

Digital Transformation in Montenegro – Current Status, Issues and Proposals for Improvement

PhD Vojin Golubović¹, PhD Milika Mirković², MSci Nikola Mićunović³,
PhD Velimir Srića⁴,

WHAT IS Covid-19 teaching us?

Chinese word CRISIS consists of two ideograms: the first means DANGER, the second means OPPORTUNITY. Most people perceive the coronavirus as a DANGER manifesting itself in its worst forms. It causes drastic behavior change, quarantine and social isolation. It creates panic, shortages and anxiety. It dramatically reduces economic activity, destroys stock markets and paves the way for recession.

Schools, colleges, even kindergartens are closed. Sport events, concerts, competitions and championships are canceled. An overstretched health system is bursting at the seams. Borders are closed, traffic has stopped, and airlines, cultural institutions, tourism and the entertainment industry are suffering huge losses. Concerned heads of government hold press conferences on a daily basis to portray the murky reality, offer increasingly drastic measures and increasingly restrictive solutions. Immersed in such a deep crisis, is it at all possible to see the coronavirus as an OPPORTUNITY, as we try to do in this paper?

First of all, we should stop and rethink. We should question our values and try to get rid of false myths we are surrounded with. We should also question personal priorities, the meaning of life, work and all our activities. We should better understand the risks of global connectivity and the complexity of all the consequences. We should better grasp the necessary balance between personal freedoms and restrictions that are imposed on us by the interest of common good. We should compare how a deep crisis is addressed by different political regimes and learn from the mistakes. Finally, we should draw lessons from all this by initiating faster and deeper reforms of the (global and local) political, educational, health, social and, of course, economic systems.

Apart from these abstract and philosophical gains, there are a number of concrete positive consequences of the coronavirus crisis. The trend of teleworking will accelerate. The need for openness and transparency in media and political discourse will grow and the tendency to produce "fake news" will be reduced. Sensitivity for older and more vulnerable sections of the population who are neglected and marginalized will increase. The perception of "private space" will change and the overall hygiene habits will improve.

The text that follows is based on a field research on Digital Transformation in Montenegro during the Covid-19 pandemic. It explores the current status, and deals with issues and proposals for improvement, focusing in particular on a set of recommendations and proposals for companies, enabling them to cope with the challenges.

Keywords: **digital transformation, agility, innovation, education, technology, globally competitive network**

I Introduction

Extreme instability and insecurity have become key features of the “**new normal**” **business, education and living environment**. Therefore, the whole society must be prepared for sudden changes, quick adjustments and timely reaction.

¹ University of Donja Gorica, Montenegro

² University of Donja Gorica, Montenegro

³ University of Donja Gorica, Montenegro

⁴ University of Zagreb, Croatia

There is a need to be resilient - to create long-term values by focusing on current results, and companies also need to think about whether they have prepared strategies, enough skills, whether they follow economic and social developments in the world, whether they manage risks. The COVID-19 crisis will result in numerous turnarounds in the future, and only companies that have started strategic preparations for business in the coming period can hope for survival and success.

The pandemic has accelerated the digitalization needs of all companies, regardless of their previous estimates, and forced them to adapt to new market conditions, create new business processes overnight, which are largely or entirely now related to digital technologies. **It is technologies that have created a new mindset**, an organizational culture that is open to new challenges. It is very important to know that the obstacles that previously prevented companies from adapting to innovation were not related to technology, but to **bureaucracy and unwillingness** to disrupt traditional business models.

A big problem in Montenegro is the attitude **"there is no need for innovation as long as established practice gives results"** which is no longer sustainable. The solution is to apply a proactive, non-reactive approach - seek for changes, and not changing when they happen. Also, pandemic forced many to adapt to the changes, so all teams become **more agile**, leaders search for **soft skills**, and the organization is now **fluid**.

Capable individuals must realize and understand that each of them "sails the river of time" of their life. **That "river" is constantly flowing and asks us to adapt our swimming to the new "sections" of constant flow.** It calls for self-improvement, self-educate, self-respect, it demands greater self-responsibility, it asks for self-confidence. **Life is a struggle, a fierce struggle of every man in his aspiration to reach the highest possible spiritual step;** life is a struggle that creates the experience of both the spirit and the mind in man. So doesn't the COVID-19 pandemic show how invisible things, invisible phenomena are possible, **powerful and unstoppable?**

These changes give priority to digital business where quality takes primacy over quantity, now the results are the most important and therefore, there is necessary that all stakeholders are evenly involved in business process design, company management and investment decision making. The company needs people who will get the opportunity to create its future: **"We like people with heart: H-humble, E-effective, A-adaptable, R-remarkable, T-transparent"**. When you take five factors, you get the methodology of Google, the Smart Creative company, which combine technical knowledge, business expertise and creativity.

Ii Methods And Procedures:

Project DIGagCOV: Support measures to companies in fight with COVID-19 digitalization

If approach to transformation is not comprehensive, but partially, there is a great chance that there will be no success. That is why, in addition to the purpose and significance, it is very important that the whole society shows preparedness for change. In order to be able to prepare a reaction to the existing problems and challenges, it is necessary to notice them first of all, more precisely, **it is necessary to conduct research on the impact of digitalization on business in Montenegro.** More precisely, the Covid pandemic has only accelerated the need for digitalization, so **the main goal is to identify the main gaps in education, daily life and work that prevent us from making prompt decisions, implementing changes, and responding effectively to challenges.**

Scientific research project **DIGagCOV: "Support to small and medium enterprises in the fight against Covid-19 digitalization and digital payments"**, was realized by a research team from the University of Donja Gorica, with the support of the Ministry of Science of Montenegro. **The research was conducted in 400 companies through questionnaires as well as in ten companies**, with the aim of collecting real challenges faced by companies, customers, universities and society, as well as opportunities for digitalization in the future.

Through research through questionnaires and interviews, the project team came to reliable results that are important for the development of further steps to support the digitalization of business in **terms of changes in the company, employee training, and education reform.** The aim of the research is to examine whether employees, customers and the entire population have enough knowledge, skills and equipment to be able to adapt to digital procedures, although they show high preparedness for necessary changes, more precisely learning and acquiring new skills at work due to covid-19 pandemic.

The DIGagCOV project was implemented in order to point out a large number of challenges and problems currently facing the business sector in Montenegro, which are mainly related to **insufficient knowledge and skills of employees, insufficient technology and equipment to digitize the processes in the company and financial support of institutions and professional support of the university to employees and customers** who need to accept the digital offer that will be presented by the companies.

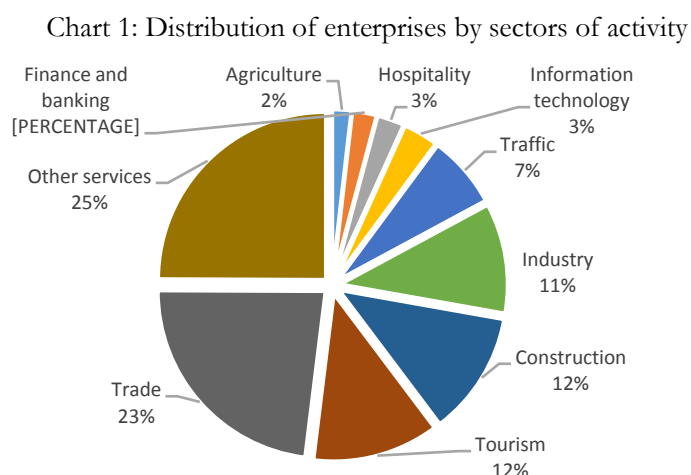
Based on the results of the research, problem analysis is planned and creating a set of recommendations and measures that **will help companies and other actors to digitize activities, so the society digitalization plan will include clear guidelines for companies on how to digitize the economy, departmental institutions on how to digitize administrative processes** and financially support the economy, as well as the academic sector how to implement the educational program with quality education.

Iii Research Results

3.1 DIGagCOV Questionnaire: Support to enterprises in fight with covid digitalization

DIGagCOV research has given interesting results. Namely, most companies have expressed **preparedness to cooperate with all actors in improving the current situation in terms of education and preparedness of companies and employees to establish quality digital procedures and processes that will enable efficient work, better results, greater competitiveness in the global market.** Therefore, cooperation between companies - the economy, institutions, universities and customers - the population is possible, which **should result in a digital business transformation plan, which will give instructions that employees need, what skills universities should offer, what are the requirements of residential companies for institutions.**

The first phase - **qualitative research, through a questionnaire was conducted in 410 companies** in Montenegro, and the stratified sample included different types of enterprises observed by size and observed by sector of activity. In addition to information on the company's operations, the questionnaire contains questions related to the assessment of **the importance of the application of digital technologies in the company, focus on innovation and digital transformation, personnel base of digital transformation, the impact of the pandemic on businesses and the relationship between consequences of the pandemic and the need for digitalization,** as well as issues related to the need for **efficient application of digital technologies,** as well as the importance of the need for **cooperation of enterprises with the academic sector, economy and the state in order to support during digitalization process.**



The research covers companies from different activities, and **the largest number of enterprises is from the sectors of trade, tourism, construction, industry** and other activities, which include accounting services, utilities, administrative services, gambling, education, consulting services, insurance, research and security of persons and property.

Over 80% of surveyed companies have a website / profile on one of the social networks

It is very interesting that more than half of the surveyed companies (53%) sell products and services only on the domestic market, while 44% of them place products and services on both the Montenegrin and foreign markets.

The largest number of enterprises whose dominant market is Montenegrin is from the trade sector (31.8%), the construction sector (13.7%) and industry (8.1%). On the other hand, the largest number of enterprises that sell products and services in both domestic and foreign markets are from tourism (22.3%) and trade (12.6%). Export-only enterprises operate in tourism, traffic, industry and agriculture sector. Given that the pandemic has closed a number of activities, we can already assume which companies had problems maintaining liquidity and solvency, providing payments to employees.

When it comes to communication with customers, a large number of companies have already decided to place their offer through digital solutions, instead of the traditional way of cooperation. **Website and/or a profile on some of the social networks have 83,2% of surveyed companies. Of this number, the company (49.5%) has a website and a profile on one of the social networks.** On the other hand, a third of companies (33.2%) have only a website, while 17.2% have only a profile on one of the social networks. **It is interesting that companies that were founded after 2006 more often have a profile on one of the social networks.** Of the total number of companies that have a profile on social networks, **48.4% were founded after 2006 and 7.7% before 1990.**

Chart 2: Website and profile on social networks

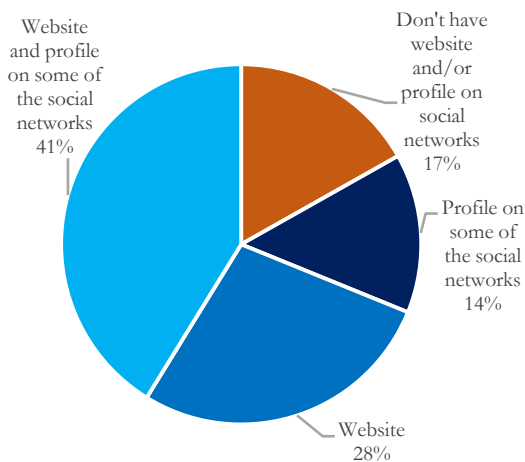
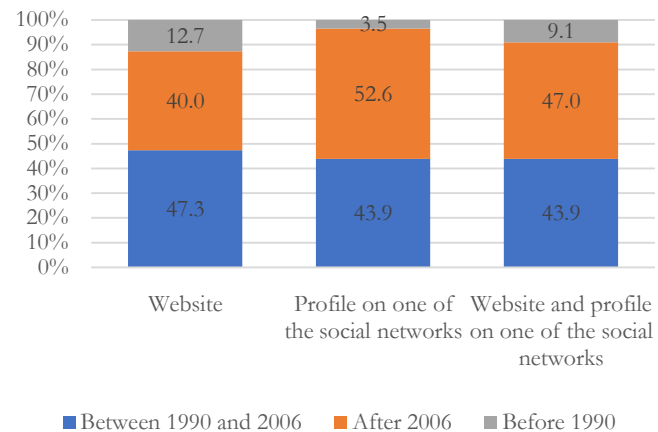


Chart 3: Percentage of companies that have website and/or profile on social networks



Does this lead us to the conclusion that companies founded in the information age are more flexible than companies that operated in the era of industrial and agro society?

It is also very interesting that the presence of companies on web platforms and social networks can be analyzed according to the size of the company, given that **more than half of companies that do not have a website and / or profile on social networks (53.7%) are micro companies (1 to 10 employees), while the percentage of small companies (11-49 employees) is 85.1%, and medium-sized companies even at the level of 95.6%.** So digital performance also depends on the **size** of those companies.

The main conclusion is that the profile on social networks is decided mainly by smaller companies, which probably do not have enough money, knowledge and technology to create their business on a digital platform? Namely, micro enterprises are the most represented among companies that only have a profile on one of the social networks (43.9% of the total number of companies that only have a profile on the social network). The website is much more represented in medium and large companies, compared to micro / small companies.

Company's view on digitalization - digital opportunity to reach customers faster?

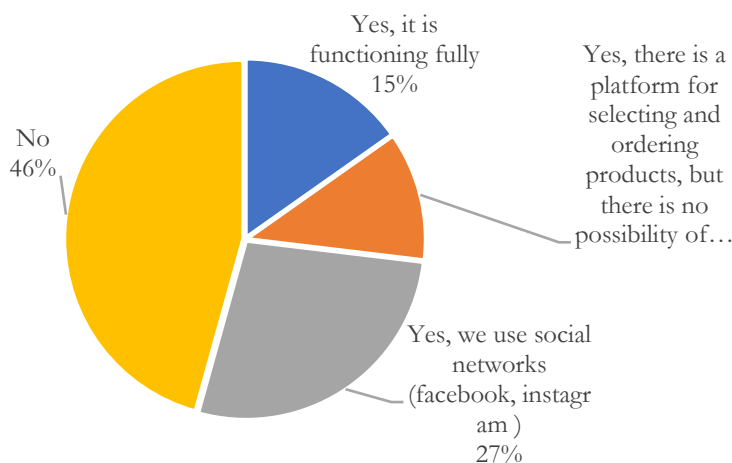
The research showed that companies in Montenegro often understand digitalization as faster communication with the market - customers and suppliers, as many as 80% of surveyed companies. On the other hand, the smallest percentage of companies understand digitalization as an investment in the knowledge of employees. The remaining two views, the understanding of digitalization in terms of faster decision-making and new business model, as well as the purchase and use of equipment and technology is on the level 33% and 38%, while large companies have a significantly higher percentage (66.7%).

A very important information and circumstance is whether and in what way companies have already digitalized certain processes and activities. **Of the total number of respondents, 13% consider that they have switched to the digitalization of their business model, while half have already started the digital transformation of the company.** On the other hand, **one fifth of companies (21%) do not yet plan and implement activities related to business digitalization.**

Companies that do not plan to start digitalization of business state that the most important reason is that **it is not necessary considering the volume of production and the market (average score 3.1 on a scale from 1 to 5, where 1 means the least significant and 5 the most significant).** **What follows is the opinion of companies that investments are greater than expected benefits (average score 2.9), as well as staff shortages (2.8).**

An important circumstance for doing business during the covid pandemic is the possibility of online product placement by the company. **Of the total number of surveyed companies, 54% have some form of online sales of products and services.** Namely, in 15% of companies, online shopping is fully functional, while 12% of companies have a web platform on which products can be selected and ordered, but there is no possibility of online payment. Even **more than a quarter of companies (27%) sell products and services via social networks (facebook, instagram, viber)** while on the other **46% do not offer online sales.**

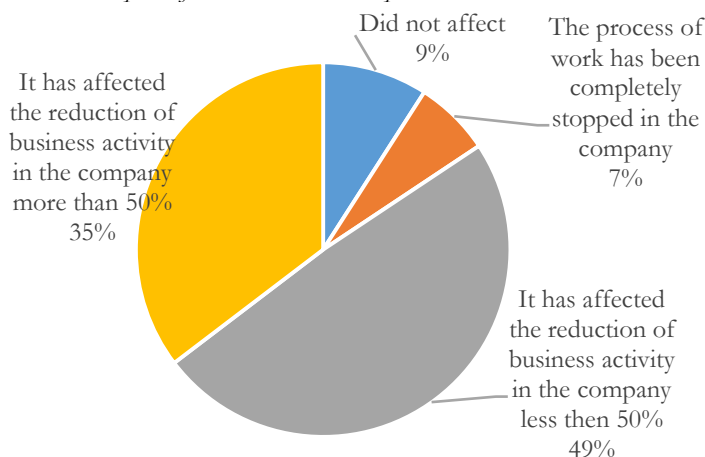
Chart 4: Possibility of online product placement by the company



Digitalization is a priority after the covid pandemic created problems in the companies

The corona virus pandemic has affected the business of more than 90% of companies. Every other company recorded a decrease in business activity by less than 50%, while more than a third of the enterprises decreased business activity by more than 50%. **The impact of the pandemic was not reflected in the reduction of business activity in only 9% of companies.**

Chart 5: The impact of the Covid-19 virus pandemic on business activities

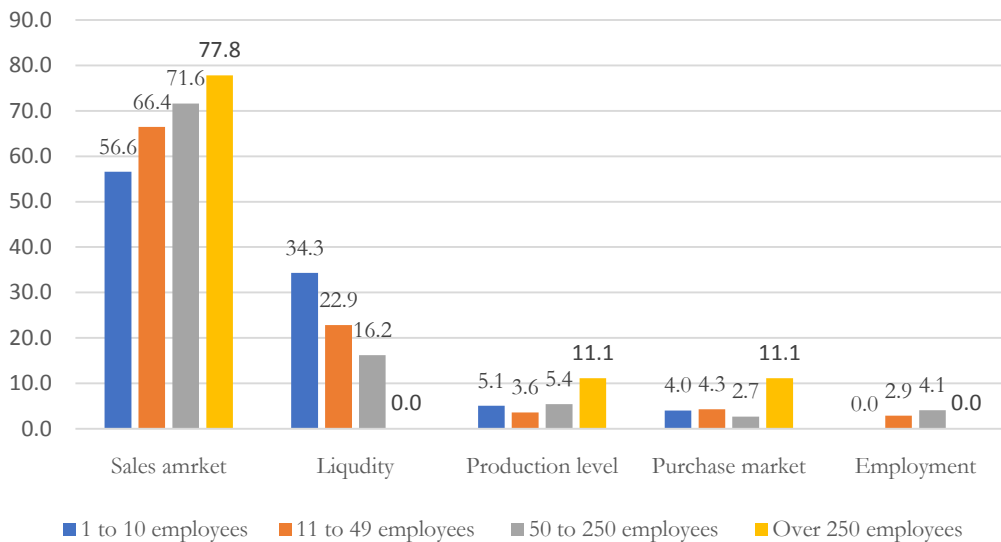


The business of micro and medium enterprises is most affected by the covid pandemic, and the impact can be observed from the aspect of the business headquarters. Thus, **enterprises from the coastal region are more affected by the consequences than companies from other regions.** Only 2.8% of companies from the coastal region did not feel the consequences of the covid pandemic on their business, which is significantly less than the national average. **As many as 62.3% of companies from this region registered a decrease in business activity by more than 50%, which is significantly more than companies in the central (23.1%) and northern region (36.0%).** Also, 8,5% of companies from the coastal region have completely suspended the work process, and this percentage is lower for **companies from the central (6.2%) and northern regions (4.0%).**

In addition to the location, the results are interesting for analysis from the point of view of companies, so **of the total number of companies in the tourism and hospitality sector, 61.4% reduced business activity by more than 50%, while more than a quarter of companies completely stopped businesses.** Companies in the transport sector significantly felt the consequences of the virus pandemic (55.6% reduced their activity by more than 50%, while 11% stopped working completely). On the other hand, **business has not been completely stopped in any of the companies from the construction and industry sectors, they are more resistant compared to other sectors, given that the pandemic did not affect as many as 21.7% of companies.**

When it comes to the reduction of business during the covid pandemic, this is a business circumstance for most companies in Montenegro. However, what are the key reasons for reductioning the business? The research shows that **the impact of the pandemic on the sales market** contributed the most to the decrease in business activity. Of the total number of surveyed companies whose business activity was reduced (but not completely suspended), **almost two thirds (64.9%) stated problems related to the sales market** that was most affected by the pandemic. The second most important business segment through which the consequences of the covid pandemic are visible is the **liquidity of the company** (24.2% of companies listed liquidity problems as the most important aspect of the business that was disrupted). Significantly lower percentage of answers to the question referred to **the production level (4.7%), supply market (4.0%) and employment (2.2%).**

Chart 6: Key reasons for reductioning the business activities



Also very important is the analysis in relation to the problems that can jeopardize the business due to the COVID-19 virus pandemic, where companies state **the inability to deliver existing products and services to customers as the most common problem (51.7%).** A quarter of the companies stated that the main problems are related to **the inability to perform the administrative procedures of the companies and insufficient technology for digital cooperation between the companies and the customers.** **Insufficient knowledge, lack of equipment and necessary approaches** for the work of employees from home have been identified as the least present problem that can jeopardize the company's business.

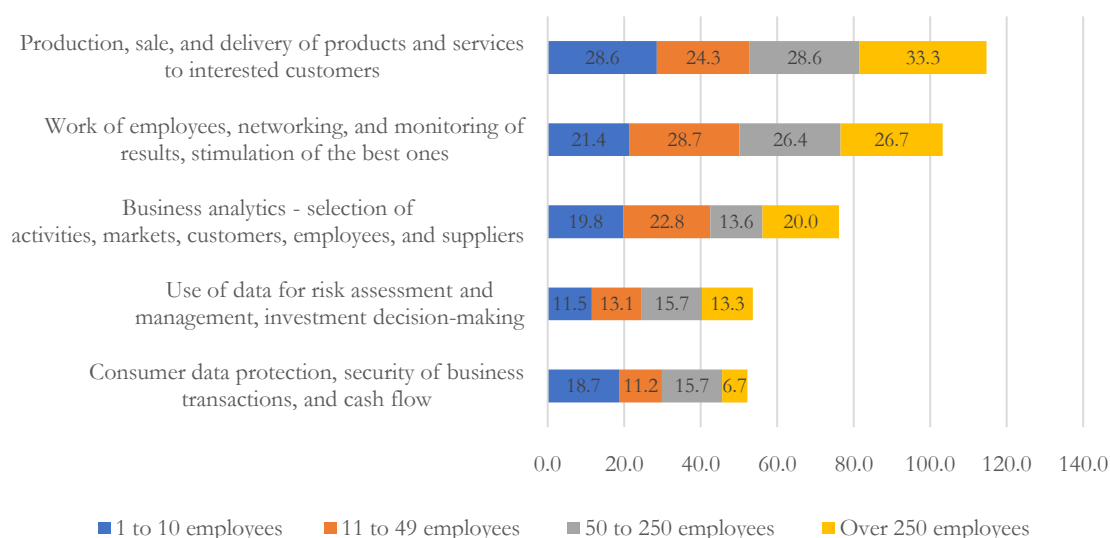
When it comes to reactions, **more than half of the companies stated that government interventions should go in the direction of providing tax and other incentives for the needs of digital transformation.** Of the total number of surveyed companies, 22.6% consider that it is **necessary to provide special grant schemes, and 17.2% stress a need for special credit lines for the introduction of digitalization in business.**

Only 6.4% of companies consider that no interventions are needed. Compared to micro and small, medium-sized enterprises were more likely to cite interventions, related to tax breaks and soft loans that.

When it comes to the specific needs of companies for digitalization, **most companies recognize the need for the introduction of digital technologies in the field of employee work, networking and monitoring results as well as stimulating the best (46.3%).** The need for digitalization in the field of production, sales and delivery of products and services to customers was recognized by 39% of companies, while 31.8% of them stated the need for digitalization in the field of business analytics, ie selection of industries, markets, customers, employees and suppliers.

If we follow the size, we can conclude that the need for digitalization is most often recognized in the largest companies in activities related to production, sales and delivery to customers, while the least emphasis is placed on data protection, security of business transactions and cash flow.

Chart 7: The need for business digitalization - the answer according to the size of the company



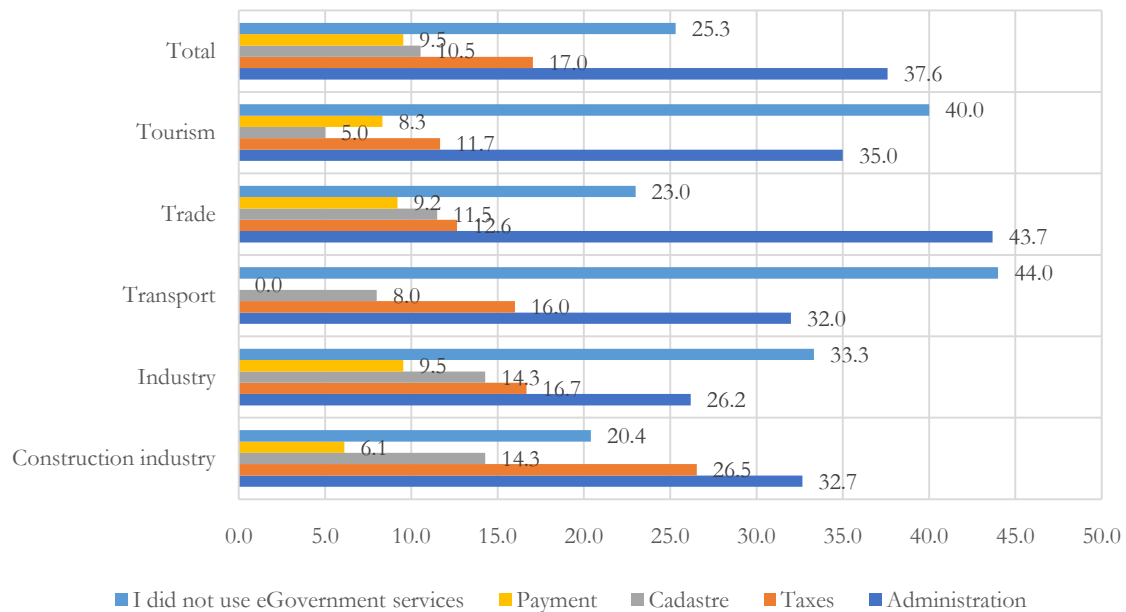
When it comes to specific digital technologies that companies already need, out of the total number of surveyed companies, **most companies pointed out the need for cloud computing via the Internet - Cloud computing (21.4%) and social networks and media(21.2%) to solve specific problems.** On the other hand, the least need is for digital technologies in the form of artificial intelligence and big data (7.5%). On the other hand, **almost 17% of companies are not familiar with technologies at all.**

When we look at activities, the greatest need for cloud computing was expressed by companies in the field of industry (27.3%), while the transport sector recorded the least need for this digital technology (13.3%). **Companies from the transport, tourism and hospitality sectors, as well as trade, stated the greatest need for social networks and media (33.3%, 28.7% and 27.6%, respectively).** On the other hand, we have **more than a quarter of companies from the construction sector, which stated the need for mobile technologies (26.4%).**

Digitalization of public administration, companies are not satisfied with Government?

Additional insight into the level of digitalization and the use of digital technologies in the business of Montenegro can be seen through the use of available public platforms, such as eGovernment of Montenegro. Significant result is that **three quarters of the surveyed companies use some of the services of eGovernment of Montenegro.**

Chart 8: Difficulties in using the eGovernment service of Montenegro



It is very problematic that even **half of the companies that use this service have difficulties in using the platform for the purpose of administrative activities**. Almost a quarter of enterprises (22.8%) had difficulty using this service to pay taxes. Smaller enterprises use eGovernment less often than larger ones. Thus, out of the total number of surveyed micro enterprises, **27.4% did not use eGovernment services**, while there is a smaller percentage of other enterprises (**26.5% small, 20.7% medium and 22.2% large**).

An important issue related to the digitalization and introduction of digital technologies in the business of the company is the **understanding of employees and their preparedness to apply technologies**. Of the total number of enterprises, **more than half answered that their employees understand the need and are ready for changes in the company**. A quarter of enterprises responded that employees understand the need for digital technologies, but see the changes as an imposed obligation. On the other hand, **only 9% of companies answered that employees do not understand the need to apply technologies**. It is very interesting that initiating changes to efficient problem solving is more common in smaller enterprises.

For the successful application of digital technologies in the business of enterprises, one of the most important segments is the investment of companies in the ICT knowledge of employees. In Montenegro, these results are not at an enviable level. **Almost a fifth of enterprises (18%) do not invest in ICT knowledge of employees at all**. On the other hand, **a large number of enterprises do not allocate significant funds to improve the IT knowledge of employees**. Of the total number of respondents, a quarter invests up to 1% of profits in ICT knowledge of employees, while a fifth invests 2-5% of profits for these purposes. **Over 50% of profits in IT knowledge of employees is invested by only 1.3% of the total number of surveyed enterprises**.

It is important to observe the level of digitalization of business from the aspect of communication with customers, more precisely the use of digital technologies in relation to customers. Of the total number of surveyed enterprises, **42.8% use technologies to communicate with customers, understand habits, analyze feedback and adjust the offer to needs**, while **33.9% use technologies only to communicate with customers**. On the other hand, **23.4% of companies do not use technology to communicate with customers or to monitor habits**.

Also, the **largest number of enterprises (almost 60%) has traditional marketing methods**. Of the total number of respondents, **23.5% use traditional marketing methods, while 35.1% use traditional methods, but also plan digital marketing, and 29.9% of companies have already completely switched to digital marketing**. Also, **11.6% of companies do not have funds for marketing activities**.

Out of the total number of enterprises, **46.3% of those who plan to introduce digital technologies cited more efficient business and greater customer satisfaction as the reason**. Also, **23% of enterprises plan to apply technologies due to global market competition, and 19.9% due to higher profitability due to digitalization of business**.

The consequences of the COVID-19 virus pandemic led **10.8% of enterprises to plan the application of technologies** in business. The enterprises also stated lower costs due to the introduction of digital technologies.

Chart 9: Reasons for the application of technologies in enterprises that plan their introduction



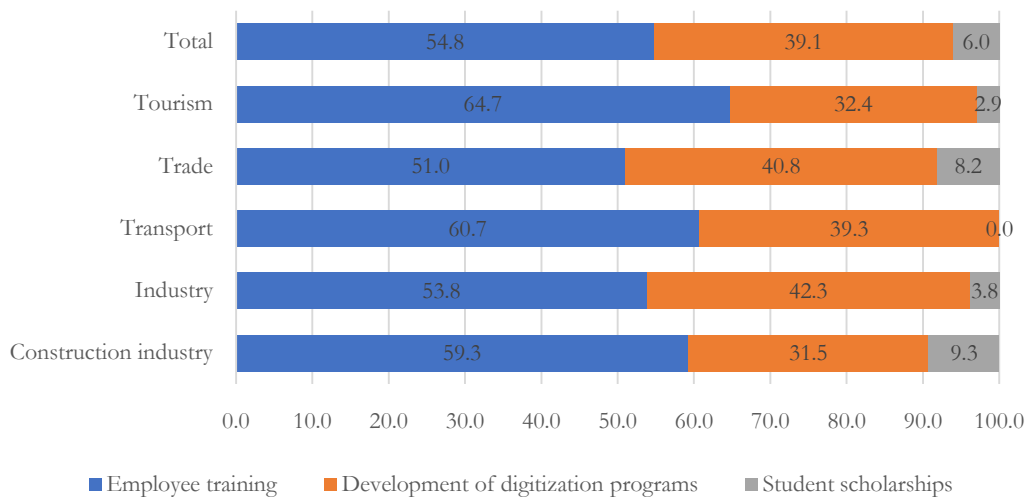
Considering their size, **medium and large enterprises have more often cited that efficient business and higher satisfaction of the customers are the reason for the application of digital technologies compared to micro and small enterprises.** On the other hand, higher profitability due to the digitalization of business is a more common reason for the application of technologies in micro than other companies.

As far as the company’s activities are concerned, **60.6% of enterprises in the transport sector cited more efficient business and greater customer satisfaction as the reason for the application of digital technologies in business, which is a significantly higher percentage compared to enterprises in tourism and hospitality (39, 5%).** Also, 12.8% of enterprises from tourism and hospitality cited that they plan digital technologies due to the consequences of the pandemic, while this percentage is lower among companies in the field of transport(6.1%).

As far as the application of digital technologies and digitalization of business, **both the company and the institutions and the whole society, the academic sector has a very important role.** Of the total number of surveyed companies, **97.8% answered that closer and more efficient cooperation with the academic sector is needed,** only 2.2% of enterprises do not see the need for this type of cooperation.

More than half of the enterprises (54.8%) that feel the need for closer cooperation with the academic sector see cooperation in the field of employee training, while 39.1% see the development of programs and plans for digital transformation as an area of cooperation between companies and universities. A very small percentage of companies cited professional development and internships in enterprises, and a business risk consulting program as possible forms of cooperation.

Chart 10: Area of cooperation with academic sector



If we look from the angle of activity, of the total number of enterprises that feel the need to cooperate with the university, **from the tourism and hospitality sector, 64.7% see cooperation in order to train employees, and 42.3% of the industry sector to create digitalization programs.**

IV Conclusion

Recommendations to support the digitalization of enterprises -due to the COVID19 crisis:

The aim of the research was to **create a comprehensive overview and assessment of the situation in the field of digitalization of Montenegrin business with suggestions for its substantial improvement.** Therefore, the research included an assessment of the current state of digital technology and the extent to which they are used in companies, what is the personnel base of digital transformation, what are the possibilities and potential of companies, what are the expectations regarding the application of digital technologies. Also, the **aim of this research was to determine challenges and problems in the application of digital technologies in Montenegrin companies in an attempt to eliminate them.** The research of companies aimed at a better understanding of **the role of the state in the field of providing support, analyzing the role of the academic sector in relation to professional assistance in digital transformation of companies and research of opportunities brought by digital networking of companies, economy and institutions.**

The field research was conducted in the summer of 2020. The selection of enterprises for the survey was selected by the method of random sampling and replacement (Simple random sampling with replacement). The sample included as many as **410 enterprises** from all three regions of Montenegro.

The largest number of enterprises is from the sectors of trade, tourism, construction, industry and other service activities. Among the respondents, 2% were large enterprises employing more than 250 people, 23% were medium-sized enterprises employing 50 to 250 people, while the majority or 75% of respondents were micro or small enterprises. In other aspects as well, **the sample was very representative and comprehensive (age of the enterprises, ownership and structure of employees, level of export orientation).**

The stratification of the sample is especially interesting from the point of view of digitalization of the enterprises. Thus, the analysis shows that **83.2% of surveyed companies have a website and/or profile on a social network.** Of that, half (49.5%) have both, a third (33.2%) have only a website, while 17.2% have only a profile on one of the social networks. The research showed that **80% of companies understand digitalization as a tool for faster communication with the market,** ie customers, suppliers etc. while the least of them see digitalization as an investment in employee knowledge.

Also, the perception of **digitalization as a way to make faster decisions and create a new business model** is stronger in large companies (66.7%) compared to others (33% to 38%). **Only 13% of the surveyed companies believe that they have already switched to the digitalization of the business model, and half have started with the digital transformation.** Micro-enterprises and companies established before 1990. rarely start the digitalization process and see staff shortages as one of the main reasons. **54% of respondents have some form of online sales of products and services,** 15% of enterprises have fully functional online trade, while 12% of enterprises have a digital platform on which products can be selected and ordered,

But without the possibility of online payment. It is also interesting that **online sales are more prevalent in privately owned companies than in state-owned ones.**

The results of the research on the company's focus on innovation and new business models are also interesting. **The research shows that enterprises founded after 2006 are more innovation-oriented than enterprises founded before 1990.** Also, the research shows that the attitude that a company has a recognized product and additional innovations are not needed, strongly supports large companies and corporations, while micro do not agree that.

The analysis of personnel assumptions of digital transformation showed that **half of the companies do not employ IT experts, a third of companies (30%) have a sufficient number of IT experts, while almost a fifth (19.3%) employ IT experts, but their number is insufficient.** This is a worrying result as well as an indicator that **46.6% of companies are just showing preparedness to invest in staff training** for the needs of digital transformation, and only 32.6% are already implementing this activity. In addition, **a fifth of companies (20.9%) claim that employees have sufficient knowledge and skills and that they do not need additional education.**

The research provided a complete picture of the impact of the COVID pandemic on the economy. **It affected the business of over 90% of enterprises, in half of them the business activity was reduced by less than 50%, and in a third by more than 50%.** The research shows that micro and small enterprises are much more affected by the pandemic than medium and large companies, enterprises from the coastal region are much stronger than companies from the other two regions. **For two thirds (64.9%) of companies, the biggest impact of the pandemic was the reduction of the sales market, while in second place was the impact on liquidity (24.2%).**

It is important to note that **a lack of equipment and access to work for employees from home was highlighted as the least significant problem.** Regarding all three packages of measures of the Government of Montenegro that were introduced in order to combat the effects of the pandemic on business, **29% of respondents were completely satisfied with them, 13% of enterprises were not satisfied with the measures, and most (58%) were partially satisfied.** The largest dissatisfaction with the measures was expressed by enterprises from the transport sector (18.5%) and industry (17.1%), and the least dissatisfied were from the tourism and construction sectors (8.5% and 8.7%). Interestingly, **46% of companies prefer the introduction of digitalization in the areas of employee work, networking, monitoring results and rewarding.**

This is followed by the need for digitalization of production, sales and delivery of products and services to customers (39%), while 31.8% emphasize the priority of digitalization in the field of business analytics. Of the surveyed enterprises, **most of them (21.4%) emphasize the need for computing in the "cloud", followed by social networks and media (21.2%),** and the least need for digital technologies of artificial intelligence and big data (7.5%) It is worrying that **almost 17% of enterprises are not familiar with these technologies.**

The consequences of the COVID-19 pandemic led 10.8% of enterprises to plan the application of digital technologies in business. In addition to these reasons, the enterprises **also cited lower costs as a result of the introduction of digital technologies.**

As many as 97.8% of the companies in the sample pointed out that their digital transformation requires stronger cooperation with the academic sector, while 2.2% of companies do not see the need for that. **More than half of the enterprises (54.8%) that feel the need for stronger cooperation with the academic sector, give priority to employee education, while 39.1% prefer cooperation in the development of digitalization program.**

We suggest that the conclusions of the research should be turned into a program of the following measures:

1. **The key importance in preparing the company's response to the crisis, have the activity and the market.** Industry operated smoothly during the pandemic, trade and tourism were significantly affected by insufficient knowledge and determination to change, however tourism, although digitally ready, was completely threatened by inability to travel.
2. **Support for technological modernization of companies.** The company's response to the crisis depends solely on how much the company has invested in technology, which provides employees with networked devices, access to documentation, conducting business.
3. **The company must invest in the education of its employees.** Employees in most companies have shown a high degree of preparedness for change, daily learning and acquiring new skills at work.

However, some employees complicate the planned processes to make some procedures simpler, due to the insufficient preparedness and traditionalism.

4. Create web platforms for the retail market. The decision whether companies should invest in web depends mainly on the market, whether the companies operate in the wholesale or retail market, in Montenegro or abroad, and competitiveness of the offer itself.

5. Invest in technology. Depending on the activity, companies need to invest in ERP systems that monitor production and sales, databases for conducting business analytics, a cloud for access to documentation, and a website technologies and social media for sales and ordering.

6. Introduce companies to the digital offer of IT companies. Companies in the manufacturing sector hire IT support externally, trade requires IT support depending on the level of digitalization of sales the IT industry has its own IT experts, tourism hires IT support.

7. Increase the efficiency and simplicity of state administrative portals. Companies are satisfied with the services of the eGovernment portal, but it is important for small and medium enterprises that the state introduces the possibility of electronic submission of documentation, and a digital network between the companies, institutions and universities.

8. Prepare a strategy for customers. It depends on the activity whether and how the companies will manage to keep the existing customers, so the production, food and IT industry have kept the business at the level or even increased it, while the trade and tourism sectors have been suspended. Because of that they have to find a way to take a new market.

9. The company's ability to cooperate with foreign partners, adopt methods and perform certain activities on the international market is important for successful changes.

10. Create a globally competitive network. Companies require information on all available funds for digitalization of business, then financial and professional support in digital transformation and cooperation with universities, with developing a digitalization strategy.

V Literature:

1. Becky Frankiewicz& Tomas Chamorro-Premuzic.2020.Digital Transformation Is About Talent, Not Technology. Harvard Business Review
2. Chelsea Segal. 2020. How to Choose the Right Technology for Your Small Business or Startup. Cox Blue
3. Divya Menon. 2020. Digital Transformation – Choosing the Right Technology for Managing Suppliers. ISG
4. GüntherLemmens& Sonja Noben. 2020. COVID-19 Forces Companies to Rethink &Digitize.Digital Scaler
5. Harvard Business Review Analytic Services. 2020. IT talent strategy: New tactics for a new era
6. Ira Kaufman&Velimir Srića 2020. EmpowerUs - From Crisis to Strategic Harmony, Kitsap Publishing
7. Jonathan Whiteside. 2020. COVID-19 - accelerating the digitalisation of operations. Supply Chain Digital
8. Mario Spremić. 2016. Digitalnainformacijska transformacija poslovanja. Sveučilište u Zagrebu
9. Matt Fitzpatrick, Isha Gill, Ari Libarikian, Kate Smaje& Rodney Zimmel.2020. The digital-led recovery from COVID-19: Five questions for CEOs. MCKinsey Digital
10. Simon Blackburn, Laura LaBerge, Clayton O'Toole, Jeremy Schneider. 2020. Digital strategy in a time of crisis. MCKinsey Digital
11. Sophie Heading. 2020. COVID-19 Clues: What to watch. KPMG
12. TillContzen. 2020. Increase resilience through digitization. RESPOND – A global COVID-19 response for legal leaders. Deloitte
13. Tom McGinness. 2020. Questions to ask in times of change. KPMG
14. Velimir Srića. 2016. Sve tajneharmoničnogvođenja. Sveučilište u Zagrebu
15. Veselin Vukotić. 2021. Digitalization and digital payment. University of DonjaGorica
16. VeselinVukotić. 2020. Simboliimetafore. Nova Knjiga. Podgorica
17. ZeevRotem, Benjamin Berenblut, Ori Shinar&LironHason. 2020. COVID-19 pulse check.KPMG