### Field – ENGINEERING MANAGEMENT

**Abstract** – *Libyan economy knows actually hard disturbances since 2011 with severe political and security crisis then with Covid – 19, but it is very sensible to technological changes. Libyan companies are supposed to be aware from the changes of their environment especially related to technologies and the use of digital. The purpose of this study is to evaluate in what extend, Libyan enterprises can adapt themselves to a more and more open environment to technologies.*

**Keywords** – *Digital Transformation, Libyan companies, Digital communication, Digitalization*

### 1. INTRODUCTION

Digitization is becoming an inevitable consequence of technological development, in particular the development of the Internet and IT. Now everything can be processed online, this is the principle of digitization [1]. All industries are affected by digitalization and have therefore experienced several evolutions over the years. Over the past three decades, the global economy has undergone profound changes. Indeed, over the years, the market has opened up, the environment has been rationalized, regulation and rapid technological change have led companies to face a higher level of competition, complexity and uncertainty than before.

This transformation takes place in the context of the globalization of the world economy. In this new environment, we are witnessing a strong expansion of new technologies, in particular in the field of services (IT, telecommunications, internet, marketing, etc.). Thanks to these technological advancements, economic transactions have become easier and faster, mainly due to "electronic commerce".

The real engine of this new economy is e-commerce, an important competitive lever for companies and a new space for consumers.

In this increasingly digital world, a massive digital presence powered by mobile apps would be an ideal overall strategy for entrepreneurs. Moreover, implementing in them influential campaigns and content is beneficial in increasing the visibility of the business. In addition, performing a digital transformation in a company implies many changes in organization and in employees requirements.

### NAPOMENA:

**Ovaj rad proistekao je iz master rada čiji mentor je bio dr Bojan Lalić.**

To make such analysis, we have to answer some research questions like :

- What are the digital principles of the company?
- What role does digitalization play in creating added value for businesses?
- What are the social and economic impacts of digitalization on companies?
- What are the requirements of digital transformation in terms of knowledge and training of employees?
- What are the benefits of digital transformation for companies?

Libyan economy knows actually hard disturbances since 2011 with severe political and security crisis then with Covid – 19, but it is very sensible to technological changes. Libyan companies are supposed to be aware from the changes of their environment especially related to technologies and the use of digital. The purpose of this study is to evaluate in what extend, Libyan enterprises can adapt themselves to a more and more open environment to technologies. This requires an customer focused approach with appropriate organizational changes and efforts to be made for and by employees to become (digital compatible). It is therefore interesting to check these words for a practical case, Libyan companies.

In the following chapter, the author presents the theoretical foundations of the work, after which the practical part of the work, research results and discussion will be presented.

### 2. THEORETICAL BACKGROUND

#### 2.1. Digital transformation: 21st century paradigms

To do business in the digital age, companies must first transform their business models to digitalization. The customer relationship is really at the heart of the life of a company and must be prioritized. If this digitalization succeeds, the visibility of the company will be greatly increased. It is a development of a process that simplifies access to information.

As a result, more and more innovative entrepreneurs are turning to digital entrepreneurship, a context that allows them to land in an important market with many business opportunities and digital-focused startups. Digitization is part of a movement towards the dematerialization of certain activities and the evolution of economic reality, marked by technology and social work. Digital technologies must change the way of working and practice at work.

In addition to being a great source of business opportunities, these innovations have opened up a multitude of new communication and marketing opportunities for businesses.

To undertake in the digital age, a company must first go through the digital transformation of customer service: the customer relationship is indeed at the heart of the life of the company and must be a priority. If this digitalization succeeds, the visibility of the company will be greatly increased. It is a process that simplifies access to information, so it is necessary to use digital tools to facilitate customer communication.

Digitization affects all types of businesses and all major areas of activity. The challenge comes from the company's misunderstanding of the strategies adopted to succeed in its digital transformation. It must therefore put in place a digitization strategy, which includes all the processes, from information gathering to the creation of sub-policies [2].

Digitization does not only concern commercial tools, it is also linked to the attitude of people, organizations, behaviors. A whole way of working including management and marketing practices, and even corporate culture. Digitalization affects all professions without exception, sales, human resources management, finance, project management, marketing and communication, digitization changes the paradigm of an entire spectrum, work, the state of spirit and business practices. However, and to properly supervise its use, the company is obliged to put a real training and initiation strategy for employees of the various departments.

There is an investment to do from companies in terms of adaptation to a new digital environment; we showed that effort needed is bigger when the posture of the company is sceptic about the change. But in all cases, companies in the 21st century have to adapt and use available technology in order to be visible and exist in the eyes of consumer. Communication is thus the main battle to win for a company and digital will be the most powerful weapon for that.

### **2.1. Digital transformation and digital communication in companies**

Communicating, whether through the press, television, radio, cinema or the Internet, should not be done by simple chance, by "feeling", to avoid the risk of failure of the communication campaign. A strategy must be put in place to define the objectives of a communication, by what means to achieve it and to respect the deadlines and budgets granted. Each company has very specific objectives, which communication often helps to achieve. Reach targets through different communication channels in order to encourage them to buy, and therefore increase the company's turnover; increase the visibility of the company, increase its notoriety, etc. are examples of goals to be achieved.

The means of communication are grouped into two distinct categories: the offline (or traditional) communication and online communication. A communication strategy can either be built solely on resources from the offline communication, either on digital communication

means or a combination of the two. Depending on the objectives to be achieved, the type of message to be conveyed and the target, the company will choose the most suitable channels.

If companies have long preferred to opt for offline communication, many include digital communication in their strategy.

Digital communication does not only extend to social networks, it extends to everything related to the web. Website, search engine, blogs and many other tools must be taken into account when optimizing digital communication [3]. A digital transformation can bring advantages: dematerialization of communication, reduction of cost and speed of dissemination.

Digital communication is above all the digitization of information media. But beyond that, it also means considering corporate communication as an entire ecosystem, a environment that encompasses and acts in all digital dimensions.

Communication terminals have mainly become screens... smartphone, PC, tablets. Individual and touch screens, it signs the disappearance of supports and goes through information channels.

Digital has also included a new dimension in communication: consumer opinion. In traditional communication, communication is done unilaterally: the brand sends its message without feedback from the recipient. There is no exchange. In short, the consumer goes from passive to active. He really takes part in the life of the brand and his remarks, positive and negative, are to be taken into consideration in order to improve the brand's services and products, but also its reputation and thus, the confidence of customers in the brand. The brand therefore evolves with and thanks to its consumers and its communication too.

Digital communication is not just about posting messages at the right time on Facebook or Twitter. It is a mode of communication not to be taken lightly, so great is its importance, so much does its power tend to intensify. It cannot be improvised and that is why an effective strategy must be developed by web experts. In recent years, new professions and new university courses have appeared to understand digital in all its forms. Social Media Strategist, Community Manager, Content Manager, online communication manager, many companies have therefore understood the importance of having professionals with real skills in the field of the web for effective communication [4].

## **3. RESEARCH METHODOLOGY**

The research in this paper was conducted through a survey, based on the answer to the problem that consists in finding out whether Libyan companies have undertaken digital transformation and whether this digital transformation has affected the relationship between these companies and their customers and whether it has affected organizational aspects. and about how human resources are managed.

The research conducted by the author on a sample of Libyan companies consists of breaking down the problem into simple questions. Collecting the results and answers to these questions allows us to, in reverse, answer the problem for the Libyan case.

The author decided to conduct research in order to touch more closely on the specifics of companies in terms of digital, organizational and human resource management.

Data collection was carried out with a random sample of Libyan companies established in Tripoli. These companies are of different sizes (in terms of number of employees) and belong to diverse sectors. In total, our sample is composed of 56 observations.

We sent our questionnaires during the period between August 1 and August 8, 2022. We collected the data, either by traveling to the headquarters of the companies questioned or electronically one month after sending the questionnaire. Some completed questionnaires were, however, abandoned due to the existence of contradictions in the answers and/or the existence of insufficient answers.

In formulating the questionnaire, we attempted, in a first step, to identify the specific characteristics of the companies interviewed in terms of size and sector of activity. Also, we asked questions about the characteristics of the respondent in terms of gender, age group and position in the company. In a second step, a series of proposals try to characterize the digital transformation strategy and its impact on organization and human resources management.

The questionnaire is composed of closed questions to facilitate the answer for the respondents by limiting the choice of answers to a predetermined number, as well as to have precise and more targeted answers. The formulation of the questions is based on the aspect already analyzed at the level of the theoretical part. At this level, the questionnaire is composed of scale of Likert based and multiple-choice questions.

– Scale of Likert based questions

These questions allow us to know to what extent the respondent agree with the proposition. According with this degree the respondent choose an answer going from “not at all” (total disagree) to “definitely yes” (totally agree).

– Closed multiple choice questions:

These are questions that do not require much thought on the part of respondents and can attract their attention (attractive questions) to answer that can be accepted. The choice of answers is based on literature dealing with the question.

To be able to carry out the descriptive analysis, we used « Excel » to synthetize the answer provided by the filled questionnaires. Then was deduced graohics that allow us to know the answers concentration around a specific answer.

#### **4. MAIN RESEARCH FINDINGS, DISCUSSION AND RECOMMENDATIONS**

Our practical study on a sample of Libyan firms allows us to draw some interesting results which can be summarized in some points as below:

- There is a dynamic of digital transformation in Libya during the last two years boosted by the Covid crisis,
- This digital transformation is touching mainly the commercial aspects of the activity and aims to let companies more visible digitally in order to be closer to more and more connected consumers.
- Many aspects are not covered by digitalization such us the production process and management. The reason is that the content of production is not so intensive in technology and management is still conservative and characterized by an important change resistance.
- The impact of digital transformation remains limited to improving sales but there no impact on added value per unit and the technological contents of products.
- Our study shows that digital transformation is ongoing at different speed among companies depending of their sector and their size. More the sector is intensive in technology and bigger is the company, the impact of digital transformation is bigger.

In light of these results, we may suggest some recommendations for the Government and for the companies.

For the State :

- Preparing a favorable environment to make digital transformation general and easier by a suitable digital infrastructure. Many dispositions could be made like strengthening internet and generalizing it.
- Digitalizing government services especially those companies oriented.
- Encouraging firms engaged in a digital transformation process by some fiscal and financial dispositions.

For companies:

- Improving communication and training about the use of digital especially for people showing some change resistance.
- Generalize the use of digital to the production process.
- Concentrating on data related to market, customer. Such data will be a very important competitive lever allowing a company to be differentiated.
- Creating more positions related to digital transformation and move to a more flexible organization by increasing the part of online work. It is shown in developed countries that online work allows companies to save important amount of operating costs.

This situation pushed us to propose some recommendations to the Government and to companies to improve the effectiveness of digital transformation in Libya.

In particular, improving the digital infrastructure and enlarging the digital transformation spectrum by improving the corporate culture of employees.

## 5. CONCLUSION

The aim of this dissertation is to better understand the requirement of a successful digital transformation and to evaluate the situation of a sample of Libyan companies. First, digital transformation is a new concept in management meaning a transformation in the management model resulting from a more intensive use of technologies of information and communications in several fields of business's life.

However, recent literature focuses on the impact of digitalization on the relationship between the company and its customers showing multiple advantages turning around closer relationship and less purchase cost in addition to more safety in relation with Covid.

Despite these significant advantages of digital transformation, many constraints are also noted by the literature. The more two important constraints are related to the heavy cost of this transformation in terms of technological infrastructure and the change resistance in addition to the needs in terms of training.

More interestingly, digital transformation needs new corporate culture paradigms to be integrated in everyone's behavior such as openness, flat organization...

Our practical analysis on a sample of Libyan companies led us to some interesting results regarding the behavior of these companies in terms of digital. First, the environment characterized by Covid 19 had led them to find a solution to save their customers and let the activity continue. Digitalization was the best solution despite the poor level of digital infrastructure in the country. Then, doing shopping on line became a habit for Libyan consumers, that's why many companies developed their visibility on the internet and perform a digital transformation.

However, the impact of this transformation remained in the commercial stage and did not touch other fundamental aspects of the companies' life like management mode. We think that in order to take benefits of the largest effect of digital transformation, a suitable corporate culture should be set up which needs time.

Actually, digital transformation is a central part of business intelligence and it should be helpful in gathering and analyzing a huge amount of data, transforming the governance of companies from a classic hierarchic style to a more flat turned to projects style, being closer to consumers by a suitable communication strategy...

Libyan companies took use of technology in order to survive from a difficult to death crisis but there is no advancement further. Here, the role of the government is crucial to encourage companies to undertake digital transformation by specific dispositions like fiscal or financial advantages. Government should be an example of digital transformation by digitalizing some services. Thus, a synergy can be set up between the government and companies to change the economic environment to a more efficient and digitalized environment.

## 6. REFERENCES

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