



Elevating Businesses Through the Adoption of Digital Transformation

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(Received: 27 October 2023

Revised: 22 November

Accepted: 26 December)

Keywords

ABSTRACT:

With or without the desire of companies, digitalization has become a necessity to enable companies, depending on restrictive measures and circumstances, to adapt to changes such as: work from home, creating channels for 'online' shopping, use of technology in operations daily, adaptation to customer requirements and expectations, finding suitable channels for communication and distribution and other adaptive changes to the situation. Digital technologies and digitization in general continue to be at the center of the debate due to their use during the Covid-19 pandemic outbreak. The pandemic has caused damage to both consumers and businesses, changing the way people work, spend and spend their free time. The Covid-19 pandemic has pushed society and businesses to a point where adapting to new technologies is no longer an option but a necessity. Moreover, with the right steps and actions, digital transformation can be seen as a benefit (albeit belated) as a result of the pandemic. Covid-19, among other things, has changed the vision and orientation of the management of the companies. Under normal circumstances, the focus of businesses is on increasing revenues and market share, while in this unprecedented situation businesses are struggling to control spending, maintain liquidity and survive. It is important that the private sector, on the road to economic recovery, incorporates digital transformation as a way to prove itself successful in managing the consequences of the pandemic. This paper analyzes the transformation of businesses into digital platforms during the pandemic. Digital transformation has helped many businesses to survive the consequences of the pandemic and in this regard we are talking about companies that have already started their digitalization before the outbreak of the pandemic.

1. Introduction

Today, digital enterprises and transformation entrepreneurship represents the main mechanism of economic development of a country. Regardless of the challenges faced by entrepreneurs, the results of entrepreneurship are evident. However, the impact of technology has had a great impact in this field as well. The implementation of digital strategies has enabled many companies to contribute in this direction, as well as to strengthen the idea of incorporating digitalism into business life. Given the different specializations of entrepreneurs in specific fields, it is normal to think that technical business work is done digitally by a small number of employees. This strategy enables the focus of the entrepreneur to bring field specialists to his business, who would create development strategies based on real data provided by digital information. Energy, enthusiasm, time and creativity are one of the most

important components that innovation conveys. If these components are used at the right time then the results are satisfactory.

2. Literature Review

2.1 Digital enterprises and digital transformation

Digital transformation is an essential driver of revenue, profit and growth. It is no longer a choice and will define the future of business. Digital transformation cannot be scaled up or considered independently of the operating model (Siemens 2018a). In order to stay ahead of the competition, leading companies are increasing their investments in cloud computing and enterprise mobility, Industrial Internet of Things (IIoT) technology, Big Data analytics, Machine Learning and Artificial Intelligence (SAP 2017). A successful enterprise-wide digital transformation, which extends to partners and suppliers, will be a key factor for future success. Digitalization



plays a major role in contributing to the United Nations' sustainable development goals. (Covin, J., & Slevin, D., 1991) and without the transformation of existing businesses, the economic and environmental challenges of the future cannot be solved sustainably. However, there is a lot of confusion in the interrelationships and terms related to digitization or digitalization: Digital business model, digital transformation, digital entrepreneurship. How do these terms relate to and with digitization, and how do they support firms to grow sustainably? To answer this question, we identified seven core terms related to digital based on a structured literature search within the field of management and economics, namely: Digital, Business Model, Digital Enterprise, Digital Technology, Digital Innovation, Digital Transformation and Digital Entrepreneurship. Following this, we analyzed previous literature to derive a common understanding and definition as a basis for the interrelationships within a conceptual framework. The definitions were presented in a case study with twelve innovation and research and development (R&D) managers from different business units of a German high-tech company. (Deans, P. C., and Kane, M. J., 1992). Based on these insights, we propose a conceptual framework of how Digital Readiness, Digital Technology and Digital Business Models can be sustainably linked to Innovation, moderated by a Digital Transformation Process. While digitization has gained momentum in recent years, it is here to stay (Nylén, D.; Holmstro, M.J, 2015). This is supported by impressive numbers where about 39.1 million results on Google for the search term "digital transformation", 818 thousand for "digital business model", 311 thousand for "digital enterprise" and, together, 7.3 billion results for the search term "Digital". Apparently, everything digital is not only a dominant topic in industry and academia, but especially when talking about the transformation of business models in a sustainable and circular economy. There is no conference, no new business model and no political discussion that lacks a reference to "digital" or its oft-used siblings, innovation or industry. However, a common understanding of the various terms is lacking, especially in academia. Confusion is essential (as with other contemporary concepts, such as Artificial Intelligence), and "digital" risks worsen in a simple word (Kaplan, A.M.; Haenlein, M. Siri, 2019). Further complicating the digital puzzle, digital terms and

relationships are not only perceived differently between different fields of study, but also within specific fields of research, such as the social sciences or engineering. Digital technologies are transforming the global economy, changing the rules of business, introducing new business models and redefining the category of business success. They change the way organizations operate and companies recognize that digital technologies enable them to get work done faster and at lower costs and, in many cases, offer their customers the opportunity to participate in the design and creation of products and services (OECD, 2018). Internally, digitalization provides the possibility for a different model of tasks and enables a completely new portfolio of coordination mechanisms based on modern information and communication technologies. Digital technologies include "computer hardware, software, transmission networks, protocols, programming languages, very large-scale integrated circuits, algorithms, and all the components and practices that belong to these various technologies." Digital technology enables you to integrate, store and transmit large amounts of information, and data shows that this is rapidly changing the way work is done and the way people behave at work. Digitization is certainly initiated and supported by the development of information and communication technologies; technology enables and improves its application. But digitalization is much more than the use of technological innovations because digital technology not only changes the way organizations operate, but also the way we think about organization. (Freeman, C., 1995). With digitalization, everything that has been said and talked about for decades has come to its full extent that information is the main resource of the organization, while the main organizational skill becomes the ability to collect, organize, manipulate and productively use available information. Digital technologies lead to new ways of organizing work - digital organization - and to the development of a new organizational form - digital organization. Digital organizations involve collaboration with multiple entities and less reliance on hierarchy for control and coordination. It also includes empowering employees, partners and users of digital tools to create products and/or services, as well as providing digital platforms for self-organized collaboration. The most basic forms of digital terminologies, often used synonymously, are digitization and digitalization.



Digitization refers to a technical process, i.e., "the integration of digital technologies into everyday life" (Fors, A.C. , 2013). Viewing this technical process through the lens of information technology on coding and programming, digitization describes analog information being converted into a digital format, for example, making physical products programmable or communicable (Yoo, Y., 2010). In contrast, digitization has been described "... as a socio-technological process of applying digitization techniques to broader social and institutional contexts that yield infrastructures of digital technologies. "Digital transformation "[brings] together firms from previously unrelated industries " (Yoo, Y.; Henfridsson, O.; Lyytinen, K. , 2010). Data exchange, data generation, data analysis and data adaptation for actionable information are seen as necessary and important competencies in mastering this digital transformation process. With these skills in hand, the inevitable organizational change from digital technologies and digital business models can lead to an improved business outcome (Wade, M. A , 2015.). Digital transformation does not stop at the often referred process level (Jabłoński, M.; Jabłoński, A. , 2019): It carries profound consequences for all aspects of business, such as business models, services, products, etc. ., and includes the actions of all participants, such as customers (Matt, C.; Hess, T.; Benlian, 2015). As a consequence, (Kaltum, U.; Widodo, A.; Widiasono, 2016) and several other authors argue that "... Digital transformation is a profound change and accelerates business activities, processes, competencies and models to fully exploit the changes and opportunities in digital technology and its impact on society in a strategic and prioritized way".

2.2 Challenges on Digital Transformation

Digitization is already changing every aspect of life and existing business models. Technological disruption in the world of industrial business has grown significantly. The growing maturity of analytics and IoT is driving industrial businesses to interconnect products, value chains and business models. Digital transformation is directly related to a changing digital economy, with individuals, businesses and societies becoming interconnected in real time, supported by technology. Digitization enables industries to turn product ideas into reality in new ways by relying on technological trends

such as generative design and intelligent models. The use of cloud solutions and knowledge automation are changing industries, and additive manufacturing and advanced robotics are driving manufacturing in an innovative direction. Over the last few years, digitization has changed all areas of private life and business reality. And this is just the beginning. Existing business models must be adapted in order to be competitive in response to future demands. This increases pressure on industries and also opens up new business opportunities at the same time. For modern enterprises there is a need to evolve into a digital enterprise in order to stay ahead of the competition. Digital disruption is happening faster than ever. Digitization requires us to behave flexibly and develop new business models faster than competitors in order to be successful and survive. Typical drivers for using IIoT are improving operational efficiency, increasing productivity, improving customer satisfaction, increasing revenue, facilitating product innovation, optimizing operations, gaining a competitive advantage, reducing operating cost, and creating new jobs. Digital technologies are creating completely new business opportunities and challenges. On the other hand, digitization is also eroding traditional barriers to entry in many sectors, enabling the development of entirely new product categories and the creation of new alternatives for customers. With digitization, products are becoming smart products and manufacturers are becoming smart products. The next generation of smart products will be complex systems that render current development processes inadequate. Smart factories with smarter, faster and cheaper robots along with additive manufacturing processes are disrupting factories and transforming manufacturing industries. Smart products require a new pattern-based design approach and improved manufacturing approaches. Global teams across all disciplines must share the detailed information required to assess opportunities and predict performance. Smart and connected products are forcing enterprises to undergo a radical change, to redefine and rethink almost everything. Unprecedented data and new capabilities that enable smart, connected products are changing customer interactions into new continuous and open relationships. New processes are required, such as reformatting of almost every function in the value chain and more intensive coordination between functions. For cross-functional collaboration, entirely new functions and



structures are emerging, including unified data organization, continuously improved products, and customer relationship optimization. Digital transformation is directly related to the digital transformation of the economy, with individuals, businesses and society becoming interconnected in real time, supported by technology. Business demand for organizations and data is critical in executing this transformation, enabling innovation and competitive differentiation. Datadriven organizations have better decision-making skills with an immediate positive impact, but data management is a hot challenge. (Handbook of Digital Enterprise, 2021). Digital transformation requires robust and appropriate data architecture with strong governance not only to maintain security, but also to enable activities such as analytics, enterprise, connected objects and Artificial Intelligence.

2.3 Digital Enterprises

The fully digital enterprise is a powerful combination of people, technology and organizational agility that is well suited to today's economic and social environment. However, preparing for a digital future is no easy task for several reasons:

1. Organizations will be faced with the question of whether they have the capacity to face the challenges of digitalization requirements and the ability to validate, assimilate and commercialize the knowledge generated by its potentials.
2. IT work is sophisticated, dynamic and complex for organizations that have not developed independent IT systems that will be competitive enough.
3. And, unfortunately, most companies face a lack of resources, a lack of talent, and distraction from other priorities, and find it impossible to focus their resources on digital transformation, hoping that it will eventually happen somehow spontaneously and luck will help the company to reach the top of the market.

Reality shows that this does not happen. Either companies and their inter-organizational networks will work with awareness and commitment on the digital transformation of their business and industry, or they will be weakened as a result of their delays. Digital enterprises must deal with global industrial operations in relation to engineering, optimization and operations. In digital enterprises, the demands for improved product performance, production flexibility and reduced

operating costs are the driving forces of innovation. This is facilitated by the collaborative management of the program throughout the product life cycle and the supply network throughout the product life cycle. Enterprises must respond flexibly and effectively to changing production schedules, which become more challenging due to the demands of global supply networks. Due to increased global competition, rapidly changing markets, increasing complexity and changing markets and customer demands, industrial enterprises must significantly reduce time to market, time to volume and time to customer. At the same time, they must increase flexibility, improve quality, increase efficiency, reduce energy and resource consumption and also establish cyber security. Further products must be sustainable, environmentally friendly and energy efficient in production. And manufacturing is becoming an increasingly important competitive advantage.

Enterprises must launch products of increasing complexity faster (time to market), ensure a fast and reliable start of production (time volume), and deliver products using an optimized supply chain (time to customer). This requires the integration and optimization of product development, production or logistics planning and control. Nowadays the fast competitor beats the slow one. Consumers demand individualized products, but at the prices of mass-produced goods. As a consequence, production must become more flexible. Quality is essential to satisfy customers. Consumers reward producers of high-quality goods and punish producers of poor-quality goods using the Internet. Digitization makes quality improvement and high-quality production possible immediately. In global competition, increasing efficiency is mandatory. This requires reducing planning costs and avoiding planning errors and at the same time reducing production costs. By standardizing solutions and increasing productivity, costs can be reduced. Digital enterprises are offering integrated approaches to improve products, services and all processes. Within the digital enterprise, simulation technology as a key factor is applied to virtual models at various planning, control and operational levels in order to improve products and processes. Digital Enterprises are not something to introduce for technological purposes. Transforming a business into a digital enterprise will enable the business to produce better services, products and results for customers, much faster and of course at lower cost.



Organizations with a modern digital enterprise platform will be more agile and responsive to customers than their competitors. However, as organizations begin the transformation process to become a digital enterprise, the starting point, as well as the core technology and infrastructure that drives a company, must be considered. Digital enterprises focus on affordability, asset visibility and supply chain efficiency. A complex and collaborative business environment must support the entire creation-to-production process to enable access and use of data throughout the lifecycle. Real-time configuration control and adherence to security processes and procedures ensure compliance with infrastructure and data standards. The costs and risks of using advanced materials and technologies must be minimized. Innovative engineering accelerates the product design and manufacturing process by enabling team collaboration to drive engineering processes. Digital transformation is not just about acquiring and deploying fit-for-purpose technologies; rather, it is a significant approach in dealing with managerial issues such as human resources, business efficiency and business process redesign.

2.5 Digitalizimi i bizneseve si shkak i Pandemisë COVID – 19

Inevitably, similar to other countries of the world, the COVID-19 pandemic also negatively affected the economy, as a result of the decline in economic activity due to the closure of the economy. Thus, Covid-19 has had a great impact on businesses, society and the economy in general and has significantly accelerated the need for digital transformation of companies. Among other things, Covid-19 has built a new narrative for the way of doing business, taking into account the changes caused to companies of all sectors. Therefore, it is important to discuss ways for companies to orient themselves towards mitigating the economic consequences of the pandemic and adapt accordingly to withstand it. Considering Covid-19 as the main driver of the digital transformation of companies, as well as digital transformation as a necessary process for companies to stay relevant and competitive in the market, this summary addresses the importance of digital transformation as a pillar for economic recovery. During the pandemic, consumers have moved dramatically to online channels and companies have responded in kind.

The Covid-19 pandemic has created a new narrative for the way of doing business considering the changes caused to companies of all sectors. The potentials that digital transformation has for companies have been pointed out especially after the outbreak of the Covid-19 virus pandemic and as a result of the establishment of restrictive measures to prevent its spread. Businesses, whether small, medium or corporate level, have faced numerous changes in the way of doing business and have found themselves in an unprecedented situation that necessarily requires reaction and change. Companies, found in this unusual position, look for ways to improve productivity, to have the best services for customers, to facilitate communication and access to customers through new sales channels. Among other things, they must work to optimize the work process as well as simply to be innovative and to create a competitive advantage, as the only option to stay relevant in business. Consequently, Covid-19 has spurred the process of digital transformation of companies, regardless of whether the businesses were ready for such a transformation. Regarding this, in the first months of the pandemic, the following question began to circulate on the Internet, which ironically shows the truth about the situation. The question "Who prompted the digital transformation in your company?", under the assumption that the correct answer is the third alternative COVID-19, makes us understand that many companies have not recognized the importance of digitalization until facing the new circumstances created as a result of the pandemic. With or without the desire of companies, digitization has become a necessity to enable companies, depending on restrictive measures and circumstances, to adapt to changes such as: working from home, creation of channels for 'online' purchases, use of technology in operations day-to-day, adapting to the demands and expectations of consumers, finding suitable channels for communication and distribution and other adaptive changes to the situation. Digital technologies and digitization in general continue to be at the center of debate due to their use during the outbreak of the Covid-19 pandemic. (Ting, D. S. W., Carin, L., Dzau, V., & Wong, T. Y., 2020) The pandemic has wreaked havoc on both consumers and businesses, changing the way people work, spend and spend their time. free. The Covid-19 pandemic has pushed society and businesses to a point where adapting to new technologies is no longer



an option but a necessity. Furthermore, with the right steps and actions, digital transformation can be seen as a benefit (albeit a delayed one) as a result of the pandemic. (Karabakh, SF, 2020) Among other things, Covid-19 has changed the vision and orientation of the company's management. Under normal circumstances, the focus of businesses is on increasing revenues and market participation, while in this unprecedented situation, businesses are struggling to control expenses, maintain liquidity and survive. Even today, Covid-19 continues to bring a public health crisis as well as a crisis with serious economic consequences. It is important that the private sector towards the road to economic recovery, includes digital transformation as a way that has proven itself successful in managing the consequences that the pandemic has brought. (Chou, S, 2019) After overcoming the Covid-19 pandemic, companies will need to consider the impact these changes have had and continually adapt the way they design, communicate and build customer value. While companies are moving from the phase of immediate reaction to the phase of mitigating the impact of the pandemic, strategies are needed that help the competitiveness of businesses and for some strategies that ensure survival in the market. Digital transformation has helped many businesses to survive the consequences of the pandemic, and in this regard we are talking about companies that have already started their digitization before the outbreak of the pandemic. (Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. , 2020) Such a case of the company which is going through the economic consequences of Covid-19 more easily or rather it was better prepared because of digital transformation started a few years ago is the company interviewed for the purposes of this paper. Example: Company X (named with the symbol 'X' for reasons of anonymity and impartiality) is a company that offers professional maintenance, cleaning and renovation services to individual and business clients. During the pandemic, company X has continued its operations in a regular manner, except for the period when movement restrictions were imposed, when the company worked with half the staff. The company declares that there is a 15% decrease in economic activity compared to the same period last year and claims that if it were not for the digitization process that started in 2017, the decrease in activity would have been greater. The company has

started the first phase of the digital transformation process by digitizing some of the processes related to the service activities they offer, including the digitization of the sales process and the administration of sales and orders. Also, the company has created a mobile application through which the entire order process can be managed more easily. Despite the operational difficulties, during the pandemic the company has increased its digital presence by being active in social networks and not cutting the marketing budget. According to the company 'X', digitization has served them a lot during this period, helping them to amortize the decline in business. As a result of earlier digitization for this company there was no need to improvise with strategies forced by Covid-19. In general, digitalization for the company in question has facilitated the management of the situation, the forwarding of information, the forwarding of orders and the management of orders. On the other hand, many companies were not prepared in terms of digitalization, not having a concrete action plan or strategy before the pandemic. Consequently, depending on the immediate needs that have appeared, they have reacted by entering the digital transformation process without thinking. Many companies have built capacities for working from home, others have created new sales channels through e-commerce platforms, and others have changed business models in an attempt to create value and competitive advantage.

3. Problem Statement

Digitization means a continuous transformation of great importance for the retail sector. It transforms the following aspects, such as retail exchanges (in a number of ways and in different aspects of exchange, including communications, transactions and distribution); the nature of retail offerings (unclear separation between products and services, what constitutes the actual offering and how pricing is set); retail environments (ie where and when retailing takes place); and actors participating in retailing (eg retailers and consumers, among other parties). There have been various challenges during the digitization process of companies in Pristina during the pandemic. The digital competencies of the workforce will play a key role in the successful absorption of digitization. The labor market requires digital skills, employees who are not only fluent



in other languages or proficient in their academic specialization, but also in the essential tools for fluency in the digital age. It means knowledge of electronic devices, networks, cyber security, communication systems and data analysis, among others. Most enterprises do not have the necessary technical resources in their workforce to fully realize the digital potential. This can be due to a number of factors ranging from a lack of knowledge in identifying the necessary digital skills to a lack of staff, which limits the time and effort that can be applied to learning new digital processes. The lack of finance has been identified as another obstacle that hinders the implementation of digital technologies in enterprises. There is a significant concern among enterprises that the cost of implementing new digital technologies will not be compensated by profits. Moreover, there is a lack of capital to invest it.

4. Methodology

The analysis of the research part was done by combining quantitative and qualitative methods. Quantitative research methods are used to explain phenomena by collecting numerical data that are analyzed using basic mathematical methods, such as statistics. They mainly try to make predictions related to different thematic issues using different instruments such as tests, interviews, experiments, surveys, etc.

Qualitative research methods by nature can also be inductive, which means that the researcher can construct theories or hypotheses, different explanations and concepts using sources from literature research, from interviews, from basic theories, etc.

Theoretical methods are qualitative methods that claim to explore the meaning, purpose or reality related to the topic of study, ethnography, basic theoretical studies, various phenomena and narratives.

In support of the research methods and for the benefit of analyzing and presenting the results, a multi-criteria decision-making analysis was also used. Multi-criteria analysis (MCA) is a decision-making tool developed for complex problems. In a situation where multiple criteria are involved then confusion can arise if a logical decision-making process is not followed in an orderly manner. Another difficulty in making decisions is that reaching a general consensus in a multidisciplinary team can be very difficult to achieve. Using MCA, members do not have to agree on the relative importance of criteria

or the ranking of alternatives. Each member presents personal professional judgments and expertise, and makes an identifiable contribution to achieve a successful conclusion. In the end, the comparative (correlation) method was used that will help in the sensitivity analysis of the method offered for auditing the performance of human resources in health institutions from this research. Cases of human resource performance of health institutions of several European countries were taken as comparative models.

Always in scientific works, it is necessary to first summarize the literature and at the same time give a picture of the economic environment in which the study is carried out. Only after reaching the construction of a theoretical framework for the paper and after the hypotheses, which will accompany the paper, is also built, it is the turn to write the methodology mentioned in this chapter.

Providing a description of the research approach and methodologies that can be applied to this study and to the empirical testing of the research hypotheses.

4.1 Data collection techniques

Study population and sample selection. We are all aware that the pandemic has affected and affected every business in the world. In our country, in contrast to developed and developing countries, it is noticed that there is almost no empirical study done regarding the impact of the pandemic on businesses, and this is the main reason for selecting a topic with such a focus. Starting from the above reasoning, it was thought that the work should start with finding the contacts of managers and workers of businesses in our country. The sample of the study consists of workers and managers who during the pandemic period were forced to do digital work. According to Zikmund (2003), primary data is collected exclusively for the research being worked on. There are several methods for collecting primary data. But in this topic, questionnaires have been selected as the main tool, which Van der Stede et al., (2007) defines as the most used methods for research done in the field of digital business. According to Robertson (1993) other methods such as experiments and interviews should be used more often in the field of business in order to expand the methodological base of research in this field. After many discussions, it has been decided that in this paper,



questionnaires will be used to collect the necessary information.

The reasons for choosing this method for data collection are several and will be explained below:

- achieving the goals and being consistent with the theoretical axis of the work;
- fulfilling the need to collect a large amount of information on the basis of which the set objectives will be achieved;
- the fact that this method is widely used in the business field;
- limited time and at the same time available resources to do such a study.

So, for this reason, in this paper, information will be collected through the distribution of a questionnaire to the selected samples that deals with cases of digital business issues.

4.5 Research questions and hypotheses

As research questions within the paper are:

- Does the digital platform have an impact on the work of businesses and what impact did it have during the pandemic period? Digitization continues to remain a 'hot' topic, especially after the outbreak of the Covid-19 pandemic and the imposition of restrictive measures which led to digitization being seen as a necessity for the survival of companies.
- Are employees satisfied with remote work? Telecommuting is a work arrangement in which some or all of the work is performed from home or another location abroad. Generally, regular office hours are worked and deviations from that schedule require supervisor approval. Telecommuting is easier to implement for jobs or tasks that require reading, writing, research, working with data, and talking on the phone. Generally, and at the discretion of management, a job is suitable for telecommuting if the job or some component of it can be done off-site without disrupting work flow and communication.
- Does remote work have an impact on the growth of your business? Each sector adapted to the conditions imposed by the pandemic and this included taking additional measures for distances, in the branches where they worked, or adapting online where there

was an opportunity. Ensuring business continuity and that remote work has proven to be productive.

- Didn't the employees with a higher level of education find it very difficult to adapt to digital work? It is known that people with a higher level of education find it easier to adapt to digital work, since their experience helps them to adapt to digital work faster.
- What has been the focus of businesses during the pandemic? It is known that the focus of businesses during the pandemic period was survival in the market, but why not the increase in income.

The working hypotheses are:

H1: The digital platform has had a positive impact on work during the pandemic

H2: Employees are satisfied with remote work

H3: Remote work has not had a significant impact on business growth

H4: There is a relationship between the level of education and the adaptation of digital work

H5: Survival in the market has been the main focus of enterprises during the pandemic period

4.6.1 Cronbach's Alpha

When creating a reliable measuring tool (gauge) many points should be considered. Some of these points are the ability of the variables that make up the measure to reveal the accuracy of the research, the existence of the connection between them, stability, being understandable and in sufficient number, etc. The concept of reliability is necessary for any measurement made because reliability expresses the consistency between the variables that participate in a test.

Interpretations of the reliability of the meter in relation to the coefficient Alpha (α) can be made as follows:

- if $0.00 \leq \alpha \leq 0.30$, the meter is unreliable,
- if $0.30 \leq \alpha \leq 0.50$, the reliability of the meter is low,
- if $0.50 \leq \alpha \leq 0.80$, the measurer is very reliable and
- if $0.80 \leq \alpha \leq 1.00$, the measure is a measure with a high degree of reliability.

Alpha is the pattern regarding the correlation between variables. Gives the Alpha coefficient. This coefficient, which takes two values, 0 to 1

**Table 1** Reliability Analysis**Reliability Statistics**

Cronbach's Alpha	N of Items
.758	21

As can be seen, there are 20 variables. In this case, the coefficient of Alpha is 0.758, which indicates that the meter is a very reliable meter, since it is within the level of 0.50 - 0.80, i.e. 75.8%. This indicates that all variables must participate in the model. And the analysis shows that the model and the data are very reliable.

4.6.2 Factorial Data Analysis

Factor analysis is one of the multivariate statistical techniques that is widely used to reduce the number of variables that are related to each other to a small number

of significant and independent factors. (Kleinbaum, Miller 1998). In order to evaluate the suitability of the data set for the factorial analysis, 3 methods were used. These are the creation of the correlation matrix, the Bartlett test and the Kaiser-Meyer-Olkin (KMO) test.

As a rule, the KMO Test should be greater than 0.50 in order to say that the data set is suitable for factor analysis. In the case of our analysis, the KMO test is 0.679 or 81.2%, which means that it is a value higher than 0.50 and that we can say that the variables are suitable for factorial analysis.

Table 2 KMO and Bartlett test**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.679
Bartlett's Test of Sphericity	Approx. Chi-Square	5478.044
	df	17
	Sig.	.001

The second test we will look at is the Bartlett test. As can be seen from the table, the Bartlett test is significant at 0.001 significance. This means that there are high positive correlations between the variables, in other words this analysis also shows that our data set is suitable for factorial analysis.

4.7 Analysis of the correlation

4.8.1 Verification of the first hypothesis

Correlation shows the relationship between the dependent variable and the independent variable. The

first correlation is related to the duration of work of an employee and his opinion about the impact of the digital platform at work. So the more an employee works with technology, the more he understands the importance of technology for remote work. Two variables were taken in the questionnaire, the duration of the work of the remote workers and their opinion about the impact of remote technology.



Table 3 Correlation Analysis 1
Correlations

		A ka pas ndikim platform digjitale në punën tuaj	Që ka kohe punoni këtu
Pearson Correlation	Does remote work have an impact on the growth of your business?	1.000	.756
	How long have you been working here?	.756	1.000
Sig. (1-tailed)	Does remote work have an impact on the growth of your business?	.003	.000
	How long have you been working here?	.000	.003
N	Does remote work have an impact on the growth of your business?	50	50
	How long have you been working here?	50	50

As can be seen, the correlation between these two variables is positive and quite high. We can say that there is a connection between these two variables. The longer you work in a job that is connected to a digital platform, the more you understand the importance of remote work. We look at the significance, which is at the standard level of 0.003, this shows that the econometric model as a whole is correct. Since the significance level is within the allowed level of 0.05% or we can say that the model is

within the 95 degree confidence level. Based on this, we can say that the first hypothesis H1 in the paper is accepted and that the model has statistical significance.

4.8.2 Verification of the second hypothesis

Another correlation has been seen between job satisfaction and the duration of remote work. The correlation shows that those who were satisfied at work had a longer time working remotely.



Table 4 Analysis of Correlation 2
Correlations

		How long have you been working here?	Are you satisfied with remote work?
Pearson Correlation	How long have you been working here?	1.000	.361
	Are you satisfied with remote work?	.361	1.000
Sig. (1-tailed)	You have been working here for a long time	.	.033
	Are you satisfied with remote work?	.033	.
N	You have been working here for a long time	50	50
	Are you satisfied with remote work?	50	50

So, job satisfaction and the duration of remote work have a positive relationship for 36.1%. There is always a probabilistic component involved in the accept-reject decision during hypothesis testing. So, the criterion used for accepting or rejecting a null hypothesis is called the

level of significance or value - P. So that in this case the significance is $0.033 < 0.05$ and it shows that all models are accepted.

4.8.3 Verification of the third hypothesis

Table 5 Analysis of Correlation 3

		A ka pas ndikim puna ne distance në rritjen e biznesit tuaj	Që ka kohe punoni këtu
Pearson Correlation	Does remote work have an impact on the growth of your business?	1.000	.232
	You have been working here for a long time	.232	1.000
Sig. (1-tailed)	Does remote work have an impact on the growth of your business?	.043	.000



	How long have you been working here?	.000	.043
N	Does remote work have an impact on the growth of your business j	50	50
	How long have you been working here?	50	50

From the correlation analysis, it is clear that remote work does not have a big impact on business growth. The weak correlation of 23.2% between these two variables.

The significance that shows the importance of the hypothesis or the importance of the model as a whole in this case is 0.001, which verifies our hypothesis, so the hypothesis that there is a connection between the level of education and knowledge about the protection and

security of personal data is accepted. There is always a probabilistic component involved in the accept-reject decision during hypothesis testing. So, the criterion used for accepting or rejecting a null hypothesis is called the level of significance or value - P. So in this case the significance is $0.043 < 0.05$ and shows that the hypothesis is accepted and the model has statistical significance.

4.8.4 Verification of the fourth hypothesis

Table 6 Correlation Analysis 4
Correlations

		Have you had a hard time adapting to digital work?	
			EDUCATION
Pearson Correlation	Have you had a hard time adapting to digital work?	1.000	.708
	EDUCATION	.708	1.000
Sig. (1-tailed)	Have you had a hard time adapting to digital work?	.	.006
	EDUCATION	.006	.
N	Have you had a hard time adapting to digital work?	50	50
	EDUCATION	50	50

It can be seen that there is a positive relationship between the level of education and the adaptation of digital work. Positive correlation between these two variables of 70.8%. This means that with the increase in the level of education, it becomes easier to adapt to digital work

The significance that shows the importance of the hypothesis or the importance of the model as a whole in this case is 0.001, which verifies our hypothesis, so the hypothesis that there is a connection between the level of education and knowledge about the protection and



security of personal data is accepted. There is always a probabilistic component involved in the accept-reject decision during hypothesis testing. So, the criterion used for accepting or rejecting a null hypothesis is called the level of significance or value - P. So in this case the significance is $0.006 < 0.05$ and shows that the hypothesis is accepted and model has statistical significance.

After overcoming the Covid-19 pandemic, companies will need to consider the impact these changes have had and continually adapt the way they design, communicate and build value for the consumer. While companies are moving from the phase of immediate reaction to the phase of mitigating the impact of the pandemic, strategies are needed that help the competitiveness of businesses and for some strategies that ensure survival in the market. Digital transformation has helped many businesses to survive the consequences of the pandemic, and in this regard we are talking about companies that have already started their digitization before the outbreak of the pandemic. Such a case of the company which is going through the economic consequences of Covid-19 more easily, or rather, it was better prepared due to the digital transformation started. On the other hand, many companies were not prepared in terms of digitalization, not having a concrete action plan or strategy before the pandemic. Consequently, depending on the immediate needs that have appeared, they have reacted by entering the digital transformation process without thinking. Many companies have built capacities for working from home, others have created new sales channels through e-commerce platforms, and others have changed business models in an attempt to create value and competitive advantage.

5. Conclusion

The Covid-19 pandemic has influenced the acceleration of the digital transformation process of companies. The Covid-19 pandemic has influenced companies to treat digitalization not only as an additional opportunity, but to actually see it as a solution for business survival. Considering digitization as survival in business, it has not been treated as a process of purchasing a new technological device but more as a process of transformation and a good opportunity to reduce operating costs. Among other things, digitization has been used to prepare companies to be more competitive

in internal and external markets. However, businesses seem to recognize the importance of digitization, but they stagnate in the design and implementation of digitalization strategies and concrete action plans. Consequently, it can be concluded that digital transformation has returned as an emergency for businesses prompted by the Covid-19 pandemic and the restrictive measures for its prevention. In this direction, digital transformation should serve as a pillar for economic recovery that is supported through concrete financial instruments and other modalities. During the pandemic, consumers have moved dramatically to online channels and companies have responded in kind. The Covid-19 pandemic has created a new narrative for the way of doing business considering the changes caused to companies of all sectors. The potentials that digital transformation has for companies have been pointed out especially after the outbreak of the Covid-19 virus pandemic and as a result of the establishment of restrictive measures to prevent its spread. Businesses, whether small, medium or corporate level, have faced numerous changes in the way of doing business and have found themselves in an unprecedented situation that necessarily requires reaction and change. Companies, found in this unusual position, look for ways to improve productivity, to have the best services for customers, to facilitate communication and access to customers through new sales channels. Among other things, they must work to optimize the work process as well as simply to be innovative and to create a competitive advantage, as the only option to stay relevant in business. Consequently, Covid-19 has spurred the process of digital transformation of companies, regardless of whether the businesses were ready for such a transformation.

The three main obstacles and barriers for firms on their way to digitization during the pandemic were:

Lack of the right skills of the workforce. The digital competencies of the workforce will play the main role in the successful absorption of digitization. The labor market requires digital skills, employees who are not only fluent in other languages or proficient in their academic specialization, but also in the essential tools for fluency in the digital age. It means knowledge of electronic devices, networks, cyber security, communication systems and data analysis, among others.



Lack of technical knowledge to advance the digitization process. Most enterprises do not have the necessary technical resources in their workforce to fully realize the digital potential. This can be due to a number of factors ranging from a lack of knowledge in identifying the necessary digital skills to a lack of staff, which limits the time and effort that can be applied to learning new digital processes. Most enterprises do not have a specific strategy or even an idea for the digital future of their company. The lack of finance has been identified as another main obstacle that prevents the implementation of digital technologies in enterprises. There is a significant concern among enterprises that the cost of implementing new digital technologies will not be compensated by profits. Moreover, there is a lack of capital to invest it. What raises further concerns is the fact that IT security is not the highest priority. At least the respondents did not consider IT security as the main obstacle to digitization.

6. Recommendation

To help the digital transformation and alleviate the damage that the pandemic has caused in economic terms, I recommend:

- Enterprises should focus on digitizing the administration and reducing bureaucracy;
- Financing of companies for digitalization of their business processes and increase of business activities through electronic commerce;
- Inter-institutional coordination and preparation of a concrete work plan related to the Digital Agenda
- Harmonization of all key actors for the best use of support schemes for digital transformation;
- Support of the current digital expertise in favor of the digital transformation of the private sector and the addition of digitalization expertise;
- Approval of the package of laws that support the digitization of public institutions and the private sector;
- Implementation of awareness campaigns to promote digitalization and the potential it offers.

7. Bibliography

1. Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. . (2020). How will country-based mitigation measures influence the course of the COVID-19 epidemic?. . *The Lancet*, 395(10228), 931-934.
2. Jabłoński, M.; Jabłoński, A. . (2019). *A. Social Factors as a Basic Driver of the Digitalization of the Business Models of Railway Companies.* .
3. Kaltum, U.; Widodo, A.; Widiasono. (2016). *A. Local TV Goes to Global Market through Digital Transformation.* . Acad. Strateg. Manag. J. 2016, 15, 221–229.
4. Yoo, Y. (2010). Computing in everyday life: A call for research on experiential computing. *MIS Q.* , 213–231.
5. Beniger, J, R. (1986). *Information Society and Global Science.* Cambridge,: Harvard University Press.
6. Bernardo Bátiz-Lazo, Douglas Wood. (2002). *A Historical Appraisal of Information Technology in Commercial Banking*”. New York.
7. Chou, S. (2019). The fourth industrial revolution: Digital fusion with internet of things. . *Journal of International Affairs*, 72(1), 107-120.
8. Covin, J., & Slevin, D. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior? . *Entrepreneurship Theory and Practice*, 65.
9. Deans, P. C., and Kane, M. J. . (1992). *Information Systems and Technology.* PWS-Kent Publishing, 45.
10. Figurë 2. Model i menaxhimit me cilësi të plotë. (a.d.).
11. Fors, A.C. . (2013). The Ontology of the Subject in Digitalization. In *Handbook of Research on Technoself: Identity in a Technological Society.* *Information Science Reference: Hershey, PA, USA*, , 45 - 63.
12. Freeman, C. (1995). The national system of innovation in historical perspective. *Cambridge Journal of Economics*, 19(1), 5 - 24.
13. G. Gudergan and P.Mugge. (Hawaii, 2017). The gap between practice and theory of digital transformation. *Proceeding Hawaii International Conference of System Science*, 1 - 15.
14. Garbade, K. D. and Silber, W. L. (1978). ‘Technology, Communications and the Performance of Financial Markets: 1840–1975’, . *Journal of Finance* , 819–32.
15. Handbook of Digital Enterprise . (2021, 06 10). Handbook of Digital EnterpriseHandbook of Digital EnterpriseGjetur në



- https://www.worldscientific.com/doi/pdf/10.1142/9789811200748_0001
16. IDG. (2018). *State of Digital Business Transformation*. Gjetur në https://cdn2.hubspot.net/hubfs/1624046/Digital%20Business%20Executive%20Summary_FINAL.pdf
 17. Kaplan, A.M.; Haenlein, M. Siri. (2019). *On the interpretations, illustrations, and implications of artificial intelligence*. . Bus. Horiz. 2019, 62, 15–25.
 18. Karabag, S. F. (2020). An Unprecedented Global Crisis! The Global, Regional, National, Political, Economic and Commercial Impact of the Coronavirus Pandemic. . *Journal of Applied Economics and Business Research*, 1-6.
 19. Matt, C.; Hess, T.; Benlian. (2015). *A. Digital Transformation Strategies*. . England: Bus. Inf. Syst. Eng. 339–343.
 20. Nilles, J.M., Carlson, F.R., Gray, P., and Hanneman, G.G., . (1976). *The Telecommunications-Transportation Tradeoff*. John Wiley and Sons.
 21. Nylén, D.; Holmstro, M.J. (2015). *Digital Innovation Strategy: A Framework for Diagnosing and Improving Digital Product and Service Innovation*. Horiz.
 22. OECD. (2018). *Digital Government Review of Morocco: Laying the Foundations for the Digital Transformation of the Public Sector in Morocco*. . Paris: OECD Digital Government Studies.
 23. Ting, D. S. W., Carin, L., Dzau, V., & Wong, T. Y. . (2020). *Digital technology and COVID-19*. Nature Medicine, 1-3.
 24. Wade, M. A .(2015.). *A Conceptual Framework for Digital Business Transformation*. Switzerland: IMD: Lausanne.
 25. Yoo, Y.; Henfridsson, O.; Lyytinen, K. . (2010). The New Organizing Logic of Digital Innovation: An Agenda for Information Systems . *Research. Inf. Syst. Res.*, 724–735.
 26. Pavitt, K. (1985). Patent Statistics as Indicators of Innovative Activities: Possibilities and Problems. *Scientometrics*, 7, 77–99. <http://dx.doi.org/10.1007/BF02020142>
 27. Proctor, K. Scott (2011), *Optimizing and Assessing Information Technology: Improving Business Project Execution*, John Wiley & Sons, ISBN 978-1-118-10263-3
 28. Proctor, K. Scott (2011), *Optimizing and Assessing Information Technology: Improving Business Project Execution*, John Wiley & Sons, ISBN 978-1-118-10263-3
 29. Radosevic, S. (1999). *International Technology Transfer and Catch-up in Economic Development*. Nothampton, MA: Edward Edgar Publishing.
 30. Reddy, N. M., & Zhao, L. (1990). *International Technology Transfer: A Review*. Research Policy, 19, 285-307. [http://dx.doi.org/10.1016/0048-7333\(90\)90015-X](http://dx.doi.org/10.1016/0048-7333(90)90015-X)
 31. Sahal, D. (1981). Alternative Conceptions of Technology. *Research Policy*, 10, 2-24. [http://dx.doi.org/10.1016/0048-7333\(81\)90008-1](http://dx.doi.org/10.1016/0048-7333(81)90008-1)
 32. Sarkis, J. & Sundarraj, R.P., 2006. Evaluation of enterprise information technologies: a decision model for high-level consideration of strategic and operational issues. *IEEE Transactions on Systems, Man and Cybernetics, Part C (Applications and Reviews)*, 36(2), p. 260-273.
 33. Sutton, G., Khazanchi, D., Hampton C. & Arnold V., 2008. Risk Analysis in Extended Enterprise Environments: Identification of Critical Risk Factors in B2B E-Commerce Relationships. *Journal of the Association for Information Systems*, 9(3-4), p. 151-156,158,160,164-166,168-174.
 34. Tarantilis, C.D., Kiranoudis, C.T. & Theodorakopoulos, N.D., 2008. A Web-basedERP systemfor business services and supply chain management: Application to real-world process scheduling. *Journal of European Journal of Operational Research*, 187(3), p.1310-1326
 35. Themistocleous, M., Irani, Z. & Love, P. E., 2004. Evaluating the integration of supply chain information systems: A case study. *Journal of European Journal of Operational Research*, 159(2), p. 393-405