EMPLOYMENT, EDUCATION AND ENTREPRENEURSHIP

23 October 2020 Belgrade, Serbia

THEMATIC PROCEEDINGS

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Editors:

Zorana Nikitovic, Mirjana Radovic-Markovic

***Publisher*:**

Faculty of Business Economics and Entrepreneurship, Belgrade, Serbia

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

330.341.1(082)
005.591.6(082)
616.98:578.834]:33(082)
001.895(082)
658.114(082)

INTERNATIONAL scientific conference Employment, education and entrepreneurship (9 ; 2020 ; Beograd)
Thematic proceedings / [Ninth international scientific conference] Employment, education and entrepreneurship [(EEE2020)], 23 October 2020 Belgrade ; [organize Faculty of Business Economics and Entrepreneurship ... [et al.] ; editors Zorana Nikitovic, Mirjana Radovic-Markovic]. - Belgrade : Faculty of Business Economics and Entrepreneurship, 2020 (Valjevo : Valjevoprint). - [160] str. : graf. prikazi, tabele ; 29 cm

Tiraž 100. - Bibliografija uz svaki rad.

ISBN 978-86-6069-180-6

а) Менаџмент -- Зборници б) Корона вирус -- Економски аспект -- Зборници в) Предузећа -- Пословање -- Информациона технологија -- Зборници г) Иновације -- Технолошки развој -- Зборници д) Предузетништво -- Зборници
COBISS.SR-ID 28747017

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Jointly organize

Ninth International Scientific Conference

EMPLOYMENT, EDUCATION AND ENTREPRENEURSHIP (EEE2020)

Belgrade, Serbia, 23 October 2020

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I IMPACT OF COVID-19 PANDEMIC ON BUSINESS

THE IMPACT OF COVID-19 PANDEMIC ON BUSINESS ORGANIZATIONS AND WORKFORCE IN SERBIA

Miloš Vučeković, Goran Avlijaš, Mirjana Radović-Marković

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Abstract

The importance of digital transformation maturity level for the resilience of a business organization is becoming ever more evident during these challenging times of the global COVID-19 pandemic. Many of the companies affected by this pandemic had to change the way they deliver services or sell products to their customers. In some cases, they were forced to either shut down their business operations for an extended period or find new business models to sustain revenue and workforce. Like many European countries, Serbia declared “State of Emergency” on March 15., 2020., establishing measures and restrictions to cope with the spread of the deadly coronavirus. The authors of this paper surveyed the employees and business owners in Serbia to better understand the impact of the COVID-19 pandemic on the business organizations and their workforce. This paper contributes to the topic by measuring the impact and the ability to adapt to the “new normal” way of conducting business for companies in Serbia.

Keywords: Digital Transformation, COVID-19, Resilience,

1 INTRODUCTION

On March 15th, the Republic of Serbia declared the “State of Emergency”, and introduced a subset of measures and restrictions, to contain and control the spread of coronavirus within its population. Many companies were instantly affected by this decision and forced to transform their operations or close their business for an extended period. Besides the product and services delivery, one of the biggest issues were organizing work, continuing production, and ensuring employee safety. For most companies, the options were scarce, making management choose between remote work, sending employees on paid vacation, or in some rare cases, terminating contracts. Some of them continued business as usual, but with greater precautions and health measures for the employees and the customers. After two weeks, new measures were introduced that prohibited business operations for most companies that require extensive physical contact with customers, like hairdressing salons, fitness and sports gyms, betting places, and similar businesses in the servicing industry. Meanwhile, public transport has been stopped and all other non-essential community offered services were closed, including open markets and government buildings, which further complicated the situation and threatened business continuity. The sudden need for a change of traditional work processes and business operations made digital transformation paramount for every organization or entrepreneur, making work from home a preference not a privilege, and for the product and service delivery to continue by online channels, pushing the move to the cloud at an unprecedented pace. The main hypothesis of this research paper was that this pandemic sparked an instant need for digital transformation for most business organizations, reinventing the workplace, changing the means of production, and the delivery of service in Serbia. Another hypothesis was that most of the businesses showed high resilience and responded rather quickly and profoundly to the new conditions of high uncertainty and rapid change, using emergency measures to sustain business continuity, deliver products and conduct services for the customers, thus maintaining employment and production rates at optimum levels.

2 LITERATURE REVIEW

During recent years, many studies have been conducted on the topic of digital transformation, trying to better understand triggers, goals, success factors, and problems encountered in this kind of endeavor. In one such study, the requirement of cultural change was critical for fostering the digital transformation projects and was mostly attained by applying the concepts of agility and open innovation within businesses and similar types of organizations [1]. The authors also identified seven main requirements that lead to success: fully engaged management, new value and concept development, proactive change management, resolving legal issues, resolving operational issues, selection-based criteria, and team openness [1]. Furthermore, based on the premise of Peter Drucker's "Culture eats strategy for breakfast", the authors showcased new business and people management models for fostering cultural shifts, including collegial leadership, holacracy, and agile teams applied through self-organization and self-guidance [1]. Finally, the open innovation was considered as the most essential factor for maintaining competitiveness, but only attainable by constant learning, self-reflection, competence development, autonomy, creativity, and attitude [1]. Similarly, another study conducted in Slovakia within the transportation industry showcased how digital transformation can also influence other business organizations, fostering innovation, and empowering digital disruption within the industry [2]. In some examples, there was a big tendency for change towards a more "digital" approach, especially from companies that operate in a traditional industry like transportation [2]. Furthermore, the connection between successful digital transformation and big involvement from human resource departments was evident, especially when the employees were in the middle of all processes of digitalization, and when the concepts of "Design thinking" and "Agile" methodologies were used [2].

Today, digital transformations are accompanied by "Agile" transformations, empowering organizations with modern paradigms of change and innovation management. In one recent case study on the topic of "Agile" transformation and its triggers, that was conducted with the Bank of France, the authors researched the importance of this kind of endeavor for big organizations and their digitalization efforts. The findings emphasized the need for top management support to generalize a local agile effort and apply it within the whole organization [3]. Similarly, a recent study conducted on the same topic showed that digital transformations are the cause of rapid and disruptive change for most organizations [4]. Furthermore, the systematic change of business processes is beneficial, but require a more holistic and competence-based approach to be successfully implemented. Authors also agree that most of the business organizations that are on this path will become software organizations in the end [4].

3 DEFINITION OF DIGITAL TRANSFORMATION

Digital Transformation is a broad term used to describe the process of digitalization and implementation of modern ICT systems within businesses and other types of organizations. With primary goals of digitizing business processes, fostering positive changes, and boosting value creation, the process is seen as an opportunity to modernize organizations, and further attain additional customers and new market shares [5]. For most businesses, digital transformation helped change the business processes, models, and social engagements, and by measuring the digital maturity, they have a deeper perspective and approaches to digitalization, further employing advanced learnings and best practices from their employees. This also makes them highly attractive for job seekers, as experts tend to work for digital leaders [6]. Taking risks and leading the transformation from the top are two highly rated factors for success, making leaders and their ability to understand the value of technology for their organization irreplaceable in this kind of endeavor [6].

The biggest benefits of digital transformation may be different for every organization, and in some cases be industry specific. Authors in one recent study showcased the benefits extending from new ways of production and delivery to using big data and new digitalized safety systems within organizations [7]. Furthermore, the correlation between fulfilling requirements and achieving benefits of the digital transformation process was evident in the study, with defining strategy, creating plans, and ensuring the alignment between business strategy and operations as the primary tasks [7]. By measuring the levels of digital maturity of an organization, we can define the starting point for the digital transformation and define the current state with the following categorization: 1. Unaware, 2. Conceptual, 3. Defined, 4. Integrated and 5. Transformed [7]. Digital maturity models also have industry-specific requirements, and for example in the manufacturing of smart products, this models should take into account a broad business perspective, establishing a point of departure for current and future capabilities, providing roadmaps and strategies to achieve goals, and creating measurable deliverables aligned with the business case [8]. Besides that, there are many factors and approaches to digital transformation endeavors in form of tools, methods, and methodologies, often used as models or frameworks for developing and executing digital strategies, thus representing the key to success for many business organizations, especially for SMEs [8]. The imperative for every business leader is to digitally transform the business processes to drive growth and to take advantage of digitalization for their organization [9]. Furthermore, they should have an understanding that the digitalization is not just an IT issue, but a more complex one that involves a full commitment from management and executives [9]. For example, the cloud, once a futuristic dream of few tech-savvy leaders has become a reality and a requirement for introducing new products or processes where speed and agility are of high importance [10]. The presence of cloud-enabled innovations are most evident in the automotive industry, where the pressure is enormous from the IT companies on the traditional manufacturers to change and modernize their products and services [10]. In more recent years, new forms of business organizations are emerging on the premise of digitally first paradigm, creating an organization model for the future by creating modern digital strategies and using modern agile methods [11]. Networked enterprises, agile workforce and virtual teams are all part of this new paradigm that will help organizations cope with challenges of doing business in these challenging times. In that extent, virtual organizations are becoming a new reality in a COVID-19 impacted world. Furthermore, the authors of the paper concluded that without the symbioses of workforce knowledge and skills, there is no means to reach agility within the organization [11,12, 13].

4 METHODOLOGY AND RESEARCH SAMPLE

The authors conducted research by using the survey methodology [14] on the effects of coronavirus pandemic on digital transformation of business in the Republic of Serbia. The questionnaire was published online in the first half of April and had 165 participants engaged in the survey. Majority of our survey participants answered that they live in Serbia (95.1%), and only their answers are included in the research results for the purpose of this paper. More than a half of our respondents are employed full-time (66.24%), while others are self-employed (24.20%) or contracted workers (8.28%). Only small amount of the participants answered they are unemployed (1.27%). Most of our survey respondents are qualified professionals working in the fields of marketing and promotion (26.11%), information technology (22.29%), sales and commerce (12.10%), education (8.28%), management and organization (5.73%), media and journalism (5.10%), services (4.46%), printing and design (1.91%), insurance and banking (1.27%), agriculture and farming (1.27%) and others (11.46%). Furthermore, our survey participants mostly work in SME, with less than 10 employees (35.03%), then companies from 10 to 100 employees (34.39%), and in larger business organizations with 100 to 200 employees (7.01%) or with over 200 employees (23.57%).

5 FINDINGS AND DISCUSSION

The questionnaire presented 13 questions to the survey participants, including the control question for determining the place of residence of the respondents. The following results are the basis for our research on the topic of “the impact of COVID-19 pandemic on business organizations and workforce in Serbia”. Within the online survey, the following questions were asked:

- Are you living in Serbia?
- Are you employed?
- What is your field of work?
- What is the size of the company you work for?
- How does the outbreak of the COVID 19 pandemic affect your work?
- To what extent has the COVID-19 pandemic affected the volume of your work?
- To what extent can you run business processes from home?
- Has the COVID-19 pandemic affected the modernization of your business?
- Have you implemented innovative and new business models even before the COVID-19 pandemic?
- Do you think that you will be able to continue your business in the future?
- Do you think that you will need some help from the state in continuing business activities or resuming the execution of those activities?
- Do you think that the new ways of working and communicating will be used in your company after the COVID-19 pandemic?
- Assess your organization's readiness for the new situation?

On the question “How does the outbreak of the COVID 19 pandemic affect your work?”, the survey respondents answered that they are working from home (82.58%), they are not affected (12.26%) and that they are not working (5.16%). This shows that many companies had to establish a new “work from home” process for their employees to cope with the pandemic and adjust to the new conditions. To an extent, the business continued as usual or in contrast fully stopped for the smaller part of survey participants.

Responding to the question “To what extent has the COVID-19 pandemic affected the volume of your work?”, the survey participants responded in the following manner, the volume has decreased (47.77%), the volume stayed the same (29.30%), the volume has increased (18.47%) and there are no business activities (4.46%). Even with the whole country in quarantine, only half of the participants noticed decreased volume and demand, with the rest noticing the same levels of activity or an increased one.

More than half of respondents (60.90%) agreed fully with a question “To what extent can you run business processes from home?” and said they can execute all business processes from home. One third (30.77%) said they can only execute some business processes from home, while the rest answered they cannot work from home (6.41%) or that the business processes cannot be executed from home (1.92%).

Answering the question “Has the COVID-19 pandemic affected the modernization of your business?”, the survey respondents mostly answered that the pandemic did not modernize their business (61.78%), but there was a clear trend among others that replied positively (38.22%).

On the question “Have you implemented innovative and new business models even before the COVID-19 pandemic?” most respondents answered positively (80.89%) and in lesser extent negatively (19.11%). This corresponds with the previously mentioned efforts from companies to digitize their businesses and transform the way they conduct business.

Most of the participants (76.43%) confirm that they will continue business operations in the future by replying to the question “Do you think that you will be able to continue your business in the future?”, and (23.57%) said that they will not continue their business activities in the future.

The survey respondents almost evenly replied to the question “Do you think that you will need some help from the state in continuing business activities or resuming the execution of those activities?”, answering positively (49.03%), and negatively (50.97%).

Most of the survey responders replied positively (75.48%) on the question “Do you think that the new ways of working and communicating will be used in your company after the COVID-19 pandemic?”, with the rest answering negatively (24.52%). It is not uncommon to see the business going back to their old ways after the crisis has passed, as proposed here by the participants.

For the “Assess your organization's readiness for the new situation?” question, the survey participants needed to use three levels of readiness for each category by selecting poorly prepared, medium prepared, or very prepared for their business organizations.

Table 1. Organization's readiness for the new business situation

Criteria/Category	Human Resources	Logistics	Sales	Administration	Management
Poorly prepared	10.19%	14.65%	28.03%	14.65%	12.74%
Medium prepared	35.67%	37.58%	34.39%	40.13%	33.12%
Very prepared	54.14%	47.77%	37.58%	45.22%	54.14%

Source: Authors

Furthermore, the survey showcased that the biggest impact from the COVID-19 was done on the hospitality and service industry, where almost third of the survey participants answered that they are not working (29%), while most of the employees had to start working from home, ranging from 73% till 91% depending on the company size. Regarding resilience, most respondents agreed that the situation negatively affected their volume of business, with commerce (79%), hospitality (71%) and traditional design and print industry (100%) leading the category as the most hit by the pandemic.

6 CONCLUSION

This paper showcases the initial impact of coronavirus on the Serbian business sector and its employees within different industries. As previously mentioned in this research, many business organizations were forced to quickly change the way they deliver products and services to their customers and change the production and work processes at the same time. For the case of Serbia, companies showed real resilience by continuing work and delivery even under quarantine and with all kinds of uncertainties. Furthermore, many employees agreed that their business organizations had successfully implemented new technologies and standards for working remotely, ensuring safety and work continuity for everyone in the organization. From another perspective, almost half of the companies that were in the survey, need additional help from the government to continue operations and return to the levels of production and commerce that were before the coronavirus pandemic. Most of the survey participants agreed their companies will continue to operate after the pandemic has ended, but were unsure if they can complete all the business processes from their homes, thus making remote work still a thing for the future companies to attain. The authors of this paper would agree that the best responses to the “new normal” conditions were made by the companies who work in the tech, marketing, and related industries because they already have achieved a high digital transformation maturity level within their organizations. For the rest, the digital transformation is a must in the ever-changing world and a key factor for resilience that will help business organizations survive difficult times.

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ECONOMIC CONSEQUENCES AND THE PROBLEMS OF CONDUCTING BUSINESS IN THE AGE OF CORONA

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Abstract

This paper presents the results related to the problems and challenges in business in the Corona age, as well as presenting the economic consequences faced by countries on all continents. Also, different assumptions and trend estimamites regarding GDP losses are given. Most industries have experienced significant losses. Tourism and the hospitality industry suffered the greatest losses due to politically motivated movement and travel restrictions. Some countries have shown a minimum moral code in terms of preventing negative phenomena in the form of pandemic profiteering.

Keywords: Business conducting, corona, pandemic, risk, business.

1 INTRODUCTION

Conducting the business of any organization, regardless of size, is a challenge that managers face every day. Global business, which implies the dislocation of certain business units in relation to the parent company, is inevitable in this century. Only small organizations that are oriented exclusively toward the local market and that are satisfied with their survival of the market are not directly affected by world events in terms of economic and political consequences. This does not indicate that they are completely protected and safe, but rather that the impact of the mentioned circumstances is only indirect. In certain circumstances, their survival is even more endangered given the drastic drop in local traffic.

One of the most extreme circumstances that has affected the commerce of most of the business world is the current COVID-19 virus pandemic – the Coronavirus. As of March 2, 2020, the countries with the most reported cases include (respectively) China, Korea, Italy, Japan, the United States, and Germany. It is these countries that represent the following:

• about 55% of the world supply and demand (GDP).
• about 60% of the world production and
• 50% of world exports[1].

With the exception of the medical analysis of the mentioned virus in terms of its impact on the health of the population, as well as the possibility of control or even complete remediation, the data on the economic consequences for organizations and society as a whole leaves a strong impression.

2 THE RESULTS OF PREVIOUS RESEARCH

The impact of the pandemic on business is multiple. One of the direct effects relates to the slowdown in trade between China and the rest of the world given the fact that a significant percentage of merchandise originates in China. All organizations whose business relied on the import of raw materials or finished products from China have found themselves in an unrewarding position. Their business is jeopardized if there is no alternative supply channel for similar products.

The economic consequences can be viewed in different ways. One of the basic parameters that shows the intensity of the negative impact of the pandemic is the loss of GDP. The following table presents the results related to the GDP loss of countries on different continents. The results are presented for all 7 scenarios given the limited assumptions. The scenarios differ from one another and, accordingly, so do the estimates regarding the loss of GDP.

Table 1: Loss of GDP in 2020 (% deviation from baseline)

COUNTRY	S01	S02	S03	S04	S05	S06	S07
AUS	-0.3	-0.4	-0.7	-2.1	-4.6	-7.9	-2
BRA	-0.3	-0.3	-0.5	-2.1	-4.7	-8	-1.9
CHI	-0.4	-1.9	-6	-1.6	-3.6	-6.2	-2.2
IND	-0.2	-0.2	-0.4	-1.4	-3.1	-5.3	-1.3
EUZ	-0.2	-0.2	-0.4	-2.1	-4.8	-8.4	-1.9
FRA	-0.2	-0.3	-0.3	-2	-4.6	-8	-1.5
DEU	-0.2	-0.3	-0.5	-2.2	-5	-8.7	-1.7
ZAF	-0.2	-0.2	-0.4	-1.8	-4	-7	-1.5
ITA	-0.2	-0.3	-0.4	-2.1	-4.8	-8.3	-2.2
JPN	-0.3	-0.4	-0.5	-2.5	-5.7	-9.9	-2
GBR	-0.2	-0.2	-0.3	-1.5	-3.5	-6	-1.2
MEX	-0.1	-0.1	-0.1	-0.9	-2.2	-3.8	-0.9
CAN	-0.2	-0.2	-0.4	-1.8	-4.1	-7.1	-1.6
ARG	-0.2	-0.3	-0.5	-1.6	-3.5	-6	-1.2
RUS	-0.2	-0.3	-0.5	-2	-4.6	-8	-1.9
TUR	-0.1	-0.2	-0.2	-1.4	-3.2	-5.5	-1.2
USA	-0.1	-0.1	-0.2	-2	-4.8	-8.4	-1.5
KOR	-0.1	-0.2	-0.3	-1.4	-3.3	-5.8	-1.3

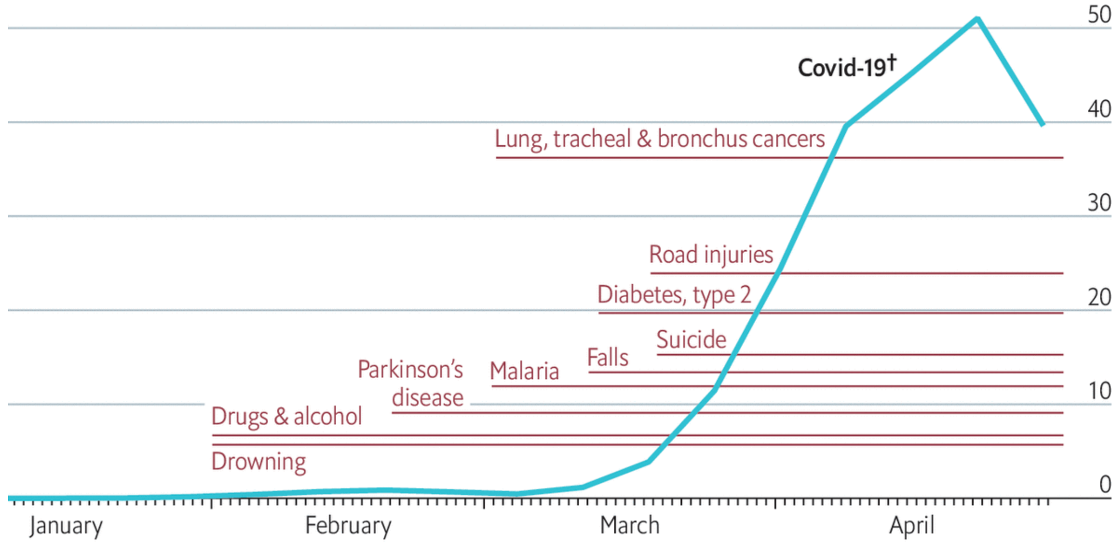
Source: https://www.brookings.edu/wp-content/uploads/2020/03/20200302_COVID19.pdf [2].

Scenarios S01, S02, S03 assume that epidemiological events have been isolated in China. The economic impact of the pandemic on China has gradually began to spill over to other countries. The negative impact is noticeable on several fronts, these being trade, capital flows and the effects of changes in risk premiums in global financial markets. Scenarios S04, S05, S06 are pandemic scenarios where different degrees with epidemiological shock occur in different countries. Scenarios 1-6 assume that the shocks are temporary, while scenario 7 is the case where a mild pandemic is expected to recur indefinitely each year [3].

Based on the presented scenarios, it can be stated that the negative impact of the pandemic is widespread on all continents, with assumptions differing only in terms of intensity and continuity.
The pandemic must be viewed multidimensionally. No angle of observation, be it health, sociological, eonomic or any other can be a unique aspect of analysis.

If we look at the health aspect, i.e. loss of human lives, which, in addition to the sociological one, also have an economic impact on all countries of the world, then the comparison of the COVID-19 pandemic with other diseases can be justifiably used for a clearer understanding of the consequences. The following chart clearly shows the shocking impact of COVID-19 relative to the impact of other diseases.

Chart 1: Global disease burden: COVID-19 versus other causes in 2020.



Source: file:///C:/Users/user/Downloads/PEP/covid-19_and_human_development_0.pdf, p. 4. [4].

Based on the data presented in Chart 1, it can be concluded that COVID-19 was by far the strongest cause of death in early 2020. The diagram shows that the pandemic overcame all other diseases as the cause of death in just one month (March-April). Such data represent a potential danger of spreading panic among the inhabitants of all countries. The absolute dominance of news in the media dealing with the pandemic issue (COVID-19) is a significant limiting factor in both regional and global business.

3 ECONOMIC CONSEQUENCES OF A PANDEMIC

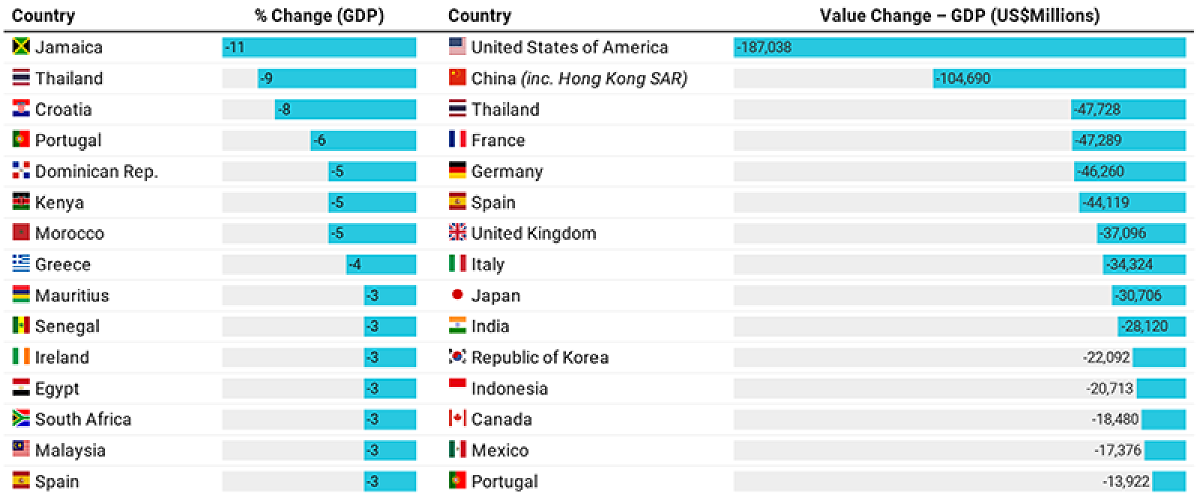
The pandemic has caused the biggest economic shock that the world economy has witnessed for decades. In turn, that shock has caused a general collapse in global activity. Most countries have introduced various mitigation measures in the form of border closures, school closures, and travel restrictions in the aim of limiting the spread of COVID-19 and ease the burden on health systems. The applied mitigation measures have sharply limited consumption and investments. These measures have also contributed to the emergence of a limited labor supply. Disabled cross-border crossings have disrupted global trade, the supply of retail chains. travel and tourism [5].

Tourism is the branch most economically affected given the political decisions to close the borders of most of the countries in the world. Due to travel restrictions, the cruise industry had suspended sea travel until September 2020. The industry has recorded record losses in stock prices between the three main cruise lines - Carnival, Norwegian Cruise and Royal Caribbean cruises. In fact, Carnival's share price fell by 70% in the first quarter of 2020. Since April 2020, the airline industry (IATA) has recorded 80% fewer flights compared to the same period in 2019. It is estimated that the global airline industry is expected to lose US$ 84.3 billion in 2020 [6].

The impossibility of travel is an insurmountable obstacle to the development of tourism. Tourism is an economic branch that is directly conditioned by the movement of people. The hospitality industry is inextricably linked with tourism. Catering facilities record negative records in terms of the number of overnight stays. Since there is no alternative way to sell catering services, the hospitality industry is one of the most affected economic areas, in addition to tourism.

There are several scenarios according to which losses in tourism can be seen as more or less devastating. The losses of the global GDP under the most optimistic scenario of tourism decline amount to about US$ 1.17 trillion, which is about 1.5 percent of the global GDP. Extending the four-month closure to eight and 12 months increases losses in a fairly linear way, to US$ 2.22 (2.8% of the world GDP), i.e. US$ 3.3 trillion (4.2% of the world GDP), respectively. Estimated GDP losses of US$ 3.3 trillion are more than twice the size of the international tourism industry itself, in the worst case scenario [6].

The following chart presents the losses in terms of GDP for countries that are absolutely oriented, and thus most dependent on tourism.



Country	% Change (GDP)	Country	Value Change – GDP (US$Millions)
Jamaica	-11	United States of America	-187,038
Thailand	-9	China *(inc. Hong Kong SAR)*	-104,690
Croatia	-8	Thailand	-47,728
Portugal	-6	France	-47,289
Dominican Rep.	-5	Germany	-46,260
Kenya	-5	Spain	-44,119
Morocco	-5	United Kingdom	-37,096
Greece	-4	Italy	-34,324
Mauritius	-3	Japan	-30,706
Senegal	-3	India	-28,120
Ireland	-3	Republic of Korea	-22,092
Egypt	-3	Indonesia	-20,713
South Africa	-3	Canada	-18,480
Malaysia	-3	Mexico	-17,376
Spain	-3	Portugal	-13,922

Chart 2: Source: file:///C:/Users/user/Downloads/PEP/ditcinf2020d3_en.pdf, p. 13. [7].

Based on the data from the chart, it can be noticed that Jamaica, Thailand and Croatia are the countries with the largest negative percentage of GDP, while the USA and China are projected to have the largest absolute losses in terms of GDP.

4 NEGATIVE AND POSITIVE EXAMPLES OF THE PANDEMIC SITUATION

The free market is a suitable ground for various immoral activities of sellers in times of crisis in society (wars, earthquakes, floods, pandemics, etc.). In such, non-standard circumstances, socially responsible countries are directly involved in the functioning of the market by affirming rational frameworks in terms of quantity, quality and the price of products that can be categorized as extremely necessary (basic foodstuffs, hygiene products, medicines, medical devices and health care products, etc.). The current pandemic has once again shown that there are individuals and groups who are ready to use the specific situation and trouble in general in order to profit extremely, despite the penal policies. An example of this are the prices of protective masks, disinfectants, and medical gloves.

In fact, from mid-January to mid-March 2020, 3M masks cost 2.72 times more than those sold by Amazon in 2019. Similar results were obtained for Purell hand sanitizer products [8].

A much more drastic example of an amateur economy was seen in the Republic of Serbia during the state of emergency due to the COVID-19 pandemic. At the beginning of the state of emergency, in mid-March in Serbia, masks were sold for two hundred dinars per piece at one point, although their regular price, before the appearance of the Coronavirus, was almost ten times lower, around 30 dinars. Disposable protective gloves have also become drastically more expensive, and a pair of gloves cost as much as 50 dinars, compared to the price of 15 dinars before the pandemic [8].

One of the positive examples of state influence and consumer rights groups refers to a letter penned to Amazon and other vendors by a group of 34 U.S. attorneys. They recommended that the online retail platforms should set up policies and apply restrictions on reckless price movements during emergencies. In that letter, they strongly emphasized that the platforms that control Internet sales should prevent the occurrence of reckless price increases. They also stressed the need to define and implement strong policies that would severely punish negative examples from the outset [8].

5 CONCLUSION

A pandemic cannot be viewed from only one angle, regardless of whether that angle of observation is health, sociological, economic or some other. Economic observation of the consequences of the pandemic indicates dramatic losses of GDP. All economic areas are endangered and state aid can be a salvation for small and medium-sized enterprises. The mitigation of the consequences will depend on the decisions of the World Health Organization and the political centers of power. Political decisions directly affect the business of all companies and indirectly affect all employees in the public sector, senior citizens, students, all youth - in a word, all residents. The tourism and hospitality industries have experienced an unprecedented loss, which will be reflected in the results in the coming period. The consequences will gradually spill over from the health sector through the economic area to the social sector.

Thereby, conducting business during the pandemic is a challenge for all organizations and especially for small and medium-sized enterprises. Organizations that survive the pandemic will be true heroes of the modern age. Unemployment, poverty and unrest are just some of the potential dangers of continuing to restrict movement, and therefore business.

Many organizations will be facing a moral dilemma regarding profits during the pandemic, to the detriment of their customers, ordinary citizens. Systemically strong states may have enough strength to fight on that front as well, while economically weak and credit-dependent countries will be a suitable ground for profiteering as a negative phenomenon.

The only area that will passively profit, so to speak, is ecology. It is only Mother nature that will rest from pollution, people, and the negative impact of traffic.

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HIGHER EDUCATION AND DIGITALIZATION DURING THE COVID-19 CRISIS - WHAT DO THE YOUTH THINK ABOUT ONLINE TEACHING?

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Abstract

The current situation in the world, caused by COVID-19 has brought changes in all spheres of life. Processes that could be digitized suffer fewer consequences during this period. Changes are present everywhere and affect the capabilities and habits of individuals, businesses and society. The declaration of a state of emergency and digitalization have inevitably led to changes in the education process. As in the world, so in Serbia the educational system has turned to online teaching. This school year has gone through the transformation of traditional learning from books and direct contact with teachers into a digital form. The aim of the research in this paper was to find out how much the youth in Serbia were ready for the process of teaching digitalization, what they were satisfied with, and what changes they consider crucial to introduce in order to raise online teaching to a higher level.

Keywords: Digitalization, education, technology, online teaching

1 INTRODUCTION

In order for the digitalization process to be successful it is necessary that certain conditions are met: certainly one of the most important is understanding the technical skills and knowledge of both teachers and students. It is important to discover the needs of students and strive to achieve them. Thanks to information technologies (ICT) knowledge is much more accessible to young people. The basic and obligatory use of ICT in education usually includes: a system for registering exams and monitoring grades, downloading materials that teachers post on the pages of course or send via e-mail, communication with professors and colleagues via e-mail. These activities are now complemented by the mandatory use of various online platforms. Online platforms facilitated communication between the main actors: professors and students and their use varied depending on the capabilities of educational institutions. Another advantage of information technology is that teaching now adapts to changes faster, it is more flexible and efficient. Most researchers agreed that technology - assisted learning has become a compulsory teaching component in the modern world.

This paper is organized as follows: Section 2 defines digitalization. Section 3 gives a brief explanation of digitalization of education. Section 4 presents the methodology of the work. Section 5 provides an overview of the results of the research of young people in Serbia, regarding online learning during a pandemic COVID-19. Section 6 contains the conclusion of the paper.

2 DIGITALIZATION

Information technologies, hardware and software programs aim to improve and ease all areas of public communication, including knowledge sharing. Internet technologies offer the possibility to quickly and efficiently search, use, analyze, and process information. [2]

Digitization means the transformation of all types of information into digital language. This means that all the processes we encounter every day are now changing their form of existence and functioning of the entire system. Employees in companies, educational institutions and state-owned enterprises undergo training and improve their skills in using technology. According to the Republic Statistical Office of the Republic of Serbia 3.81 million inhabitants use the Internet every day or almost every day. The computer was used by 3.17 million people every, or almost every day while the mobile phone was used by 4.95 million people in 2019. [3] These data only confirm that Serbia does not lag behind the developed countries in the level of knowledge in the use of technology.

Thanks to technology, we place our knowledge and ideas in the world with one click. This means that we have access to all the information through smart devices and digital channels. Digitization should be observed as a socio-technological phenomenon with the processes of adoption and use of technologies for personal, organizational or social purposes. [4] Emerging digital technologies influence our behavior and the choices we make. [5] In addition to the fact that we now "carry knowledge in our pockets", digitalization also has its downsides.

One of the negative aspects of digitalization is the definition: Digital transformation is a long process of creating a "digital organization" in which most processes are performed without human participation. [6] A large number of people in all branches of industry lost their jobs due to the digitalization of the business itself. Machines and programs change people in production processes worldwide. Processes are simplified while at the same time the need for labor is reduced. There is a growing demand on the labor market for information technology experts.

3 DIGITALIZATION IN EDUCATION

Digitization in education is a transformation of the educational process formed under the influence of the use of modern information technologies and technological solutions. [7] The main goal of digital transformation in education is to achieve maximum efficiency through the use of various technological solutions that will enable the fulfillment of all set goals in the educational process. Education systems around the world, professors, students, parents and technology companies, have been united in recent months in the face of the challenges of digital teaching and the creation of new models of education. The fact is that we are witnessing an accelerated change in education.

Technology used for educational purposes represents a wide category of educational products and services and is used both in educational institutions and by private individuals. The main areas of application of Information Technology in education are: [8]

- Development of pedagogical software for various purposes;
- Development of educational websites;
- Development of methodological and didactic materials;
- Management of actual facilities;
- Organization and implementation of computer experiments with virtual models;
- Targeted retrieval of information.

Although the development of ICT skills is recognized as essential for the full and active participation of students in the future, the use of digital media in teaching and learning does not automatically guarantee the active participation of students and their high achievement. [9] The digitalization of education leads to changes in the labor market, in educational standards, the identification of needs in the development of new competencies of the population and is also focused on the reorganization of the educational process, re-examining the role of teachers and students. [10] New trends in digital learning environments will continue in the direction of personalizing and adapting the learning experience in unique digital learning environments that use new realities. Advances in virtual, augmented, and immersive technology and media increase real-time synthesis experiences during media use.

In higher education around the world, the digital transformation is influenced by government policies and institutional development strategies, where both play a key role in shaping the digitization landscape of higher education. [11] According to Seres et al (2018) [12] the digital business transformation of higher education institutions has six dimensions, or transformation blocks that make up:

- Established and accepted organizational digital strategy and approach to the application of innovations;
- Organized, fast and essentially adaptable collaboration processes in modern business models;
- Complete automation of business processes;
- Detailed analysis and research of customer decision-making;
- Information technology that supports all organizational business processes; and
- Usable and relevant data and the use of data analytics as a basis for making decisions in accordance with the goals and strategy of the organization.

The industry of educational technology includes various devices (tablets, computers), applications, software and other technologies that aim to improve learning and education in the home or educational institution. [13] Also, the Internet plays a very big role, offering more information than the world's largest libraries, so it is to be expected that the use of the Internet at universities has positive effects. The Internet plays an essential role in educational institutions as it enables the needs of students, teachers and institutions to be met, especially when it comes to searching for information and simple communication. The use of the Internet can also be seen as supporting and promoting the technological revolution that is taking place in education. It seems that the Internet is the most perfect instrument of education: it is very practical, but also has immeasurable potential for expanding and deepening knowledge.

Educational technology is changing the way that teachers teach. Teachers do not always have to teach from the classroom at certain times, and students can access the lessons whenever they want and wherever they are. On the other hand, educational technology is changing the way that students approach learning. There are several different trends and tools in the service of education which rely on technology.

In addition to the Internet in the future, we can expect greater use of Artificial Intelligence (AI) that can automate core activities in education, such as administrative tasks, or even assessment and enrollment of students. [14] Also, students can get the help of an AI teacher if the teacher at that time cannot achieve to help all students. It is predicted that in the future, Artificial Intelligence will be an important topic in the teaching framework because it helps to personalize and simplify teaching process. AI can be implemented in colleges through the use of chatbots that are available 24 hours a day and can help students answer their questions instead of professors. [13]

Machine learning is a subset of artificial intelligence, based on the idea that machines access data and statistical techniques that they can learn on their own, without explicit programming. [15]

Gamification is the use of video game elements, where its elements help to create an interesting and positive environment for students, with the aim of increasing student motivation and their results. [13][15] This concept emphasizes the acquisition of knowledge rather than grades.

The potential of using augmented reality in combination with virtual reality will grow exponentially in the coming years. Virtual worlds help students to gain valuable practical experience which would not otherwise be available to them. Students can use various simulations to get practically involved in a certain real life process. [13]

Blockchain is one of the latest trends in educational technology and can have the greatest use value in interacting with teachers from different parts of the world through the online learning platform. It represents data storage in the cloud to ensure students' records and other records, or safe and secure "vault" for proper document management. [13][15]

In the modern world, the main engine of progress is a man with his knowledge and abilities. In this regard, currently the most relevant is the formation for him of most comfortable conditions in which he would be able to develop himself and improve the world around him. [16] In addition to humans, robots can be used within the education industry as part of interactive displays to attract students' attention. In addition, robots are able to efficiently find all relevant target market data that is worth analyzing. [17]

Internet of Things (IoT) consists of several interconnected devices, systems and services that rely on autonomous communication within the existing Internet infrastructure. [18] The applications of IoT in education are numerous - IoT enables educational institutions to improve safety by monitoring key resources and improving access to information, which makes it easier for teachers to create "smart teaching plans". Students progressively use smart devices and tablets that are equipped with interactive applications with built-in graphics and simulations. This digital transformation will reveal new insights that promise to change the way we think, learn and apply things in our real life, more precisely in the future education system. [19]

ICT has also brought some negatives effects concerning the protection of privacy, simplification of applied language content in communication, alienation of people, etc. [20] That is the reason why special attention will be paid to improving cyber security, especially in terms of data protection, combating identity theft, software and viruses on student devices, university servers and data warehouses, which often results from the lack of security tools. [21] Improving cybersecurity is becoming a major challenge in the development of educational technology in the coming years and is crucial to ensure that students have a safe and productive environment to continue their studies, as well as teachers to ensure that their personal data is protected.

4 METHODOLOGY

The aim of research was to determine how much online teaching was conducted in Serbia during the COVID-19 pandemic and how satisfied students are with the quality of work in this way. The research was conducted among young people in Serbia. An anonymous questionnaire was used as an instrument and 139 young people (high school and university students) participated in the survey. The questionnaire consists of 14 questions, among which five questions are the Likert scale and one is an open-ended question, while the remaining questions contain the offered answers.

5 RESULTS

The Table 1 shows the distribution of respondents by gender, age and occupation.

Gender:	
Male:	52 (37.4%)
Female:	87 (62.6%)
Age [years]:	
< 20	24 (17.3%)
20 - 25	113 (81.3%)
> 25	2 (1.4%)
Occupation:	
Student:	134 (96.4%)
Pupil:	5 (3.6%)

Table1: Distribution of respondents by gender, age and occupation

To the question “Did you have organized online classes after the declaration of the state of emergency?” (Fig. 1), 128 respondents (92.1%) said yes, while 11 respondents (7.9%) said no.

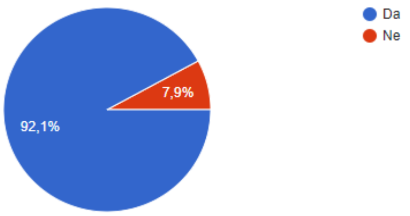

Figure1: Did you have organized online classes after the declaration of the state of emergency?

Figure 2 shows answers to the question “How many lectures did you have on a daily basis?” where 72 (51.8%) respondents said 1 – 3 school classes, 60 (43.2%) of them said 3 – 5 school classes and only 7 (5%) said that they had more than 5 school classes.

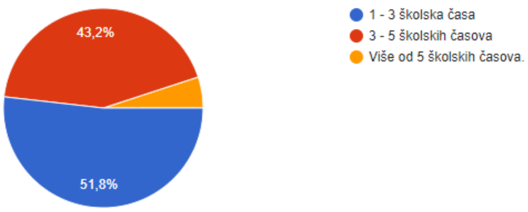

Figure 2: How many lectures did you have on a daily basis

Next question was „Have you communicated with teachers/professors via email, chat on social networks or through a specific platform?“. (Fig. 3) The answers of respondents are: 90 (64.7%) of them told us “We communicated via emails.”, 22 (15.8%) of them chose “We communicated through messages.” for their answer and 100 (91.9%) chose the answer “We communicated through the platform.”

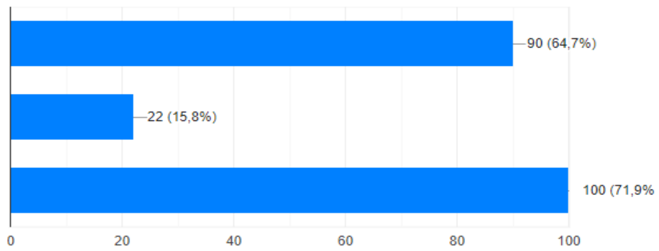

Figure 3: Have you communicated with teachers/professors via email, chat on social networks or through a specific platform?

From the answer to the question "Which platform did you use for learning?" (Fig. 4) we can conclude that the largest number of educational institutions in Serbia learned through the platform Google Meet – 76 (54.7%) respondents gave the same answer. There is not much difference in the number of users of other platforms: Zoom 11 (7.9%), Microsoft Teams 15 (10.8%), Skype 11 (7.9%), other platforms were used by 14 (10.1%) respondents and 12 (8.6%) of them didn't use any platform.

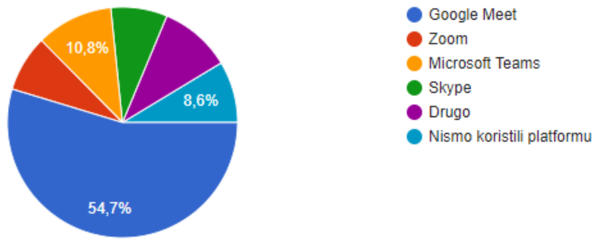

Figure 4: Which platform did you use for learning?

The following five questions used the Likert scale. The first one is "On a scale from 1 to 5, rate how satisfied you were with the communication with teachers/professors during online classes?" (Fig. 5) From the answer we conclude that the lecturers really tried to keep the communication with students at a high level, because even 58 (41.7%) respondents said that the communication was very good and only 7 (5%) said that it was very bad.

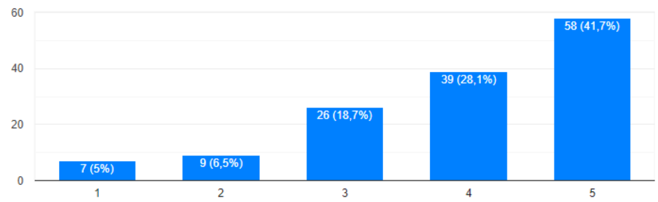

Figure 5: How was the communication with teachers/professors during online classes?

We can see that the lecturers performed their task professionally from the answers to the question "On a scale of 1 to 5, rate how dedicated your lecturers were to explaining the material." (Fig. 6) The vast majority of respondents said that the lecturers were very dedicated to explaining the material – 78 (56.1%) of them. Only 4 (2.9%) respondents think that the lecturers were not dedicated to it at all.

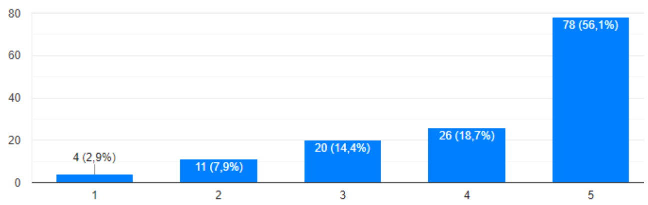

Figure 6: Dedication of lecturers to lectures

Understanding of learning materials was at a high level, as we see from the answers to the question "On a scale of 1 to 5, rate how understandable the lecture materials were for learning" (Fig. 7) That the learning materials were very understandable said 65 (46.8%) respondents. On the other hand, only 2 (1.4%) respondents thought that learning materials were not understandable.

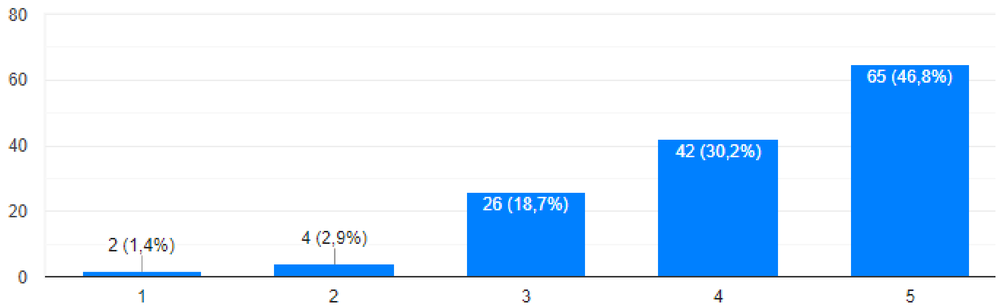

Figure 7: Comprehensibility of learning materials

Among statements concerning the advantages of this way of learning: A. Thanks to the materials available on the Internet it was easier for me to find the most important parts of the material in the book, B. Availability (it was possible to attend lectures, wherever you were), C. Save time on transportation to the college building, D. Greater commitment of the lecturer to each student individually. Ss the two most important advantages, the respondents singled out statements C and B. (Fig. 8)

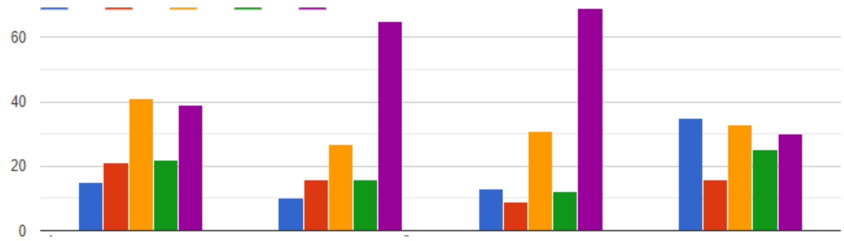

Figure 8: Advantages of this way of learning

Regarding the difficulties in learning, the statements are listed in the following order: A. Lack of communication with lecturers, B. Lack of freedom to express views and opinions, as the lecturers only sent us learning materials, C. Lack of freedom to express views and opinions, because the lecturers did not allow us to use the microphone on the platform, D. Lack of instructions for using the platform. The statements that the respondents chose for the biggest disandvetages of this way of learning are statements A and B. (Fig. 9)

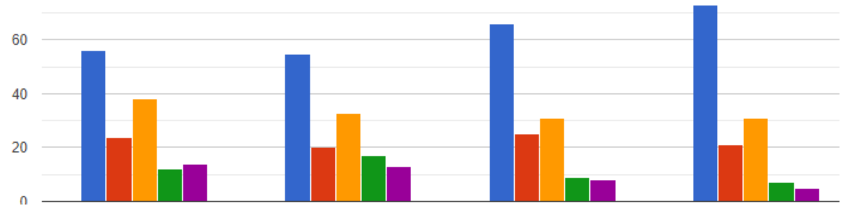

Figure 9: Disadvantages of this way of learning

The only open-ended question is “What would you change about the way online classes are held, and what do you think is extremely important for improving the quality and facilitating this type of learning?”. The majority of respondents said that they were satisfied with the way online classes were organized, and that they would not change anything – 65 of them. The largest number of complaints refers to increasing interaction between teachers/professors and students. There are numerous tips for professors to use the same platform for all subject in one educational institution. Another disadvantage is the lack of knowledge of lecturers in the use of the platform. Students also wants classes which are more interactive. All other answers are just praise for the lecturers and all the effort they put in to make students have as few learning problems as possible.

6 CONCLUSION

Based on the obtained results, it can be concluded that students are mostly satisfied with the way online classes were held. Despite the fact that the professors did not have enough time to prepare for this type of lecture, it did not affect the teaching process. It follows from the above that the teachers will be able to overcome obstacles related to the use of different on-line platforms in the future, and succesfully organize classes so that students are more involved in teaching process. A recommendation for future research may be to expand the sample with an in-depth analysis of the youth satistaction, which would enable better understanding of students, their greater engagement, and the ability to monitor trends in digitalization of education.

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II ENTREPRENEURSHIP, INNOVATION, AND KNOWLEDGE SOCIETY

INNOVATION AND ENTREPRENEURSHIP: CREATIVITY, OPPORTUNITY AND FEASIBILITY

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Abstract

Innovation is the essence and heart of entrepreneurship, because whenever people start a business or become the owner of someone, it is a new beginning and often a new experience. The entrepreneurial future is reflected in the fact that entrepreneurs have a special set of observational skills, as well as thinking skills that help them identify good business opportunities. Entrepreneurs may notice things that others have missed, but also the motivation to look for chances and opportunities to start and / or grow a business. Researchers in the field of entrepreneurship and small businesses believe that the behaviour of recognizing opportunities is the basic and most important entrepreneurial behaviour. Also, there is innovation and implementation of a creative idea or opportunity that leads to profitable and effective outcomes. Identifying opportunities means looking for and finding new ideas that lead to business opportunities. This process often involves creative thinking that leads to the discovery of new and useful ideas.

Keywords: innovation, entrepreneurship, knowledge economy

1 INTRODUCTION

Most of the ideas that have been turned into business, or that result in “new and improved” products and services, come from the information and observations we are surrounded by every day.

Innovations today represent the key factor of growth and development of modern enterprises and in many industrialized countries they represent the main driving force of the development of economy. Innovativeness is one of the most important factors in survival, growth and development of an enterprise. [1] Innovation is a prerequisite for the development and conditio sine qua non of success of every enterprise and economy as a whole.[2] Successful small business owners must possess the power of observation or use “top-secret” strategies when looking for ideas for new businesses or innovations for their existing companies. It is much more likely that these people have learned to pay attention to the signs around them and to ask many questions about things that most people take for granted. This search and finding new ideas that lead to business opportunities is called identifying opportunities. [3]

The exact reasons why entrepreneurs act to be better at finding good ideas are not clear. The idea of entrepreneurial vigilance has gained the attention of scientists, which means that entrepreneurs have a special set of observational skills and thinking skills that help them identify good opportunities. [4] Some scholars believe that the key to entrepreneurial work lies in the fact that entrepreneurs can notice things that others have missed, without actually starting a formal search for opportunities. Others say we consider the motivations of entrepreneurs to look for new ideas. For example, if a fast food restaurant owner notices that customers are looking for a substitute for healthier ingredients, they may be motivated to contact their suppliers and inquire about purchasing those ingredients that customers are looking for or change the offer, or increase menu offers. so that his customers would be satisfied and so that he might gain new customers. The analysis of the innovation is a very current topic in all countries. Many authors have analyzed innovation,entrepreneurship in their studies [16][17][18][19][20][21][22][23][24][25].

2 SOURCES OF INNOVATION

Ideas for new businesses come from a variety of sources. A person who wants to start a business can start looking for opportunities that exist in the market, perhaps as a way to use the skills and knowledge they have acquired in college or in the workplace. A panel study conducted in the United States on entrepreneurial dynamics, on a sample of 480 entrepreneurs, examined whether a business idea came up first or a decision was made to start some kind of business first. The answers were sublimated and the following answers were given to the question of what came first for new companies: [5]

- Business idea - 37%;
- Decision to start a company - 42%;
- The idea and the decision were simultaneous - 21%.

Whether it was preceded by an idea or a decision to start a business, we now consider the factors that led small business owners to their business idea. Namely, in the Panel Study of Entrepreneurial Dynamics, 480 entrepreneurs were asked "What led you to your business idea?" Figure 1 presents the results of this question. Work experience in a particular industry or market was the most frequently mentioned source of ideas, followed by discussion with family and friends.

So, the most important factors that precede the realization of entrepreneurial business are shown in the following text, they are:

- Work experience,
- Related business,
- Hobby or personal interest,
- A random event or the discovery of beautiful things,
- Family and friends,
- Education and expertise,
- Technology transfer and licensing.

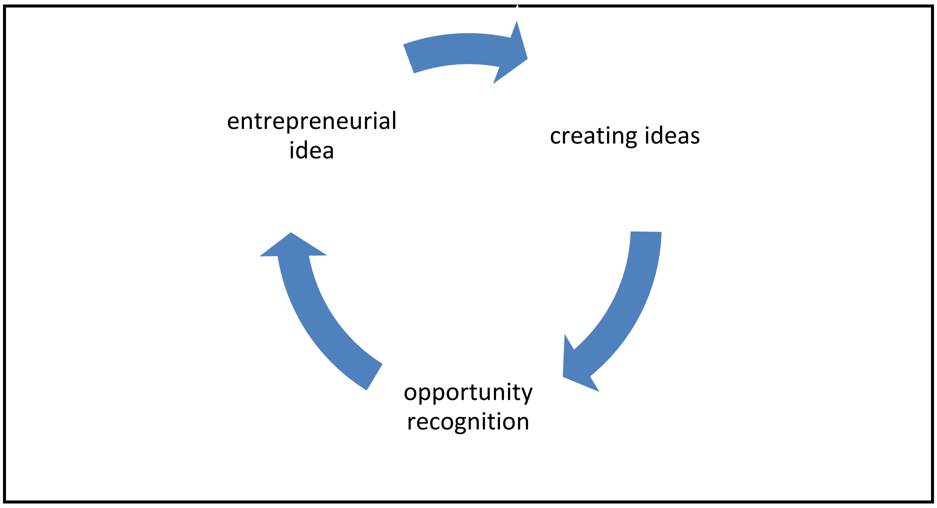

Figure 1. Factors influencing the realization of entrepreneurial business

Source: http://www.entrepreneur.com/businessideas/index.html [6]

Work experience - Many successful small business owners have spent years working for the company and gained experience with new things that can be done differently. Sometimes the idea grows out of listening to customer complaints. This means that one can use one's own work and personal experience to come up with an idea for doing a different job. Sometimes the best business ideas come from your own frustration or from not finding exactly what clients are looking for.

Similar business - Even if the future entrepreneur has no experience in any industry or market, he can see the business in the area that intrigues him, because, for example, he likes certain products or if he finds out that there is a growing market for that business, he can design a way to expand some possibilities.

Hobbies or personal interests - Many people find a way to turn their hobbies into a successful business. For example, David and Tom Gardner, founders of Motley Fool, did not start by wanting to write an online newsletter about investment consulting on a website. They were fiery dice baseball players at a high school called Strat-O-Matic and had a league in their hometown outside of Washington D.C., where they grew up. Tom later said that it was a numbers game with a lot of statistics. There were as many variables, as in the stock market and as companies have. It was a thing that involved people, which is a big part of running a company, because it was fun and it consisted of trading with your competitors.

Accidental event or discovery of beautiful things - If it is true that successful owners are awake when it comes to what is happening around them and pay attention to things that most people miss, then it is no surprise to learn that another popular source of business ideas comes from random events. Whether it's about being in the right place at the right time, as happiness, or as vigilance, many businesses are set up as a result of the unexpected. During the early 1980s, Rangaswamy Srinivasan worked for IMB where he worked with lasers and organic plastics. He accidentally came up with a "great idea" while sitting at a table on Thanksgiving, when he wondered how effective a laser would be in cutting a turkey leg. His experiments contributed to the development of laser eye surgery, an idea that came to his mind as he observed his surroundings. [7]

Family and friends - Ideas can also come up in conversation with family and friends. As a rule, an entrepreneur is open to new proposals, which can lead to a great business idea. Joan Ecker, founder of Fat Hat Factory, a $ 1.7 million clothing company, came up with the idea to make a hat that could be shaped when a friend told her he would visit her at her new home in Vermont only if she got him a warm hat. [8]

Education and expertise - Some small business owners first decide they want to own a business, and only then look for a viable idea for that business. Often, future entrepreneurs consider their own skills and talents when looking for ideas. Consulting companies are a very popular example of this approach to business ideas. Many consulting company owners have taken their own skills and launched businesses by selling those skills to other companies or individuals who need them. Some of these consultants either lost their jobs or voluntarily left large employers to consult clients because they felt that their talents would be more significantly recognized and rewarded in their own company.

Technology transfer and licensing - One powerful but rarely used source of ideas are universities and government agencies. Both develop a huge range of new technologies or rework existing technologies, but never do anything with them! Large universities and government agencies, such as NASA and the Department of Agriculture and Defense, all offer technology inventions free of charge to small developing businesses. There are even government programs that help fund such efforts. For example, in the United States, a good place to start is Government technology-related sites such as NASA, the Department of Defense's website, or the Byrd National Technology Transfer Center. Science parks are rapidly opening in Serbia, so a university with government-funded research can contact their technology transfer office and obtain information on available patents for commercialization.

Technology Transfer and Licensing - A license is a legal agreement that gives you the right to use the appropriate portion of intellectual property. Licensor - a person or organization that offers the rights of an appropriate portion of intellectual property. What these organizations will offer is an arrangement called licensing. A license is a legal agreement that gives the right to use an appropriate portion of intellectual property (for example, technology). In return, the licensee (the person or company that obtained the rights to use a certain part of the intellectual property) should pay the licensee (the licensor - the person or organization that offers the rights to the corresponding part of the intellectual property). These payments may consist of a direct or annual lump sum license fee or royalties (payment to the licensor based on the number or value of licensed items sold), which is paid per item sold. Often the licensor provides access to the creator of the idea to help him move in the market as successfully as possible. Examples of licensed products we see every day are MP3 format, Dolby noise reduction, or Gatorade, as well as products with celebrities from TV shows, comics or movies.

3 CONSIDERATION OF IDEAS AND OPPORTUNITIES FOR BUSINESS POTENTIAL

When considering ideas and opportunities for future business potential, the most important thing is to identify the way ideas are considered for business potential. In the previous section, we discussed different ways to look for a business idea, or for ideas that improve existing products, services, or business processes. Is every good idea a sustainable business opportunity? Definitely not. The market is full of examples of bad business ideas that worked great in the beginning but were desperate to implement - as evidenced by the dot.com bubble that burst in the early 2000s. But the reverse is also true. The business world has learned - in some cases very rudely - that not every idea is appropriately valued or deserves to evolve into a business. Therefore, although one may have a strong feeling that an idea is a real idea in which time and effort should be invested, there are still many steps that need to be taken before opening the door. In this context, the word idea broadly means a new or improved product, service, or process.

3.1 From ideas to opportunities through creativity

The goal is to understand how creative methods can help business owners recognize new opportunities. We may have a sustainable business idea, but is it the best one to follow? Are you sure you have the right approach to get the most out of an idea? Very often, the first good idea that an entrepreneur has is not necessary and the best that he will have. Before committing yourself to a sustainable idea, it is a good practice to take some time and see if you can take a given sustainable idea and renew it to create an even better - more profitable, distinctive, idea that is harder to copy.

Why worry about innovation in your approach? [9] Consider the ease with which you can access online data related to industries and markets, such as your competitors, and how company searches and articles on how to do something at your fingertips with many magazines and magazines are available at networks. Of course, anyone else who is thinking of starting a business similar to yours has the same information as you. There are, however, some very creative methods you can use to help you create ideas and opportunities that can take you beyond what everyone else knows. This is what can give you innovation in business ownership, whether you are looking for ideas that are just a little different from the competition or completely different from what others are doing or even not yet doing. Figure 2 provides a tool that you can use to help identify new opportunities. It is based on the work of Alex Osborne, a pioneer in the field of creativity (a process that creates an idea or opportunity that is new and useful, often derived from creating connections between distant ideas or possibilities), who first coined the word, brainstorming. This tool is called SCAMPER, which is an acronym for a set of characters that create new ideas for your business.

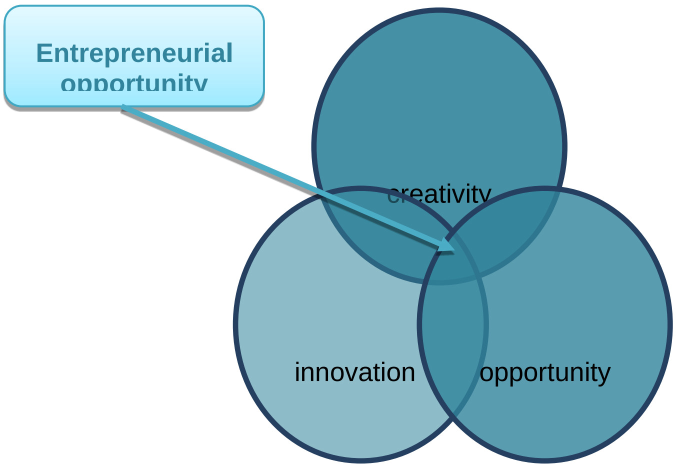

Figure 2. Identifying new opportunities

Sourse: Authors

Replacement - Consider what we can replace with something else to make a new idea. A feature that allows customers to order directly from the website before going to the store or ordering via email is an example of a replacement. One city in the Netherlands, for example, had experience with the growing problem of garbage accumulation, and city leaders tried all the usual ways to solve the problem: they increased the number of garbage cans in the city, put up signs reminding people not to get dirty and punished people for throwing garbage. Then they came up with the idea: a small recording device was installed inside the trash cans, and every time someone lifted the lid to throw out the trash, the device would play a joke! Soon the garbage problem diminished which is not surprising.

Combining - Consider what possible combinations we can make that result in something completely different. Recently, if you wanted to buy a book, you went to a store that typically only sold books, and if you wanted to buy a cup of coffee, you went to a coffee shop. If you wanted to listen to music you went to a club or a theatre. Today, you can have all three under the same roof in many places. When you buy gasoline at the gas station, you can also buy some groceries along with car items (CDs, ice cream, drinks, food, ...) along the way.

Adaptation - Consider what can be adapted from products or services that already exist. Many successful companies are based on the concept of adaptation. An innovation strategy is popular that can be equally effective and much more likely in the real world than business opportunities that result from radical innovations such as inventions. Did you know that one day a toilet paper manufacturer received a delivery of paper that was too thick to use? The manufacturer could have thrown it away, but instead he improvised and paper towels were introduced! Sometimes adaptations happen when entrepreneurs do their best to work with small resources.

Increasing or changing - Taking an existing product and changing its appearance or extending working hours For example, more dramatic advertising is some way to increase or change an idea. What drives this idea: What can I do that is more noticeable or dramatic or different in some way compared to my competitors? It doesn’t have to be in the product itself, but it can be the way an advertisement is conducted or you treat a customer during a transaction that becomes memorable.

Use differently - Think of ways to create more opportunities for a product or service than what they are traditionally used for. What prompted this idea: Suppose you find out that all the traditional uses of your product have disappeared and that you have a full trunk of products. What other uses are there?

Eliminate - Look for opportunities that arise when you solve something or stop doing something. What triggered this idea: What can I get rid of or minimize that would eliminate something my client has to do, and as a result give the client more than he expects.

Reorganize or change - What triggered this idea? What can you reorganize or reorder in the way your product or service looks, or the way businesses in your industry usually look or are located?

3.2 A thoughtful entrepreneur

The creative processes of individuals, teams and organizations have been studied intensively for more than 80 years. It deals with the way creativity actually happens. Much of what we know about creativity comes from understanding the process that highly creative people go through when ideas come to mind. Artists, scientists, composers and inventors have tried to describe their creative moments. Graham Wallas (1858-1932) was a British sociologist, political scientist, and advocate of a psychological approach to the study of politics, developed one of the earliest descriptions of the creative process and is still widely used today to lead the creative process in business. This research says that creative thinking involves four phases:

1. Preparation - research of problems or possibilities in all directions;

2. Incubation - thinking about a problem or possibility in an "unconscious" way, procrastination;

3. Illumination - the light bulb lights up and ideas begin to flow;

4. Verification - testing the idea and reducing it to the most exact form.

This process is very useful when you want to investigate a business problem, such as why you lost a customer, or when you want to identify further opportunities for your business, such as new markets or features for your product line. If you can mark what stage of the creative process you are in, you can guide yourself through an innovative solution by looking at things from different perspectives and allowing the problem to crumble a little in the background. This technique was good for many famous creative people - from Leonardo da Vinci to Albert Einstein.

4 TYPES OF INNOVATIONS DEVELOPED BY SMALL BUSINESSES

It is sometimes easier for companies to imitate the strategies of other companies due to the cost and intensive effort to make decisions based on the strategy of radical innovation. Likewise, clients may see a new company as more legitimate if it mimics established practices in the industry. This is also central to the idea of an imitative strategy. An imitative strategy is an overall strategic approach in which the entrepreneur does more or less what others are already doing.

But imitating others is not the only strategy an entrepreneur can choose. Gaglio and Katz offer a model for thinking about the business implications of opportunities. Called the process of identifying opportunities, in it the entrepreneur can assess whether the situation he is facing is the same as it is traditional or changing. Strategies that involve doing the same thing or imitating others or looking for an additional strategy make a lot of sense when the business continues in a constant flow. Sometimes during these periods of stability, experimenting with innovative ideas can help take on more business from rivals and shake up the industry and perhaps give an innovator an advantage. During periods of great change - whether due to technological, political, economic or cultural change - the potential for constant business declines and the attractiveness of innovation increases. In times of great change, people have a greater desire to try extreme new ideas and this becomes a great time to introduce extremely innovative ideas.

Table 1. Opportunity identification process

<table>
<tr><td rowspan="6">Market situation or event</td><td rowspan="3">Things seem normal and expected</td><td rowspan="3">Maintain the status quo</td><td>Continue as before</td><td rowspan="6">Innovative opportunities</td></tr>
<tr><td>Imitative strategy</td></tr>
<tr><td>Additional strategies</td></tr>
<tr><td rowspan="3">Discontinue existing framework Innovative possibilities</td><td>Throw away</td><td rowspan="3">Break the existing framework</td></tr>
<tr><td>Examine</td></tr>
<tr><td>To ignore</td></tr>
</table>

Source: C.M. Gaglio and J.A. Katz „The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness“ Small Business Economics 16, (03.2011.) [26]

One unusual ability found in entrepreneurs studied by Gaglio and Katz is that many of them can come up with new ideas with any combination of resources. While sitting at the airport, entrepreneurs start to look at where the lines are being formed and to wonder how to make money from it. Others can be given some everyday items and in a few minutes they come up with ways to combine them to make a profit. Their use of the process of identifying opportunities tells us that being creative can become a way of life.

Table 2. Types of innovation

TYPE	CHANGE	EXAMPLES
Product	Product / Service offered by	Apple iPod (product) and iTunes (service)
Process	How created	Dell's built
Position	The way they are presented in the market	Amazon online stores
Paradigm	The fundamental business model	eBay online marketplace
Incremental	Product / Service	Enhancement Increased hard disk capacity
Radical	New product / service	Digital camera vs film photography
Product / Service	Enhancements	Component Increase in LCD definition and display clarity
System	Impact of advanced products / services	Plasma display
Product	New product	Apple iPod

Source; Bessant J, Francis D., Special issue: developing capabilities for continuous innovation, international journal of technology management, 2008, Vol:44, Pages:293-297, ISSN:0267-5730 [10]

4.2 Ways to keep being creative

Understanding the value of building a creative culture in business is a requirement that is set before the entrepreneur. Once a business idea is created and evaluated and it is determined whether or not it is feasible, the identification of opportunities and the evaluation process is completed. But this process never really ends. Even if you have gone deep into the business and even if the company is successful and the initial goals have been met, the nature of entrepreneurs and small businesses is such that you will always look for new opportunities. Successful small business owners never live on their laurels and never think that since they have achieved success, it will always be there. One of the pitfalls that small business owners may fall into is failing to build a business culture - a way of thinking and behaving - that encourages new ideas and embraces change. This is especially important if you are hiring or planning to hire other people. There is nothing so discouraging as working for someone who feels there is nothing new you can contribute to the company. And you will be surprised how many small business owners have this mentality. Here are some ways to avoid this and build an "idea-friendly" business. [11] You will find that you can attract more creative workers and get more useful ideas from them that will influence the most important things concerning your company by following the recommendations.

Innovation is at the heart of entrepreneurship, because every time people start a business or become the owner of someone, it is a new beginning and often a new experience for them. Some companies are built on new ideas and new reversals of existing ideas. [12] For situations like this, it's wisest to think for a while before investing your money to decide which ideas make the most sense because a profiteer can save a lot of trouble. This is where the process of identifying opportunities, the process of screening ideas and feasibility analysis come into play. [13] In the end, it should be underlined that there is lack of consensus in scientific literature on the essence of the construct ‗innovativeness'. Generally, it relates to the individual differences in cognitive and behavioral responses of individuals to the new and unfamiliar. [14] [15] It is also true that one of the biggest challenges a company faces is taking control of the change process - one needs to know when and how to change something and try something new. Sometimes just thinking in a new way can be difficult, and then techniques like SCAMPER can help a lot. The bottom line is that while many people think innovation is a big surprise, unpredictable and uncontrollable, in reality it is anything but. This is good news, because it means that innovation is one of the most powerful techniques for building a business.

5 CONCLUSION

The most common sources of opportunities for entrepreneurs to get business ideas are:

- Recognizing opportunities, as one of the most basic entrepreneurial behaviours;
- Entrepreneurial vigilance, which means that entrepreneurs have a special set of observation and thinking skills that helps them identify good opportunities;
- Most of the entrepreneurs surveyed knew that they wanted to start a business and were highly motivated to find business ideas;

Ideas for new businesses come from many sources. These include work experience, meeting a similar company, hobbies and personal interests, random events, discussions with family and friends, education and experience, as well as technology transfer and licensing.

In the process of identifying ways ideas are considered for business potential, there are six main areas to consider:

- Product or service: description, basic technological innovation and uniqueness;
- Market: target groups, their needs and market size;
- Protection of intellectual property;
- People behind the idea;
- Other necessary resources;
- Profits that are likely to arise;

Understanding how methods of creativity can help business owners identify new opportunities includes: Creative methods, which help you identify opportunities beyond anything everyone else already knows; SCAMPER is a tool that can be used to launch new features; Use technologies that can help enter an innovative frame of mind; The creative process has three phases: preparation, incubation and verification.

Identifying business innovation strategies is an important item on the path to entrepreneurial innovation. There are three innovative strategies that small business owners can choose from:

- Imitative strategies take an idea that someone else has already discovered and build a company around that idea;

- Additional strategies take the idea and offer a way to do something better than existing design;

- Radical innovation strategies reject existing ideas and provide a way to do things differently.

Understanding the value of building a creative culture in the company means: - Building a company culture that values new ideas and accepts change; Created free time for employees to think about new ideas; Positively encourage ideas given by others; Consider unexpected sources of opportunity; Provide a room with a view and identify an environment that stimulates innovation.

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INNOVATION-DRIVEN PERSPECTIVES IN THE KNOWLEDGE SOCIETY THROUGH EXAMPLE OF HUNGARIAN EDUTUS UNIVERSITY AND THE SERBIAN FACULTY OF BUSINESS ENTREPRENEURSHIP (FBEE) INTERNATIONAL COOPERATION

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Abstract

The actors of the higher education system have to face unprecedented challenges due to the digitalization, emerging disruptive technologies and globalization trends including the huge social and economic transition, which will presumable impacted by the COVID-19 pandemic partially hindering, partially speed-up certain processes on unpredictable way. The higher education institute (HEI) should play significant role reshaping their local community's life and economy by acting as an innovative entrepreneurial hub in the field of knowledge generation, transfer and exploitation promoting the networking among the interested actors which can serve as pillar of effective innovation ecosystem. The knowledge society and economy requested practice-oriented, problem-solving-focused multidisciplinary and "tailor made" educational approach from the universities. The universities have to make efforts to meet the emerging requirements and as a consequences remarkable shift can be observed from one-institutional form to multi-institutional form. The internationalisation process can be the practical way to implement this model to tackle challenges with harmonising the concerted HEI actions, multiplying the profitable outcomes including supporting creativity, improving the quality of the educational work and raising the visibility, brand and the recognition of the involved universities. This paper analyse the Hungarian Edutus University and the Serbian Faculty of Business Economy and Entrepreneurship (FBEE) international strategic partnership and the opportunities widening this mutually beneficial cooperation promoting the necessary societal transformations paving the way toward the knowledge based economy in both countries.

Keywords: Knowledge society, innovation ecosystem, multidisciplinary, digitalisation, internationalisation, Edutus University, Faculty of Business Economy and Entrepreneurship.

1 INTRODUCTION

The pillar of the knowledge-based economy can be the effective and efficient innovation ecosystem (based on the networking among interested domestic and international stakeholders) providing the conditions for the barrier-free knowledge generation, knowledge-transfer and knowledge exploitations covering the emerging, real social and economic needs and demands aiming to improve the social wellbeing. The free flow of information and the trust building among the parties can be the origin of the creativity and the different types of innovations (including open innovation in where every interested stakeholders used to finding a mutually beneficial solutions for the emerging, existing problem, that are relevant from the local community's point of view). Knowledge society, which can be characterised with continuous innovation that demands lifelong learning, knowledge development, and knowledge sharing, positions public and higher education as the key to the regional or national economic development, and holds that education should extend beyond formal learning (based in traditional educational institutions – schools, universities) into informal learning centres to support a knowledge economy.

In this context the universities should possess significant impact on regional, national and international innovation ecosystem due to their knowledge centre tasks and responsibilities (to be a source of up-to-date, relevant knowledge generation, operating effective knowledge transfer and exploitation mechanism). This means that the traditional one-institute university approach should be restructuring, moving from the traditional education and research role toward the multi-institutional entrepreneurial university approach. In addition, this process can be accelerated by the emerging globalization trends and as a consequence In the knowledge-based economy, the labour workforce will definitely need new competencies and skills, the uncertainties arising from the coronavirus social and economic impacts. The most commonly used practical way to provide adequate response these trends can be the widening and deepening the international strategic partnership between the higher education institutes. These processes can help the interested actors generating joint projects, involving additional financing, improving the quality of their educational activities, attract more students from abroad, putting themselves on the global university landscape.

This case study thoroughly analyses the EU Member State Hungarian Edutus University and the non-EU Member State the Serbian Faculty of Business Entrepreneurship and Education (acronym in English FBEE, in Serbian Visoka Skola PEP) long-term and comprehensive strategic partnership. This study including dealing with the main elements of this international cooperation and the possible driving forces beyond them listed the main benefits and the challenges. It presents an example how can be extend this cooperation (set up and launched Dual-Diplomas Education in economic field), discussing the difficulties arising from the complexity of this initiative due to the differences of the two national higher education system and draw up recommendation to overcome these obstacles in front of the realization this project. Finally, the expected result also be summarized in this paper.

2 METHODOLOGY

This case study based on secondary or 'desk research' research methods (review of existing relevant EU, OECD, EUA documents, publications, on-line web pages and then systematization, selection and analysis of data collected in this way). Beside analysis of documents, the research work was supplemented with collecting and creating primary information via expert consultations and working group meetings among the two interested higher education institute members.

The main conclusions and lessons drawn from the analysis of the concrete example based on international experience reflect the author's own professional opinion.

3 KNOWLEDGE-BASED ECONOMY AND SOCIETY FROM HIGHER EDUCATION PERSPECTIVE

Due to the global trends (emerging of disruptive technologies and digitalization including artificial intelligence and machine learning, big-data, cloud computing, automation, Industry 4.0. process), the national and regional economies and societies have to face unprecedented challenges and try find adequate, relevant responses tackling these trends to preserve or improve their competitiveness and explore the hidden opportunities related in these processes. In addition, these efforts can only be successful with the societal and cultural transformation at the same time. In the knowledge-based economy and society the high-value added activities will serve as the main pillar of the “survival of the fittest”, to find the best and “tailor made” solutions for integration the international global value chain at the highest possible level. [1]

The main engine of the knowledge-based economy can be the effective and efficient innovation ecosystem (based on the quadruple helix model – network cooperation among interested domestic and international stakeholders - the governmental, university/academic, business and civil, professional non-governmental organisation (NGO) sphere) providing the conditions for the barrier-free knowledge generation, knowledge-transfer and knowledge exploitations covering the emerging, real social and economic needs and demands. The free flow of information and the trust building among the parties can be the origin of the creativity and the different types of innovations (including open innovation in where every interested stakeholders used to finding a mutually beneficial solutions for the emerging, existing problem, that are relevant from the local community’s point of view).

In this context the higher education institutes have pivotal role in this regional, national and international innovation ecosystem due to their knowledge centre mission related to the above-mentioned tasks and responsibilities (to be a source of up-to-date, relevant knowledge generation, operating effective knowledge transfer and exploitation mechanism). This means that the traditional university role has also to be reshaping, from the traditional education and research role a remarkable shift can be observed toward the new direction taking into practice the entrepreneurial university function as well. [1]

3.1 Main challenges and opportunities for universities in innovation ecosystem

Due to the above global trends and the future unpredictable uncertainties, in the course of the last decade the higher education institutes have to face numerous challenges [2]; [3];

- Ensuring and maintaining a sufficient number of highly qualified and motivated labour workforce to meet the needs of the local economy.
    - In this context to provide the circumstances for life-long learning process, and beside the regular curriculums and education they should offer alternative way for out beyond the scope of the regular education (e.g. organising special trainings and non-accredited courses)
- New channels need to be found to transfer and exploit new knowledge.
- Beside the decreasing external financial resources, intensifying competition for attracting domestic and foreign students.
    - in this context, the universities make efforts to widening their education portfolio offers (e.g. set up and launching new specialisations)
    - Introducing new teaching methods (e.g. instead of the traditional lecturer focused contact classroom courses, organising "participant focused" classroom lectures based on the interactive, collective works involving the students into the education process encouraging the creativity and the bottom-up initiatives, or place in the foreground of the state of the art digital educations techniques)
- Growing demands and expectations against the higher education as a consequence of the ongoing social and economic transition.
    - In this context, the best solution can be, if the given university rethinking its mission, functions and organisational and make concerted actions to operate as a local innovative entrepreneurial hub in the regional economy largely contributing the raise the social awareness toward innovation and entrepreneurship, and promoting the trust-building and networking.
- Internationalisation – the universities have to strive to put themselves on the international map to make more visible and more recognised.

In the knowledge-based economy, the labour workforce will definitely need new competencies and skills. According to international survey the higher education institutes have to implement the followings if they intend to provide empowering the future potential manpower with those necessary skills and competencies that can meet the requirements from the knowledge-based societal and economical transitions [4],

- Universities should strive to introduce practice-oriented, problem-solving-focused, multidisciplinary approach education
- Students compile for themselves individual curricula, the universities have to take into consideration these demands
- Universities have to be able to offer a range of services for lifelong learning – either in regular or in out of the regular educational forms.

In addition to, the labour markets on regional, national and global level are increasingly demanding the soft skills (management and leadership abilities, presentation, negotiation and communication skills, digital literacy, self-initiative and creativity) beside the traditional professional hard skills.

The universities intend to satisfy completely these soft skills demands with different programs largely contribute to the significant shift from "one-institution" model toward a "multi-institutional" model due to the complexity of these educational tasks. One of widely used way to implement the multi-institutional model is the internationalisation to establish strategic partnership with foreign cooperation party to multiply the outcome and the success of the concerted efforts.

Based on the European University Initiatives survey [5], expanding international strategic partnerships with various partners can take place in wide variety of forms has become main driving force for European universities. The reasons for this trend are that international collaborations can contribute to raising the quality of education, improving recognition of the given university, launching joint project-based collaborations, raising additional resources, and sharing best practices and experiences.

The main features of the international relations of European Universities are summarized in Figure 1 and Figure 2.

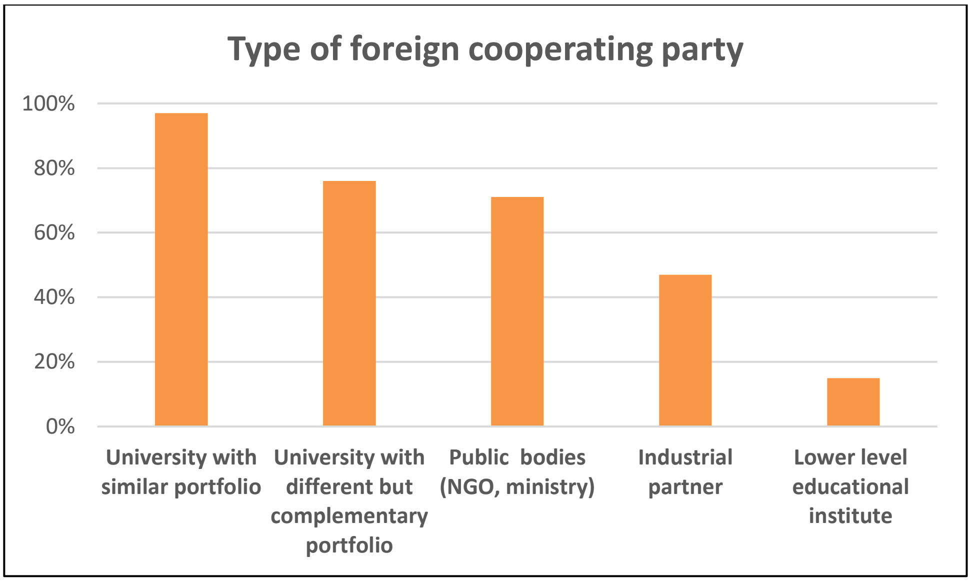

Figure 1: The main features of the European Universities international partnerships by cooperating party organisational type

Source: Based on [5] own edition

Figure 1. shows that the main foreign partners of higher education institutions are typically other higher education institutions of similar or identical profile. Other international party for example companies, authorities, non-governmental, professional organizations can come only after that in the row.

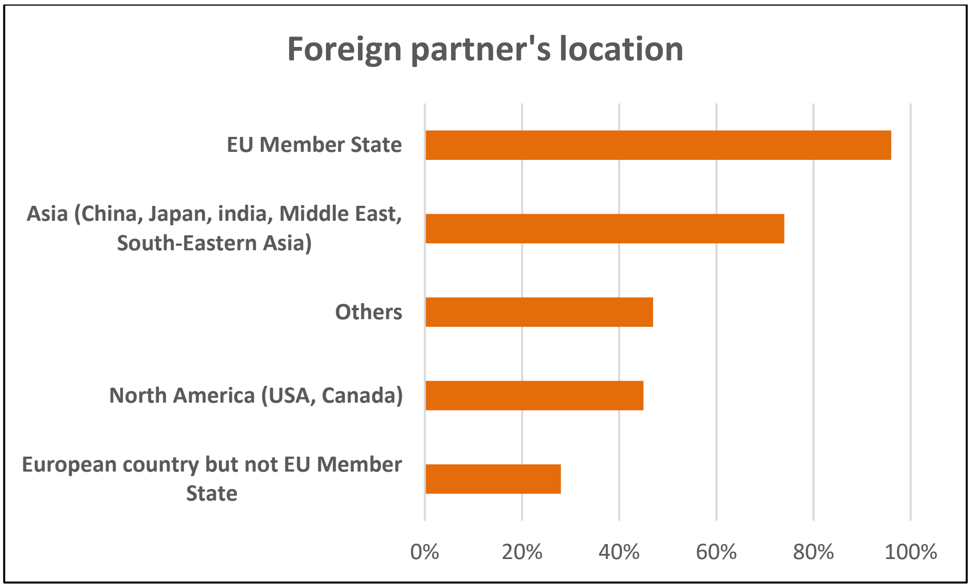

Figure 2: The main features of the European Universities international partnerships by cooperating party geographical location

Source: Based on [5] own edition

Figure 2. reveals the fact that the EU Member States universities have tendencies to cooperate mainly with universities in other EU Member States and with other European universities but outside the European Union. After this primary priority will be taken into consideration and put on the horizon other higher education institutes on global scale outside Europe.

More than 50% of European Universities have only a few years of international cooperation experience and only have relationships with a few partners. (The reason for the latter is that most of them have difficulties finding the right partners for mutually beneficial cooperation on long time scale period).

The main driving force of university international co-operations can be attracting of foreign students, the placement of the given higher education institution on the international map, increasing mobility opportunities of lecturers-researchers, sharing the mutually adaptable experiences, best practices and generating joint research projects.

The COVID-19 coronavirus pandemic had also unfavourable impacts on public and private higher education institutions, they had to close in Hungary and Serbia as well when the epidemic broke out and had to take into practice the online education and exam systems, creating or further developing their digital education platforms, university lecturers had to introducing or apply new teaching methods and providing access to digital infrastructure. [6]; [7].

The Digital Agenda for Europe [8] provide the frame conditions and circumstances for implementation of digitalisation of the education by its own means. Preparing companies for the competencies needed to understand and apply the digital technologies widely used is key to the competitiveness of future workers in the labour market, and universities have an indispensable role to play in shaping the digitalisation of society [9].

Higher education can make a significant contribution to the recovery from the socio-economic recession following the coronavirus pandemic by promoting the effective knowledge transfer and exploitation, as interactive and collaborative learning, cooperation between multidisciplinary fields can be the basis for many different types of innovation. In addition, universities as regional innovation or entrepreneurial hubs can have a significant impact on the local economy and society, promoting attitudes and cultural change (open innovations, social innovations) and networking, building the capacity to operate an innovation ecosystem. [10];

The European Commission strive continuously to set up and announce various funding programs for the next programming period (2021-2027): Horizon Europe (EU Framework Program for Research, Development and Innovation) - including the Digital Innovation Hubs under the Digital Europe Program and the European Innovation Ecosystems; and harmonising the different programs for instance to create synergies between the ERASMUS + Program for university teacher-student mobility [11]

3.2 Background of the Hungarian Edutus University and the Serbian Faculty of Business Economics and Entrepreneurship (FBEE) international partnership

The EU Member State the Hungarian Edutus University (www.edutus.hu/en) and the non-EU Member State the Serbian Faculty of Business Entrepreneurship and Education (acronym in English FBEE, in Serbian Visoka Skola PEP http://eng.vspep.edu.rs/) established long-term wide strategic partnership since 2018. This close cooperation includes many linkages for example Erasmus Plus Programme researchers and student mutual mobility and in addition to, invite each other staff members for international conferences (International Week organised by Edutus University at the beginning of every April in Budapest and International Scientific Conferences about Education, Employment and Entrepreneurship – EEE organised by FBEE in every October in Belgrade vice versa); delivering joint presentations, making joint publications, launching joint R&D projects, inviting each other as guest lecturers for different courses. The main driving force of starting this international higher education partnership was that this process can significantly contribute to the visibility, transparency and more comprehensive reputation for both organisation and enrichment of their educational scope and portfolio with increased quality mutually profitable way at the same time.

In this context, both parties declared unambiguously their mutual interest in setting up and launching Hungarian-Serbian Dual Diploma Degree Education Program in the field of business economics, entrepreneurship and management on BSc. level. The labour market value of these Dual-Diplomas are respected in Serbia, while the Serbian FBEE learners can present an EU Member State Diploma as well beside the own domestic Diploma. Nevertheless, the FBEE intends to carry out a preliminary market survey in the course of this year to gain a clear landscape about size and the extent of its student's and the local companies interests about this idea.

Both interested parties have strong commitment to implement this promising and fruitful project despite that the COVID-19 pandemic had impact on slow-down taking into practice this initiative. In order to speed-up this process, it should be clarified and finalise every detail in the course of the 2020-2021 Academic Year, if so, based on the preliminary agenda the Dual-Diplom Education can be realised and launched in Autumn 2021.

One of the pillars of this joint program should be the joint curriculum development and the digitalisation of these curriculums via knowledge sharing and knowledge transfer processes from the CEI EU MS toward CEI non-EU MS direction. The motivational driving force from the Edutus University side, that in

2012 the Edutus University took into practice the business Skype based webinar education (which is also applicable for digital distance learning purposes) as a new e-educational methodology promoting the necessary societal transformations paving the way toward the knowledge-based economy in both countries.

3.3 Transforming the Edutus University education into online digital distance learning due to COVID-19

The unfavourable economic impact of the coronavirus epidemic on slow-down of production, demand and investments did not avoid Hungary either. Economic actors were forced to reposition their production, rethinking labour capacity, production chain structure, and inventory policy. One of the driving sectors for Hungary is the automotive industry, which had also to face radical structural transformation due to the rising interest trends against electric drive vehicles. It can't precisely predict to what extent, which suppliers and how will be affected by these emerging changes.

The Edutus University (its headquarter located in Tatabánya in Komárom-Esztergom county for those regional economy main pillar also the automotive and vehicle industry), as a regional private higher education institution, can play a decisive role in exploiting the opportunities related to the automotive sector transitional trends and post-COVID-19 situation to help speed-up and revitalizing the local economy.

There is strong quality and price market competition at the regional companies in the county for improving or maintaining their market positions, exploiting of new opportunities. To do this, they will always need - despite the epidemic and automation and robotization - a sufficient number of highly trained, confident foreign language, motivated, quality workforce, of which there are fewer and fewer in the county. The output of this process lead to that the multinational companies' local branches (factories in Komárom-Esztergom county settled in the different industrial parks) requests from the Edutus University providing sufficient number of high quality, well-educated local labour workforce possessing beyond the hard professional competencies with comprehensive soft skills as well besides the tailor made curriculums. This means the Edutus University has to introduce new educational methods for solving problems, strengthening foreign language skills and communication skills, group work, pair work and situational exercises. In more and more areas of life, teamwork becomes necessary, and the knowledge gained has often to be applied in collaboration with others on the job ways. The effectiveness of this can also be strengthened by the implementation of a complex personality and ability development mentor-mentored system, as well as the wider use of the opportunities inherent in the Skype-based webinar online teaching and examination methods introduced by Edutus since 2012, online knowledge sharing.

Unlike most of its competitors, Edutus University is able to continue all its training in the form of distance learning during an emergency through the unified webinar system introduced in 2012. Basic and master's courses, higher education vocational training, specialized in-service training, adult training and, last but not least, education preparing for the language exam also take place through this system. This state-of-the-art teaching methodology and technique provided a good basis for the transition, involving 180 subjects, 55 instructors and almost 700 students. It has increased efficiency and is therefore a competitive advantage in both the full-time and part-time training markets. It also contributes to the ongoing curriculum developments in the institution that meet the emerging requirements. The webinar technology provides an opportunity for distance learning through a video conferencing system, thus helping those who are unable to attend class to prepare. In the computer environment, the digital literacy of users, which is essential today, is evolving as they learn to use new software and receive modern online tasks. The form and experience of online cooperation can be used later in the labour market. In this way, students are even more thoroughly prepared for further studies in a foreign educational institution, and the interactive training and catching-up of participants in Erasmus studies is strengthened. All this results complex knowledge in the foreign work ethic and the modern work environment on global scale.

3.4 The current Serbian situation

In the Republic of Serbia, the specializations don't exist because the labour market does not recognise these ones. If it would be needed, the companies will provide themselves about it ”in house“ out of the school training frame. That is the reason beyond the fact that the Business Economy and Entrepreneurship education on BSc level at the FBEE consist of 3 years (6 Semesters 180 European Credit Transfer and Accumulation System - ECTS), while at the Edutus University Business Economy and Management education on BSc level consist of 7 Semesters and 210 ECTS. (Since many grading systems co-exist in Europe, the ECTS grading scale has been developed to provide a common measure and facilitate the transfer of students and their grades between European higher education institutions, by allowing national and local grading systems to be interchangeable).

The best and the simplest way to harmonise the two different curriculums in cost and time effective manner can be the internal harmonisation based on bilateral mutually beneficial agreement. How can it take into practice:

- Every interested student will spend their first year at their home institution.
- In the second year the exchange of students should take place (the Serbian student will enrol into the guest institution, in other words into the Edutus University and vice versa). Making comparison the Serbian and the Hungarian curriculums, it has to be determined which courses should be educated during the second exchange Academic Year, including defining the learning objectives, issues, assessment criteria and grading system for each unit and integrating these joint courses into the domestic curriculums.
- In the course of the third year every interested student will return back to their home institution and after finishing the third year, the Serbian student finishing their studies and earning their BSc. degree Serbian Diploma. The Hungarian student will be continuing their studies completing in the 7th Semester and they will also be empowered to earning their Hungarian Diploma on BSc level.
- The Serbian students after the third year will be send back to Hungary in the frame of Erasmus+ Program student mobility to completing the 7th Semester, studying specialization units and preparing for the Hungarian final exam to earn their additional Hungarian Diploma on BSc. level as well.

Technical details (intervention logic and necessary actions):

- Based on the FBEE and the Edutus University curriculums, the common nominator (intersection) can be: Business economy and entrepreneurship (FBEE) and Business Economic and Management (Edutus). The language of the Dual-Diploma education should be the English.
- Due to the ECT and the Bologna Process regulation (which also implemented in Serbia in 2005), the Edutus University can mutually recognise those courses via credit transfer, which syllabus and content coincide at least 75 %. (It can easily realise, because the vast majority of the mandatory subjects can be similar or the same in both curriculum).
- According to the Hungarian Higher Education Act provisions, in the Edutus University curriculums, you can deal with mandatory subjects (courses) and optional courses as well. Every university student have to completed at least three optional courses (above the mandatory courses). The Hungarian party can recognise three optional courses for the Serbian students for those subjects, which are not in the Edutus University curriculum, just the FBEE/VSPEP curriculum.
- The second exchange Academic Year education activities would take place predominantly via online digital education (completing once a month three days weekend personal consultations via contact classroom blocked lectures). Education and e-learning/distance learning (EDU), taking into account that the educational paths that teachers design and develop in virtual environments can be easily accessible to pupils and students through personal devices and can offer valuable help in overcoming the logistical difficulties that can be determined when schools or classrooms are, for various reasons, unavailable and continuity of education in the presence not guaranteed;
- It should be preparing a Master Plan (MP) including the involves joint units curriculum, time framing, budgeting, necessary equipment, work-break down structure (WBS) of the online presentation distance learning and exam materials, project tasks for students, communication plan, milestones, indicators, assessment criteria). After elaboration and approval of the MP, preparing the necessary materials and organising online consultations, seminars and

workshops to provide knowledge sharing and knowledge transfers between the Edutus University and its Serbian partner (FBEE).

3.5 Main findings

Expected results:

- The successful Serbian-Hungarian Dual Diploma Program can contribute to improving the visibility, the respect and transparency of both parties (Edutus University and the FBEE) and can serve as an adoptable best practice for other interested HEI stakeholder in the Western Balkan countries.
- Due to the online digital curriculum development and the online Seminars (webinars) can create the condition to set up and launch the Hungarian-Serbian Dual Diploma Program without personal presence of the interested learner and personal contacts between lecturers and learners.
- Due to the knowledge sharing and the best practices, the efficiency and effectiveness of the education will be significantly improved from the Serbian side due to the Edutus University previous long-time experiences in the field of the webinar and the distance learning and training/retraining the staff members.
- The infrastructural conditions of the distance education will be improved by purchasing the most useful and necessary devices and equipment (laptops, softwares, smart interactive blackboards), creating the inevitable online shared platforms.
- Education and e-learning/distance learning (EDU), taking into account that the educational paths that teachers design and develop in virtual environments can be easily accessible to learners and HEI staff members through personal devices and can offer valuable help in overcoming the logistical difficulties that can be determined when schools or classrooms are, for various reasons, unavailable and continuity of education in the presence not guaranteed
- The online digital curriculum development and take it into practice will require training and retraining the HEI staff members from both side contributing to improve the quality of the education make more “tailor made” and attractive for the learners.

4 CONCLUSIONS

Universities should strive to introduce practice-oriented, problem-solving-focused, life-long learning, multidisciplinary approach education and take into practice the entrepreneurial university concept. In order to meet this complex mission and responsibilities related to knowledge society and economy and empowering themselves to be significant impact on forming their local innovation ecosystem aiming raising the social awareness toward knowledge society and economy enhancing the regional competitiveness and the social wellbeing.

The complex and comprehensive international strategic partnership between the Hungarian Edutus University and the Serbian FBEE can serve as an example to follow for other Wester Balkan countries despite minor differences among the two national higher education system. The Dual-Diploma Program through sharing best practices related to digital online educational methods, empowering the involved students with those, currently lacking hard and soft skills and competencies that are inevitable in the knowledge society and economy, accelerating the necessary social transformations which are essential not only in Serbia but in other Western-Balkan countries because,

- High quality and skilled human resources will be crucial for export growth and Global Value Chain integration,
- As workforces will be stagnating or shrinking due to aging populations, the pressure to increase productivity to maintain living standards by well-paid and sustainable jobs is even higher.

It can be concluded that the Hungarian-Serbian Dual Diplomas will mean added value in the Serbian labour market because it can be significantly improving the interested students future market positions due to their more competitive skills and competencies.

5 SUMMARY

The actors of the higher education system have to face unprecedented challenges due to the digitalization, emerging disruptive technologies and globalization trends including the huge social and economic transition, which will presumable impacted by the COVID-19 pandemic partially hindering, partially speed-up certain processes on unpredictable way. The higher education institute (HEI) reshaping their local community's social, cultural and economic life by acting as an innovative entrepreneurial hub with the mission of knowledge generation, transfer and exploitation promoting the networking among the interested actors which can serve as pillar of effective innovation ecosystem and competitiveness. The knowledge society and economy requested practice-oriented, problem-solving-focused multidisciplinary and "tailor made" educational approach from the universities. The universities have to make efforts to meet the emerging requirements and as a consequences remarkable shift can be observed from one-institutional form to multi-institutional form. The internationalisation process can be the practical way to implement this model to tackle challenges with harmonising the concerted HEI actions, multiplying the profitable outcomes including supporting creativity, improving the quality of the educational work and raising the visibility, brand and the recognition of the involved universities. This paper analysed EU Member State Hungarian Edutus University and the non-EU Member State the Serbian Faculty of Business Entrepreneurship and Education long-term, comprehensive, and fruitful strategic partnership.

This study dealt with the main elements of this international cooperation and the possible driving forces beyond them listed the main benefits and the challenges. It delivered an example how can be extend this cooperation (set up and launched Dual-Diplomas Education in economic field), discussing the difficulties arising from the complexity of this initiative due to the differences of the two national higher education system and draw up recommendation to overcome these obstacles in front of the realization this project. Finally it can be concluded that the labour market value of these Dual-Diplomas are respected in Serbia, while the Serbian FBEE learners can present an EU Member State Diploma as well beside the own domestic Diploma, the digital distance learning purposes as a new e-educational methodology promoting will be increase the quality of the education make more "tailor made" and more attractive for the learners. The ultimate goal of enriching this partnership can promote the necessary societal transformations paving the way toward the knowledge-based economy in both countries.

Acknowledgements

This work was supported by Basic research project in the field of Laser-beam – technologies and energy at the Edutus College, complemented by knowledge transfer and activities aimed at enhancing enterprises linkages and social engagement (in Hungarian: "Lézertechnológiai és energetikai alapkutatás megvalósítása az Edutus Főiskolán, tudástranszfer, továbbá a vállalati kapcsolatok és a társadalmi szerepvállalás erősítését célzó tevékenységekkel kiegészítve"). Project identification No.: EFOP-3.6.1-16-2016-000

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THE USE OF GAMIFICATION FOR EMPLOYEE ENGAGEMENT AND TRAINING: A QUALITATIVE STUDY IN THE INDIAN CONTEXT

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Abstract

The purpose of this study is to explore how Gamification as a tool and approach can enhance employee engagement and learning in Indian business context. As more organizations are investing in gamification to enhance their human capital, it is important to decipher key distinguishing factors that optimize the benefits of this investment. As an exploratory study, a qualitative approach through in-depth interviews and analysis is used in this research. HR professionals from six different organisations where gamification was extensively and successfully deployed for employee engagement and learning have been chosen for data collection. The results from the study is presented as key themes which are relevant for organizations to consider for making gamification as an effective method in their HR processes. Some major themes emerged from the study are importance of technical aspects like game mechanics, design and interactive interface and human elements like focus on emotions and behaviors, personalisation and instant feedback.

Keywords: Gamification, Employee Engagement, Training, Performance

1 INTRODUCTION

An organization with highly engaged employees will exhibit exceptional organizational performance [1]. However, keeping the employees engaged in the workplace and improve their productivity continuously is the most demanding challenge most of the companies face. Gamification as a tool and approach helps organizations to address both of these challenges. Gamification is a practicable innovative method used to improve user experience and enhance engagement in the workplace [2]. It can be used in different ways to improve the performance of employees as well as to engage, train, and recruit people in an organization. Gamification is different from classic transactional engagement strategies as it engages employees at an emotional level making it more efficient and effective [3]. Though certain researches argue that gamification has the ability to motivate employees to achieve high skills level and attain higher performance levels, implementing gamification without a good model design and game mechanics will hinder the user experience [4].

There is an increasing trend of integrating play and game elements to ordinary everyday life. At the same time, serious games combine fun and specific objectives to achieve educational purposes [5]. There is scope for improving real-life situations of people by introducing game elements through alternate reality games [6]. Recent times have seen greater adoption of gamification in organizations in the area of employee engagement and employee performance. Different studies state that the level of employee engagement is increased through gamification thus resulting in better performances [7], [8]. They have considered gamification as an effective tool to motivate, influence the behavior, and increase the productivity of employees. Integrating game designs into the workplace will increase engagement and motivation given that there is a perfect combination of business tasks within the game design [9].

Gamification is incorporated in training to make the training content more relevant and engaging to users inducing them to learn more [10]. As human-computer interaction is rising continuously, there is an increasing number of tools available for making training experience more engaging and motivating. Gamified training is becoming increasingly popular as it promotes a sense of achievement to learners, facilitates desired behavioral changes, and encourages friendly competition [11]. Using adequately, game- embedded training can encourage learners to apply their learning on the job, by challenging them with real-life situations in a controlled environment.

Though gamification is being rapidly adopted by organizations across the globe, there is a dearth of qualitative studies investigating the subjective experiences of people and the sustaining impact in their work life. This exploratory study focuses on the status and impact of gamification in the Indian context in employee engagement and training. The research questions focus on the processes, benefits, and challenges Indian organizations face in adopting gamification for greater employee engagement and learning.

2 RELATED WORKS

The primary objective of gamification is to surge the users' level of engagement using game mechanics like customized feedback, leader boards, scores, etc [12]. Gamification invokes psychological experiences and outcomes that are the same as that of a game [13]. Games incite strong emotional responses both positive and negative such as excitement, joy, frustration, anger, and curiosity [6]. Thus gamification makes an environment more enjoyable and everyday tasks more exciting [14]. And gamification creates a fun and transparent environment thus increasing employee morale [15]. To implement gamification effectively, there must be a right mixture of tasks and work activities within the game design with the objective to make the content more acceptable for the users and helpful for them to be engaged and more productive [10]. Singh & Prasad in their study claim that gamification provokes users' intrinsic motivation to succeed and has confirmed that gamification positively engages employees and motivates them in enhancing skills and solving problems effectively [1]. A study by Depura & Garg showed that the use of mobile applications and gamification in the workplace can improve the learning and engagement level of new employees [16]. Recent studies have substantiated gamification as an applicable concept and an effective tool for employee engagement and increased performance [17].

2.1 Gamification and Employee Engagement

The most valuable asset of an organization that helps in attaining a competitive advantage over others is it's highly engaged employees [18]. Engaged employees benefit the organization in various means. Researchers and practitioners accede that when employees are engaged, their performance level reaches heights [19]. When an employee is in the best of terms with his colleagues and is accustomed to the business context, his level of engagement increases which in turn increases his performance. Also, Management's efficiency is measured mostly by the level of employee engagement [20]. Earlier, Gallup's employee engagement data in 2015 reported that "71% of Gen Z (Millennial) employees are not engaged at work". Also, statistics show that by 2025, 75% of the global workforce will be of Millennials. Therefore, organizations are looking for numerous ways to increase the engagement level of employees. And, gamification is one of the several strategic tools that most of the professionals are incorporating in their work to increase the level of employee engagement [21]. Gamification makes the environment more fun thus increasing user engagement and motivation [22]. Gamification, from the psychological prospect, increases the level of engagement in employees through a sense of competition, motivation and goal setting [23]. Mollick and Rothbard state if people play games outside the working hours, higher are the chances of employees being engaged in games while working as well [24]. Researchers also claim that employee burnout can be decreased if well-designed gamification and game mechanics are implemented in the HR process [14].

2.2 Gamified Training

One of the approaches that foster the learning and development process in an effective way is gamification. Learning through games is more effective than traditional learning methods [25]. Games were considered to be the most effective method to train people [26], [27], [28]. Games were in the picture of organizational training for decades but gamification is something which is more recent [29]. Gamification can bring out the desirable outcome from training by applying the game mechanics in the existing training method [30]. Gamification is one of the most chosen potential tools for redesigning an ineffective training method [31]. In a gamified training, employees get motivated by certain game elements that increase the motivational level and excites employees to learn and achieve more. Some of the game elements like leader boards, badges, points, and scores are found to be more effective to motivate and maximize learning [32]. There are many empirical studies that substantiate the positive impact of gamification on learning and development. Baxter et al., in 2015 found that gamified training impacted more than a non-gamified training module and the trainees were found to be more satisfied [33]. A Cognizant report on gamified training mentioned that the level of difficulty in each game level motivates employees to learn more [34]. Studies have also proven that gamifying the training program resulted in better learning than traditional training programs [35], [36]. A well-designed gamified platform provides various occasions for user improvement, complex tasks to think upon, plenty of feedback, and an environment that responds to users' reactions [37], [38].

3 METHODS

Qualitative research normally depends upon stories, notes from the field, dialogue with participants, in-depth interviews, journals, etc. as sources of data. In our study we have used semi-structure interviews for understanding the perspectives of HR professionals from various organizations that use gamification. The purpose was to capture the spontaneous responses that comes from the accumulated experience of implementing gamification in their respective organizations rather than something based on their perception and 'thus existing apart from self' [39].

Semi-structure intervews were conducted on HR professionals from six different organizations that use gamification as an employee engagement approach and training method. The respondents were selected based on their involvement and experience in using gamification in their organisations. Though 12 orgnaisations were chosen and approached, only six of them were willing to participate in the study. All the respondents had more than 10 years of experience in the HR domain and 2-5 years of experience in using gamification in their organizations.

The procedure was a semi-structured in-depth interview of the six HR professionals who accepted the invitation to participate in the study. The interview had open-ended questions designed to have a comprehensive understanding of the HR managers' subjective experiences of implementing gamification. As the interview was semi-structured, participants had sufficient flexibility to express their opinions in a manner that they felt appropriate based on the given question.

There is a dearth for information in the Indian business context in terms of the subjective experience of people with regard to the implementation of gamification. The study investigates how gamification is used in the Indian business context to enhance employee engagement and improve the effectiveness of training. The qualitative study has posed the following research questions:

How does gamification enhance employee engagement?

Which are the key elements in gamification that are essential to the engagement experience?

What are the key benefits as well as challenges in implementing gamification in the organizational setting?

What are the pieces of evidence for improved learning through gamification?

Are there any particular prerequisites for implementing gamification in employee training?

What are the key benefits and challenges for gamification in training?

The research is subject to the limited generalizability of the qualitative data. As the views of a small number of chosen professionals form the key insights from the research, it is required to test with experiences from different organizations and contexts.

4 RESULTS

The qualitative study focused on the subjective experience of HR professionals from Indian organizations using gamification on employee engagement and training. The participants shared their views and experiences about the processes, benefits, and challenges of integrating gamification in their organizations. All the respondents agreed that having disengaged employees in the workplace creates unnecessary problems and decreases productivity. All six respondents are certain that gamification is good at engaging and motivating employees.

The respondents/participants will be mentioned as P1, P2, P3, P4, P5, and P6 in further discussions. Based on their inputs, the following themes have emerged as a result of this qualitative study.

4.1 Theme 1: Gamification as fun and purpose

All participants agree that gamification is now being implemented in companies in various fields for engaging, training, assessing performance, etc. Companies are having their own gamified platforms to enhance employee engagement, learning, and productivity. P4 states: "Games are not new for the business, but the use of it to attain something serious is the new phenomenon." While the fun element enhances the engagement, gamified training ensures specific learning outcomes are embedded in the process. In other words, companies are clear about what they need to achieve in terms of employee learning fun-filled game mechanics which justifies the investment in gamification. P3 states, "Gamification makes most of the frustrating and boring works fun and entertaining."

Some companies go to the next step and use gamification during the onboarding process to educate newly hired staff about the culture of the company itself. In the words of P2, “As the foundation of our company is our culture, we wanted our culture to be rooted in our employees hence we introduced a gamified platform for the existing and new joiners to educate our employees regarding our core value and culture.” Companies in India are focused on the use of gamification with a balance of fun and purpose to achieve clear objectives and very specific results.

4.1.1 Integration of well-designed game mechanics

Gamification can backfire if the gaming process is not well-designed and properly executed. Thus companies are creating their own gamification tools that fulfill and favor particular outcomes. All respondents brought out that before implementing gamified training it is essential to design the training module as per the training objective. By default, games are interesting and fun but integrating games with real-life work is the challenge. Almost all the companies of our respondents have approached professional game designers to design gamified training modules as per their requirements or have a separate technical team that takes care of the entire functioning of gamification.

4.1.2 Interactive design

Integrating gaming mechanics into the workplace will lead to interactive learning and promotes friendly competition. Gamification modifies the usual traditional training programs into more fun-filled, challenging, engaging, and interactive activities. P6 stated, “Games which are more interactive and which earns points for progressive levels are mostly preferred by our employees.” Interactive design is one of the key elements that helps in improving engagement experience. As it provides, instant feedback in terms of the level of performance or achievement, players adapt their efforts to move up the learning ladder. P2 stated, “Our gamified platforms are designed to be more interactive so that the interaction between the players increases and the players display a sense of competition. This has helped us to keep the employees more engaged and get the desired behavior exhibited out of them.”

4.1.3 Greater involvement from employees

Games were brought by the HR professionals to the workplace to engage employees and motivate them to learn and to be more productive. All the respondents have agreed that gamification has helped them to bring back all the disengaged employees on track mostly the Millennials to buy-in for the learning process. All the respondents have agreed that gamification has significantly improved productivity helping the organization to achieve the desired outcome. For example, P5 remarks, “If the game elements are found to be more appealing and beneficial by the players, there is no chance of them resisting.”

4.2 Theme 2: Emotions and behaviors resulting from gamification

The respondents also mentioned that gamification triggers human emotions. Attaining points or rewards after each level give a sense of achievement to employees thus increasing the engagement level. For example, P2 mentioned, “We have designed a gamified platform in which employees, based upon their project requirements can post modular works in the platform which the other employees can take up. In this way, the work gets distributed and employees earn incentives based on their scores. This process has increased the overall happiness and excitement in the company.”

The respondents indicated that leadership boards, scores, badges, rewards, instant feedback, progressive levels, and competition in gamification are some of the key elements that excite, motivate and engages employees. Further, companies have designed gamified programs in such a way that it helps the companies in bringing out the desired behavior from employees.

4.2.1 Positive emotions

People exhibit different types of emotions while gaming. Positive emotions give the employees a boost to work harder. P6 stated, “Earning badges and topping the leader boards give the employees a sense of achievement.” P3 stated, “When employees achieve the top score, they feel a sense of accomplishment.”

Gamification encourages competitive spirit and team building when employees compete against each other and work towards a common goal. P6 said, “When a player is getting recognized by his co-workers for his achievement, he gets positively motivated to achieve more and his relationship with his colleague improves.” The positive emotions thus created among the employees can enhance team spirit and translates into a greater task and organizational commitment. P2 stated, “Gamification creates a sense of strong team spirit in the mind of employees for team works. The players motivate each other and work together as a team and move ahead winning all the difficult levels together."

4.2.2 Negative emotions

There is a danger of the adverse impact of gamification as well. Negative emotions arising from it affect the employee's performance and motivation. P2 mentioned, "Sometimes people get too immersed in the games that they take failures by heart and get depressed and disappointed." Players can also possess certain negative emotions when their expectations are not met in terms of rewards. For example, P3 stated, "Many a time, employees get used to the rewards earned from points/scores that when the company reduces or stops that particular reward system, they feel dejected." Hence there are also questions about how consistently gamification can elicit a positive impact in the organizational context.

4.2.3 Targeted behaviors

The gamified programs have to be aligned with the targeted behavioral outcome. P4 mentioned, "We have designed our gamified learning platforms by aligning the desired behavior with the overall learning outcome." Gamified platforms have proved to accomplish the targeted behaviors thus fulfilling the desired learning outcomes. But sometimes, behavioral change can land employers in trouble. For example, P2 mentioned, "A proper incentive system should be designed to reward the desired behavior, or else employees may go overboard with the behavioral change for the rewards and become addictive." Also, measuring the desired behavioral outcome is one of the challenges that most companies face.

4.3 Theme 3: Increased learning

The ultimate objective of investing in gamification is to improve organizational performance. Gamified training is found to achieve the same through a more enriched learning experience. The respondents have stated that a well-designed gamification based training will benefit the organization significantly. The majority of the employees are excited and look forward to getting trained by gamified training. All the respondents find well-designed gamified training as an engaging learning strategy that helps the learners to meet the learning outcomes. P1 mentioned, "I find gamified training as one of the best on-the-job learning.'

Further, respondents mentioned that they use gamification to address all kinds of training needs such as soft skills training, professional skills training, product training, new technology training, sales, induction, and orientation, etc. Also, employers find it easy to evaluate the learning and assess the performance of employees in gamified training. Thus gamification appears to be an effective and attractive option for training employees in the workplace.

4.3.1 Gamification and different age groups

The respondents commented on the interest of employees of all age groups on gamification. P3 mentioned, "The younger generation find it difficult to attend traditional training programs." P5 also had a similar observation, "The young blood always wants to experiment with new ideas and are more creative." In contrast, P2 stated, "Regardless of the age factor, gamified training platform has attracted the employees of all age groups." The majority of the respondents pointed out that age is not an issue with implementing gamification unless the employees find it difficult with the use of technology, even there the age is not a factor.

Thus, it is found that though there are challenges that companies are facing in integrating game mechanics in the workplace, gamification is being adopted and accepted by employees of all age groups and their performances are showing significant positive changes in the process.

4.3.2 Instant feedback

The importance of instant and continuous feedback is an important factor in learning theories. Among the six respondents, five of them pointed out that transparent and instant feedback gives employees a sense of control over their performance thus encouraging them to complete the task/project on time. P1 stated, "One of the best features of gamification is its instant feedback." Employees will have a clear view of where they stand in terms of their performance through instant feedback. P4 stated, "Instant feedback helps the employees to learn from their mistakes and correct those mistakes within a very short span of time, they need not wait for the appraisal period to come and get to know about their performance." Immediate feedback can help employees to review their performance and make necessary changes and reinforce the learning. It also acts as a self-motivating factor in the learning process. P5 stated, "When you progress through each level, you can see your point table and performance graph right away. This helps the employee to put in more effort to top the point chart."

4.3.3 Personalized learning

From the interview, it was found that training and engaging the multi-generational workforce are the challenges that the companies face. Companies will need to meet the unique learning needs of different generations. Personalized learning is one technique that three of the respondents brought out. Learners today prefer training that is specially designed for them. Personalized training customizes the training to meet the needs of specific learners. This learner-centric approach makes the training more relevant to the learners as they will be trained as per their own needs. Personalized learning allows the learners to choose the device they wish to learn on, learn at their own pace, set their own goals, and get personalized feedback.

5 DISCUSSION AND HR IMPLICATIONS

Gamification is found to have made significant inroads into Indian organization as an approach to increase employee engagement as well as an effective tool for employee training. HR professionals from various companies who participated in the qualitative study have reiterated the global trend of leveraging technology integration into HR processes. The attractiveness of gamification is the well-formed storylines, visuals, and rewards that engage the participants. Well-designed game mechanics have helped the companies in ensuring that the engaged employees are exhibiting the desired behaviors. As earlier studies have found, to implement gamification effectively, there must be a right mixture of tasks and work activities within the game design with the objective to make the content more acceptable for the users and helpful for them to be engaged and more productive [10].

The finding that employees mostly prefer interactive games is the least surprising. Gamification with the support of interactive designs gives the opportunity to employees for collective learning and friendly competition. Furthermore, a qualitative study by McIntyre in 2018 on the effect of gamification on employee engagement in a New Zealand context found that game elements like leaderboards had a negative relationship with competence [39]. Most of the participants from the study were not in favor of leaderboards being used as it made low performing employees feel incompetent. On the contrary, the majority of respondents from our stated that topping leader boards give the employees a sense of achievement, competency and excite employees to achieve more. Along with leaderboards, the respondents also mentioned badges, rewards, progressive levels, etc, motivates and engages employees. This validates the findings by Rivers in 2016 that leaderboards, scorecards, badges, and virtual currencies are some of the game elements that motivate and engage employees [40].

In addition, respondents stated that instant feedback is one of the best features of gamified platforms. This feature allows employees to have a clear view of their current performance level and it also gives a sense of control over their performance. This feature has also helped employers to engage the employees. This outcome of the instant feedback feature is similar to findings of the study carried out by Saha & Pandita on gamification for disengaged employees where it was found that constant feedback is one of the best mechanics to engage disengaged employees [25]. Also, the study identified that companies were successful in obtaining desired behavioral outcomes from the employees through properly structured gamification methods and motivating rewards. This substantiates the findings from a study by Robson et al., [41] that gamification has the ability to change employee behavior when the employees' motivational factors are tapped. Further, the study reinforces the fact that personalized learning is something that the employees prefer more. This approach of learning is found more relevant by the millennial learners as it allows them to learn and get trained at required skills, learn at their own pace, set their own goals, and get personalized feedback.

To make gamification more effective in terms of employee engagement and an effective training tool for learning and development, the following HR implications emerge from the current qualitative study.

5.1 Have a clear vision

Most of the gamification process have resulted in failures because companies have integrated game mechanics without a properly defined vision. There are many companies that have failed terribly and ended up making no gain with gamification. Do not gamify a process just for the sake of it or because the competitors have gamified their process.

Before gamifying a process, companies must ask themselves a few questions: Why do I need gamification? How will gamification solve my problem? How can gamification help me to achieve the end result? Identify the problem or gap and define the objectives that the business can achieve through gamification. Once the objectives are defined, the company can move ahead with designing the model.

5.2 Understand your employees (players)

Before going forward with the designing phase, having a clear perspective about the employees holds the utmost importance. This is one of the aspects which most companies overlook. Companies must understand their employees' current motivation level. Employees may be of different demographics, companies should know the common behavior and characteristics if they are planning to design a common platform. Studies have proved that age is not a barrier to accepting gamification in the workplace. Thus, companies can proceed with gamification without any sort of uncertainty on the age factor. Employees may differ in their learning capacities, hence it is suggested to go for a prior evaluation to have a clear vision of the employees' capabilities and distinct needs. Experts are now coming up with personalized learning solutions for unique user needs. Personalized learning provides employees with customized and appropriate paths for learning as per their requirements which creates interest and excites an employee to learn more. When it comes to engaging employees, companies must analyze and understand why is there a gap in employee engagement, and proceed with gamification given that the model solves the problems faced.

5.3 Well-designed game mechanics

Gamification excites and encourages the employees to be involved in learning and engaged in work. But if not designed well, gamification can go wrong. The game mechanics and game elements must be designed to meet the business goals by taking the players' emotions and required behaviors into account. Companies must identify both the intrinsic and extrinsic hindrances that act as a barrier for the required change while deigning and must motivate employees for the change. In the case of training the employees, the learning outcome is found to be more using well-developed gamified training platforms than other methods. Interactive game mechanics will result in better collaboration and promotes friendly competition among the employees. Also, companies must make sure that the employees are applying the learnings through gamification in the work. Some of the new trends in gamification which companies are adopting are personalized gamification, microlearning/bit-sized gamification, social media-based gamification, etc. As per the needs, companies can opt for these new techniques.

Personalized learning allows learners to set their own goals, choose the preferred device, learn at his/her own pace anywhere and at any time, and get personalized feedback. It provides learners with recommendations and suggestions as per the user's behavior. Also, it gives all the control of learning to the learners by simultaneously recommending relevant learning options. Along with properly designing and developing suitable game mechanics, it is very essential for every business to develop an appropriate mechanism to measure the expected behaviors, performance, and other desired outcomes. It is always recommended to seek professional help while designing the gamification framework. There are several big players in the market who have ample experience and expertise in designing customized gaming models. Hence, approaching an expert for designing and developing a gamification framework will be an ideal decision.

5.4 Managing emotions and behaviors

Gamification results in employees exhibiting certain behaviors and experiencing certain emotions. If companies want to introduce or include certain behavior in employees, they can use a concept in gamification called spaced repetition. It is a kind of revision and recollection of information from the memory. The instant and transparent feedback system in gamification will allow the learners to learn from their mistakes and get motivated with positive feedbacks at a very fast pace. But, at times players may get demotivated and disappointed because of the negative transparent feedback which in turn affects the performance of the employees. Emotions lead to certain behaviors. Hence, companies can make their gamification designs fun and attractive with appealing visuals so that even if few players score less in a task, they would have been completely engaged in the work. Playing as a team engages the employees more, encourage competition and team building. A strong team gives employees encouragement to achieve more and enhances the relationship between colleagues. Thus, companies can come up with team activities in their gamification project to promote teamwork.

Companies can combine humor in their gamification tool to transform some of the negative feedback or experiences into positive ones. However, before integrating humor elements, companies need to test it on selected employees to know the reaction and then proceed with implementing throughout the workplace. In the end, gamify only those elements or behaviors that give value for the employees. Thus, before going forward with the implementation phase, companies must make sure that the employees are aware of the values that they get from this approach. If the employees find that they are learning nothing but wasting their valuable time from the gamification approach, they may refuse to continue.

5.5 Appropriate reward system

Rewards and recognition have been the most impactful aspect that motivates the employee in his work life whether as a hygiene factor or as a satisfying factor. To implement gamification effectively, it has to be meaningfully tied up with the reward system of the company. Desired behavior achieved through gamified training should be adequately incentivized to make it sustainable in the employee work life. Instant feedbacks linked with instant rewards excites most of the employees. Employees can be provided with rewards that are effective and connected with the business when they successfully complete a level, scored high points, won the competition, etc. And recognition can be of more professional rather than just providing with badges while topping the leaderboard. These are some of the challenges most organizations face while rewarding employees.

6 CONCLUSION

Through this qualitative study, it can be found that gamification has indeed contributed to increasing employee engagement in the workplace. The study also supports the findings of researchers that a gamified version of training resulted in increased performance and learning than non-gamified training. This study proves that gamification is not just about having fun but is an effective tool that creates the work environment more positive and productive. Gamification is no more a fad, more and more empirical studies are being carried out in this field with positive outcomes and several top and rising companies have successfully integrated game mechanics in their workplace. All the respondents have agreed that gamification is an effective strategic tool to engage employees in the workplace. When designed and implemented right, gamification can perform as an applicable learning tool to meet the desired learning outcomes. Two of the respondents stated that along with higher engagement, gamification also influences employee retention. Companies were able to retain employees using gamified techniques in the long-run. Some of the respondents mentioned the behavioral change in employees via gamification as well.

Some of the key game mechanics noted by the respondents that stimulate the employee’s behavior are scores, rewards, status, etc. Hence it is found that gamification provokes employee’s intrinsic motivation to level up each task. The study also highlights personalized gamification being most preferred by employees which provides a customized learning path for each employee as per their requirements. Instant and transparent feedback is found to be one of the features of gamification that attracts most of the users. The study breaks the myth that gamification is not preferred by old generation employees. Instead, the study found that irrespective of the age factor, gamification is being accepted by employees of all age groups. Professionals are now coming up with next-generation gamification solutions to enhance corporate training by improving existing approaches. The study also recommends some of the guidelines suggested by the respondents to implement gamification in any organization. Thus, this qualitative research has found that gamification certainly has a positive impact on employee engagement and gamified training helps the employee to exhibit better performance.

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ROLE OF THE UNIVERSITY IN MEETING THE STUDENTS' NEEDS FOR THE ENTREPRENEURIAL SOCIETY

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Abstract

Economics and employment are rapidly changing, and that requires a radical change in the university objectives and practices, in order to meet the needs of the modern entrepreneurial society.

The results of this research were derived from the notice of significant support of the Algerian State for project holders of interest-free loans, yet a large proportion of them fail to establish their businesses. The reason for this is that the university did not train them to do business.

This study aims to shed light on the economic and university transformations, in order to train future entrepreneurs, who can successfully establish their businesses, and meet the students' needs in psychological characteristics, occupational skills, and entrepreneurial competencies.

Keywords: entrepreneurship; traditional University**; e**ntrepreneurial society; students' employment; successful entrepreneur.

1 INTRODUCTION

The world is witnessing major economic developments, as societies have moved from agriculture to industry to service societies, and reached by the end of the twentieth century, what is called the "entrepreneurial society". This prompted the University to change its objectives and practices to adapt to modern society's needs.

The relationship of generations to their economic activities has experienced great developments, whereby they have moved from the stage of fishing to the agricultural, industrial, service stages, and we are living actually in the entrepreneurial stage. Throughout these ages, the University has been interacting with the socio-economic reality, in order to train young people to adapt to their professional reality and its needs in psychological characteristics, skills and competencies.

From the foregoing, it is clear that societies have passed through a range of stages that have characterized economic and professional activities. The entrepreneurial society is the last stage, where the concepts of entrepreneur and entrepreneurship overwhelmed economic thought. Young people no longer depend on the state to provide jobs for them, as educated young people are relying on themselves to create economic projects in which they work, manage, and contribute to wealth creation. To be able to do so, the role of the State concentrates on providing educational and training systems that contribute to the training and educating youth on the new necessary skills.

Entrepreneurship is one of the most important economic concepts in modern society. Audretsch, (2007), pointed out that more than two-thirds of U.S. college students have their own projects at some points in their lives [1].

Entrepreneurship is beneficial, not just for individuals, but is also linked to economic growth, creation of jobs, and competitiveness in the global economy. According to Higgins, "entrepreneurship is meant the function of seeking investment and production opportunity, organizing an enterprise to undertake a new production process, raising capital, hiring labor, arranging the supply of raw materials, finding sites, introducing a new technique and commodities, discovering new sources of raw materials and selecting top manager of the day-to-day operations of the enterprise" [2]

There is a strong interaction between university, students, learning/ teaching strategies, and entrepreneurial society as shown in figure 1.

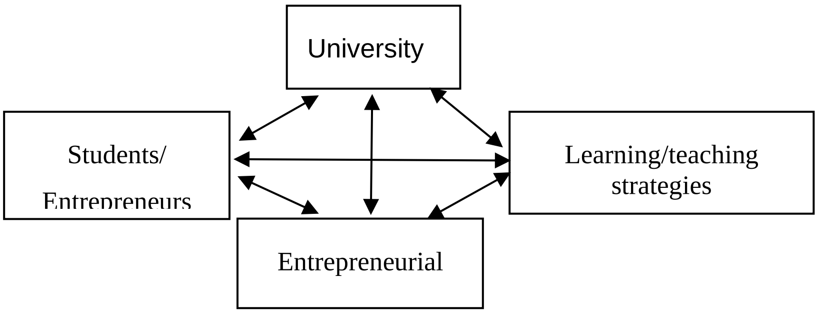

Figure.1. The dynamic relations between the university and the entrepreneurial society.

Entrepreneurs are people that notice opportunities and take the initiative to mobilize resources to make new goods and services.

2 METHODOLOGY

This study is based on observations of the employment situation in Algeria. Despite the large assistance provided by the state for youth, there is a low demand among young people for setting up businesses. The data of this study was drawn from the researcher's experience from teaching in Algerian Universities for more than 40 years, supervising students and being in contact with graduated students, and being informed about their professional activities and entrepreneurial intention.

2.1 Problematic research

The expansion of unemployment among graduates University students in the absence of real economic developments, confirms the university failure in meeting the needs of entrepreneurial society.

Among the reasons for these failures is the inadequateness of the education and training system, including higher education, to the requirements of the labor market. The traditional educational and training system has not been able to provide students and trainees with competencies and skills that facilitate their integration into the labor market, in line with scientific and technological developments and the rapidly evolving labor market requirements.

While modern universities seek to give students the basic information that allows them to deal positively with professional life, and their ability to seize opportunities to start their own businesses. This is what universities in developing and emerging countries must use in order to shorten the way to progress and development.

The objective of this study is to highlight the shortcomings of the traditional university practices, to clarify the aspects that need to be focused on, to train future successful entrepreneurs.

2.2 Research questions

To highlight the role of the modern university in meeting the students needs for the entrepreneurial society, the following questions were asked:

- What is the relation between the university and its environment?

- What are the traditional university practices?

- What are the characteristics of the entrepreneurial society?

- What are the university failure manifestations in training for entrepreneurial society?

- What are the characteristics of successful entrepreneurs?

- What are the modern university strategies in training for the entrepreneurial society?

3 RELATIONSHIP BETWEEN SOCIETAL DEVELOPMENT AND UNIVERSITY ROLES

Since ancient times, the University has been interacting with its social, economic, and cultural environments in an attempt to promote science and knowledge, and train people on technical and scientific skills needed by society.

To be able to identify the characteristics of the entrepreneurial society, it is necessary to address the development stages in terms of the prevailing professional activities, from the stone to the entrepreneurship society, and these stages can be summarized as shown in table 1.

Table 1: The historic development stages of the societies.

	Nature of the Society	Role of the university
1	Agricultural society	Training of competencies in agricultural skills, breeding, animals, and poultry
2	Craft society	Training competencies on dominant crafts in the society to meet its various needs
3	Industrial society	During the industrial revolution, the University helped train engineers and experts in various scientific and technological fields in response to the needs of that stage.
4	Services society	The University contributed to the training of experts in various service fields, which contributed to the prosperity of the service sector in that period
5	Knowledge society	The University had trained researchers, engineers, and experts who have contributed to the development of various technologies, which led to a flourishing knowledge in the fields of information and communication.
6	Entrepreneurial society	The economic development of the modern era has led to the emergence of the entrepreneurial society. So the university is still in its first steps to adapt to this new phase.

What distinguishes the modern society its focus on the psychological, cultural, professional, and economic characteristics in preparing students and society members as a whole, to the meeting of the entrepreneurial society needs.

4 THE UNIVERSITY TRADITIONAL PRACTICES

Conventional teaching methods, which require several years of training in succession, and then enter into a professional activity, without a return to university, seems ineffective.

States encourage young graduates from universities, vocational training centers, and institutes of Higher Education, to engage in entrepreneurship. In Algeria as an example, many facilities are granted to them, such as financing, accompaniment, and tax exemptions during the first years of activity. Nevertheless, results remain limited below the expectations of the operating authorities.

Among the reasons for these failures, the inadequacy of the university training programs, to the requirements of the entrepreneurship requirement. The educational system has not been able to provide students and trainees with competencies and skills that facilitate their incursion to the labor market, in a rapidly changing economic environment.

New objectives and learning-teaching practices are badly needed, to meet the needs of the entrepreneurial society.

5 ROLES AND COMPETENCIES OF ENTREPRENEURS:

To learn about the university's role in training entrepreneurs, we need to identify the psychological characteristics, roles, and tasks of entrepreneurs, in order to be identified and to assist the university to satisfy their needs.

An entrepreneur can be described as "one who creates a new business in the face of risk and uncertainty to achieve profit and growth by identifying significant opportunities and assembling the necessary resources to capitalize on them" (Zimmerer & Scarborough, 2008, p. 5) [3].

The entrepreneur is also described as a person who recognizes an opportunity and who organizes, manages, and assumes the risks of a business enterprise, with the intent of increasing the value of the business. He is a person a risk-taker and likes to take chances.

“According to Cantillon, the entrepreneur is a specialist in taking on risk, ‘insuring’ workers by buying their output for resale before consumers have indicated how much they are willing to pay for it” (Casson & Godley, 2005p. 26) [4].

By the beginning of the second millennium, it was found an increasing number of students choosing entrepreneurial activities after graduation; this requires good preparation for this field. Entrepreneurship became the most important economic concepts and in modern society.

The concept of entrepreneurship It includes three main dimensions:

- **Creativity**: Creativity is the way the entrepreneur seeks new opportunities or the way ideas are brought to a profitable result, the success of creativity depends on success in the market place of ideas, not just in the novelty of the idea.
- **Risk-taking**: The way in which creativity is integrated into the organization, community, or community means, and is also linked to the desire to provide essential resources to exploit an existing opportunity while taking responsibility for failure and its cost.
- **Initiative**: It's about doing things through perseverance, being able to adapt, and making a break with the way things are done.

6 THE ENTREPRENEURIAL SOCIETY

Drucker had written in his insightful 1985 book, *Innovation and Entrepreneurship*, that in future work would transition from bureaucratic practices; management would focus on innovation and new opportunities, generating an entrepreneurial spirit throughout entire organizations; the whole of society itself would become entrepreneurial.) [5].

Student’s personality should be shaped to meet the requirements of successful entrepreneurs, that is an entrepreneurial personality. The skills of managers and entrepreneurs in the third millennium are characterized by the need for new skills.

Entrepreneurial society is characterized by effective learning strategies and mastering information through information literacy. The American Library Association, pointed out in its report on information literacy that "to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (American Library Association, 1989) [6].

Young people no longer depend on the state to provide jobs and jobs, but educated young people are relying on themselves to create economic projects in which they work, occupy, and contribute to wealth creation. In order to be able to do so, the role of the State in providing an educational and training system that contributes to the training, education and skills necessary for young people must remain.

Audretsch, (2007), pointed out that more than two-thirds of U.S. college students with their own projects at some point in their lives [1]. Entrepreneurship is a good thing, not just for individuals. It is also linked to growth, jobs and competitiveness in the global economy. As he emphasizes, the modern world has become a business community, not a condition for the individual to work as an entrepreneur, but to have an entrepreneurial personality that will help him succeed in his social and professional life.

7 TRAINING FOR THE ENTREPRENEURIAL SOCIETY

Education determines the capital, wealth and prosperity for multiple generations in a knowledge-based economy and society. The relationship of knowledge to entrepreneurship, technology and economy is examined to understand the needs of entrepreneurial society. Exploration of realities is done to maximize the transition towards entrepreneurial society. Structural limitations of the existing educational framework are explored in the backdrop of its origin and implications. The need of integrating entrepreneurship education as an integral part of all institutional patterns is concluded as a vital element for entrepreneurial society.

The psychological characteristics of a successful entrepreneur are two main areas: excellence in intelligence and creativity, as well as the personality that allows him to interact positively with his surroundings.

In performing its duties in a complex society with many obstacles and difficulties, the contractor needs an above-average amount of intelligence and creativity. Poor intelligence and creativity of a contractor lead it to failure.

7.1 Personal characteristics

It is not possible to talk about entrepreneurship without talking about the entrepreneur and its psychological, social, professional and social, administrative, and technical competencies. It is important to limit the characteristics of a successful contractor to psychological characteristics, professional competencies, and contracting competencies.

Entrepreneurship has become a personality trait, and the university should work for its development with all students. A great effort should be carried out in order to achieve this objective.

Audretsch, (2007), emphasizes, that the modern world has become a business community, not a condition for the individual to work as an entrepreneur, but to have an entrepreneurial personality that will help him succeed in his social and professional life [1].

Student’s personality should be shaped to meet the requirement of successful entrepreneurs, that is an entrepreneurial personality.

The contractor has a set of personal qualities and characteristics necessary to perform his skills and achieve his goals in a sound and successful manner. The most important are:

- Self-confidence.
- Seriousness.
- Discipline.
- Attendance at work.
- Optimism.
- Patience to endure difficulties.

These are psychological characteristics that are required for entrepreneurs to be able to succeed in the performance in his entrepreneurial duties.

7.2 Occupational competencies

To be able to perform its duties with professionalism and mastery, the contractor must be able to have a set of skills and professional competencies in his field of activity that enables him to perform his duties properly so that he can follow his employees, supervise them and guide them in the course of their work. These competencies can be obtained through:

He may use competencies to help him perform his essay duties, but this does not preclude him from gaining some of them, so that he can understand and supervise the mechanisms of his work.

7.3 Entrepreneurial competencies

There is a deficit in the employment of all university graduates, which has led to a shift in the university's goals, which have become primarily focused on training successful entrepreneurs who depend on themselves to create wealth and create employment opportunities.

In addition to psychological characteristics and professional skills, the entrepreneur needs to have a range of competencies that we can call contracting competencies.

The most important of these can be limited to:

Acumen: an important feature for the entrepreneur. It is important even for people with low instruction level.

Searching and exploiting opportunities: A successful contractor must identify the opportunities in its surroundings that can be captured and exploited for commercial or productive operations and obtained from them by the wind.

The ability to link the elements of the entrepreneurial process: The entrepreneur needs in the setting up his enterprise to coordinate the production requirements, such as structures, workers, raw materials and machinery, which require intelligence in the selection of production needs and the overall management of the enterprise.

Risk-taking: The entrepreneur should be a risks-taker, but this process must be examined and studied, so that failure is reduced when carried out, a key characteristic of a successful entrepreneur.

These are characteristics that can be developed through study and training, which the University can contribute to, in creating a business society.

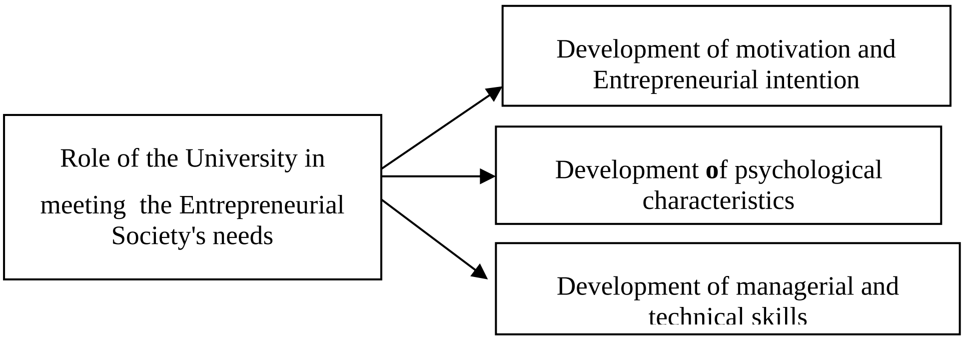

Figure. 2. Role of the university in meeting the entrepreneurial society's need

As mentioned in figure 2, the university has an important role in training successful entrepreneurs for the entrepreneurial society.

8 THE NEED FOR NEW TEACHING/ LEARNING STRATEGIES

Rapidity changes in knowledge in modern times, requires organizations to adopt relatively short training periods, through what is called sandwich courses, to allow a shuttle between work and study. This in turn allows theoretical learning and the acquisition of professional experience. This has allowed for ongoing training, lifelong training.

As mentioned by jean-Pinte "The mastery of information literacy to meet the challenge of the knowledge society, the dynamics of knowledge production and their management for lifelong learning are now the driving forces in the 21st Century Education" (Pinte, 2006) [7].

The skills of managers and entrepreneurs in the third millennium are characterized by the need for new skills. Regardless of their theoretical knowledge and technical competence, but the decisive factor of professional success remains the level and ability to acquire new knowledge, as well as the ability to innovate new methods and techniques, and this cannot be achieved without informational skills.

In his speech at the University of Toronto's 1999 promotion, Anthony Comper, then President of the Bank of Montreal, said: "The decisive factor in success is the need to acquire a high level of information culture. In the knowledge industry, we need individuals who can absorb, analyze, integrate, create and transmit information effectively and knowing the best way to use the information to highlight the true value of everything they do."

Neck and Greene (2011) pointed out *that entrepreneurship "is complex, chaotic, and lacks any notion of linearity". He added, "As educators, we have the responsibility to develop our students' discovery, reasoning, and implementation skills so they may excel in highly uncertain environments".* [8].

9 DISCUSSION

There is a close relationship between the University and its environment. The modern era has been known the emergence of a society built on small and medium enterprises, which has pushed developed universities to adapt to these transformations. The modern university contributes to training youth on the skills required by the entrepreneurial society. However, the failure of a large proportion of Algeria's university youth to set up their own businesses is evidence of the failure of the university to keep pace with the transformations and demands of modern society.

The Algerian University has been training students; giving them certificates that qualify them to work in public or private sector jobs. However, economic crises and lack of investment have exacerbated unemployment among university graduates. So we witness the protests of youth from time to time, demanding the state to provide them with jobs, which it is unable to provide. That is an inevitable consequence of university practices that train students to become civil servants, and unable to be entrepreneurs.

The entrepreneurial society is characterized by the fact that the young majority is interested in entrepreneurship professions, where the university focuses its training on the development of entrepreneurial intentions, and the psychological characteristics necessary for entrepreneurial behaviors, including communication, leadership, and the ability to make decisions and to meet different challenges. The entrepreneurial personality is a socially and professionally successful one, even if its holders have not established a private enterprise. The entrepreneurial society leads to development and prosperity in all social, cultural, and economic aspects. While underdevelopment is the result of the universities' inability to train younger generations to conform to the entrepreneurial society.

There is a contradiction between the practices of the patriarchal and socialist society and the requirements of the entrepreneurial society, which produces young people with many demands from the State and society. The demands of the entrepreneurial society are individuals who are strong and bold to face various environmental challenges. The entrepreneur must be seen as a warrior who must face a range of challenges and the Algerian University must train students to deal with this new reality.

Algerian University is still far from meeting the needs of students, in terms of competencies and skills, and preparation for professional life, in meeting the needs of the new entrepreneurial society.

Algerian University has to adapt to the new reality by seeking to develop the psychological and leadership characteristics of students and to train them in skills and competencies to allow them to enter the entrepreneurial field. So that they can rely on themselves for work, by creating businesses that contribute to combat the unemployment problem facing the Algerian society, and that developing countries generally face.

In Algerian society, we find often ordinary individuals with a medium or poor education level, and they may even be illiterate, yet they are successful, they run large businesses, they practice large businesses and import containers from China, Malaysia, Brazil, and other distant countries. While, a large number of university graduates, including doctors in economics and other scientific disciplines, are waiting to be employed by the State, which they are unable to achieve. This highlights the failure of the Algerian University to play its part in preparing students for the entrepreneurial society.

Universities in developed countries have undergone qualitative transformations, training their students on competencies that allow them to set up their own businesses. In doing so, young entrepreneurs work and create jobs for others.

This undoubtedly leads to the training of young on self-confidence, seriousness, rigor, discipline, and the search for entrepreneurial opportunities and risk-taking, factors that lead to the society's vitality and economic prosperity. This is what the modern university must take responsibility to achieve and strives to concretize.

10 CONCLUSION AND RECOMMENDATIONS

Modern societies have evolved, an increasing number of young people who are preferring entrepreneurial careers, because of their features and property. So we are in a new economic phase that can be called an entrepreneurial society. Entrepreneurship has become a personality trait, and the university should work for its development with all students. A great effort should be carried out in order to achieve this objective.

The failure of young people to establish successful businesses is primarily due to the university's failure to develop their abilities and skills necessary for the entrepreneurial society.

Algerian University does not meet the needs of the labor market in modern competencies and skills, which allow graduates to become creative entrepreneurs, who can seize the opportunities available in a competitive market. This requires new programs and sophisticated pedagogical methods to increase students' competencies, skills and psychological characteristics, allowing them to become successful entrepreneurs, working in their own institutions, and contributing to the creation of employment opportunities for other unemployed.

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SOCIAL ENTREPRENEURSHIP - CONCEPT, SIGNIFICANCE AND SITUATION IN SERBIA

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Abstract

Social enterprises can be different in organization and structure, but they all have a very clear social and public purpose, reinvest profits and are non-profit, and use entrepreneurship to achieve their social goal.

The main difference between a private (market) enterprise and a social enterprise is that the basic goal of a private enterprise is to make a profit that belongs to the owner, and in a social enterprise the well-being of the members of the enterprise or community. However, a private for-profit enterprise may, under certain conditions, obtain the status of a social enterprise. These conditions are most often the employment of a significant number of people from vulnerable groups (eg 30% and more) or the provision of services for members of socially vulnerable groups.

The specificity of the social economy is reflected in the fact that entrepreneurs and managers in this area must know well, both the real possibilities and the real needs of a particular community, and motivate and bring together all its structures to achieve agreed goals.

Keywords: social entrepreneurship, forms of retention, social organizations

1 INTRODUCTION

The manager, ie the entrepreneur, is the central figure of both the for-profit and the social enterprise. Their common features are: managerial knowledge and entrepreneurial virtues. However, as in the case of a company, there is an important difference between a manager of a for-profit company and a manager of a social enterprise. It is reflected in the fact that the basic motive for the work of a private entrepreneur is to make a profit and appropriate it for personal benefit, while a social entrepreneur sacrifices his own profit for the benefit of members of the company and the community.

The emergence of the idea and practice of social enterprises is linked to the development of capitalism in the 18th and 19th centuries, when self-help groups and other associations were founded, guided by the principles of philanthropy and charity. Various forms of association in order to achieve common goals or in solidarity with vulnerable groups have been known before. The new initiatives were fueled by the sudden impoverishment of the working class during the Industrial Revolution across Europe. The predecessors of modern organizations emerge as a spontaneous reaction of the new working classes to overcome the difficulties of living conditions during the initial accumulation of capital and to provide an alternative to the market economy in the form of creating funds to help the poor, establishing hospitals for the poor and encouraging other activities. then they were not covered by social policy. The first cooperatives as the most widespread forms of social enterprises emerged in Britain in the late 18th and early 19th centuries, while the socialist ideas of Robert Owen, William King and other theorists had a significant impact on the emergence and development of this movement.

2 DEFINITION OF SOCIAL ENTERPRISE

The analysis of the entrepreneurship is a very current topic in all countries. Many authors have analyzed entrepreneurship, education,sociql entrepreneurship in their studies [8][9][10][11][12][13][14] [15] [16].

There is no generally accepted understanding of social enterprise, but one of the best definitions is given by EMES (European Research Network):

"Social enterprises are private organizations that do not operate for profit (" not for-profit ") and provide goods or services that are directly related to their explicit goal to work for the benefit of the community.

They rely on the collective dynamics created by several types of stakeholders who are in their governing bodies and who highly value the autonomy of these companies and bear the economic risks associated with their activities. "[1]

The key phrase here is "they don't do business for profit", which is not the same as a "non-profit" organization. Social enterprises aim to make a profit - they thus ensure their financial sustainability - but they do not exist primarily for financial gain, but for some social mission.

The following six criteria, listed according to the EMES document “Social Enterprises: A New Model for Poverty Reduction and Employment Creation” (2008), provide a picture of an ideal type of social enterprise. Although most social enterprises do not possess all of these characteristics, the use of these criteria can be helpful in identifying new social enterprises and classifying older organizations that have been reformed.

1. Social criteria:

- Social welfare as an explicit goal - The main goal of a social enterprise is to serve a community or a special group of people whose common needs are recognized as needs that are in the public interest and not only benefit some individuals;

- Exclusion of organizations that aim to maximize profits - When it comes to the criterion of achieving social welfare mentioned above, social enterprises have the obligation to use part of their profits to achieve a social mission. Organizations that prioritize and redistribute profits (whether to shareholders or employees) are traditional, not social enterprises;

- The influence of individuals in the organization is not proportional to the number of shares they own -

Decisions are made jointly, and the interests of both clients and stakeholders are taken into account. The organization is governed in a democratic spirit, not on the principle of joint stock companies;

2. Economic criteria:

- Economic activity of production of goods and / or services - The main goal of a social enterprise is neither advocacy nor redistribution of financial resources. The social enterprise should be constantly engaged in the production of goods and / or the provision of services;

- Existence of autonomy - Social enterprises are usually created and managed as an autonomous project. They are usually carried under the baton, neither directly, nor indirectly, nor by public authorities, nor by private companies. Their owners have the right to take their own positions and end their actions;

- Tendency towards paid work - In social enterprises there should be an organizational commitment to job creation. The activity does not have to include the work of employees who receive a salary. However, organizations that rely on volunteer work are considered social enterprises at an early stage of development.

3 TYPES OF SOCIAL ORGANIZATIONS

The key criteria for recognizing social enterprises are the specific goals of the organization, the attribution of property rights and the exercise of control. In general, these criteria can be applied to some types of organizations:

1. Volunteer organizations that provide services (not always in a continuous period of time);

2. (Unregistered) self-help groups of citizens experimenting with new, innovative ways of working and social integration, adapted to local potentials and resources;

3. Public social bodies (social incubators) that experiment with new integration and local development strategies and that have become or are considering becoming social enterprises;

4. Cooperatives that act as enterprises of a certain community, related to the local environment and dedicated to promoting the interests of special groups of the population or the community as a whole;

5. Other new forms of non-profit organizations engaged in the provision of social protection services and having economic activities in order to raise funds for the provision of those services;

6. Charities, foundations, open foundations or centres;

7. Associations or foundations established by proprietary and controlled ancillary commercial enterprises whose purpose is to generate income for work in the public interest.

4 DEVELOPMENT OF SOCIAL ENTREPRENEURIAL ORGANIZATION

Establishing a social enterprise is a managerial and cultural challenge. Starting this journey requires commitment, ability and expertise. Creating an entrepreneurial culture can be a threat to a volunteer organization that has not previously earned money as a permanent source of income. Organizations considering engaging in commercial economic activities should assess their readiness and ensure that the Board of Directors, managers and employees are well prepared for the cultural and organizational consequences of such a decision. Organizations that are prepared have a better chance of running a successful business.

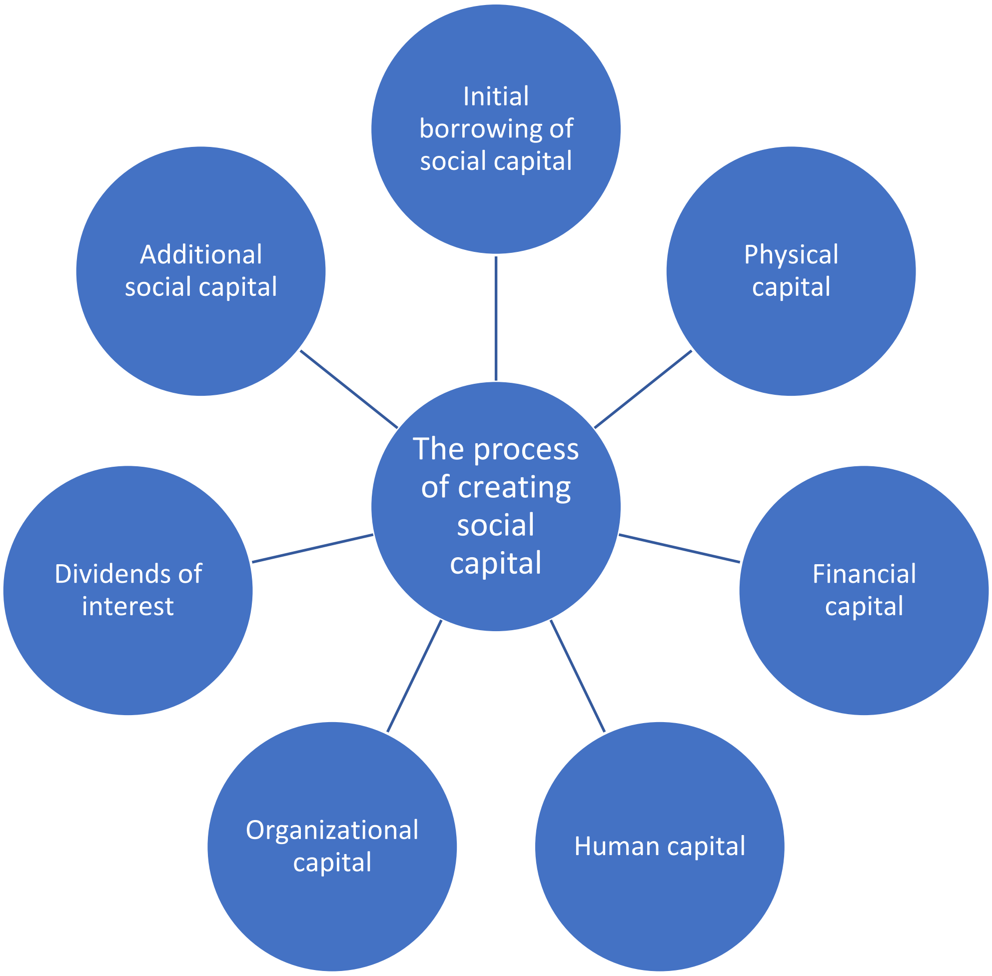

Figure 1: The process of creating social capital

Source: "Uvod u socijalno preduzetništvo", Brifing za civilno društvo u Srbiji, Projekat Delegacije EU u Republici Srbiji, 2010. god. [2]

Having the right product is the essence of any business, whether it is social or corporate. Once a sustainable product (or service) is defined, it is crucial to thoroughly go through the product testing and business planning phase.

There are six steps to developing a social entrepreneurial organization [2]:

1. Debt;
2. Physical capital;
3. Financial capital;
4. Human capital;
5. Organizational capital;
6. Payment of dividends.

To reduce risks, it is important to maintain the organization's commitment to goals. The goal is, of course, to provide the necessary change in the culture of the organization, which is crucial for sustainable business activities. In order to ensure organizational readiness and ability to create successful social organizations, that is, companies, it is necessary to take care of the basic elements of the organization.

These include, but are not limited to [3]:

• Leadership (volunteers and employees);

• Politics - vision, mission, values, culture. This refers to the totality of behaviors, opinions, and beliefs that are conveyed to people in the organization. They represent the core of the organization and concern the guiding principles, goals and aspirations. In the case of social enterprises, enterprise policy also includes business culture;

• Strategy - strategic and business plans. They refer to the activities that the organization plans to achieve its goals and anticipate changes in the environment;

• Structure - refers to how an organization achieves its goals. For example, an organization may have a strong, multidisciplinary management team or collaboration with similar organizations;

• Human resource management - the organization needs the right skills and the right human resources. Skills are certain abilities possessed by employees;

• Human resource systems, which include assessment, training and immeasurable values (motivation, morale and attitudes) are of great importance;

• Resources: investments that support the activity and growth of the company;

• Processes and systems: procedures, both formal and informal, through which an organization operates and collects information, including managerial and competition information;

• Emphasis on results and evaluation. Assessing the overall level of development helps to create companies that effectively meet the goals of their business plan, meet customer needs, and accomplish the organization's mission.

4.1 Social entrepreneurship in Serbia - SWOT analysis

Table 1 shows a SWOT analysis of social entrepreneurship in the Republic of Serbia. The advantages seen in social entrepreneurship are small country, flexibility, expressed state interest, readiness of the unemployed for work, understanding that employment is a key factor in development and stability and significant number of employment programs with elements of social economy.

Table 1: Social entrepreneurship in Serbia - SWOT analysis

ADVANTAGES	**WEAKNESSES**
✓ Small country ✓ Flexibility ✓ Expressed state interest ✓ Readiness of the unemployed for work ✓ Understanding that employment is a key factor in development and stability ✓ Significant number of employment programs with elements of social economy	✓ Vulnerable groups are not officially defined ✓ Fiscal and tax policy are not sufficiently in the function of encouraging social entrepreneurship ✓ Negative overtone of everything associated with socialism ✓ There is not enough stimulating legislation ✓ There are not enough trained staff ✓ There are not enough specialized institutions for professional treatment of vulnerable groups ✓ There is no developed network of partnership cooperation

	✓ Insufficient interest of local governments in self-development and employment
OPPORTUNITIES	**THREATS**
✓ Adoption of adequate legislation ✓ Possibility of establishing an efficient system of introduction and functioning of the social economy ✓ Support from the state and local governments and other sectors and institutions ✓ Social promotion and affirmation ✓ Commitment to join the EU ✓ Possibility to use EU funds ✓ Significant number of donors ✓ Creating new jobs ✓ Activating local communities ✓ Use of tradition ✓ Introduction of social economy through Pilot projects ✓ Positive attitude of the non-governmental sector	✓ Insufficiently developed economy ✓ Insufficient readiness of local communities for the introduction of the social economy ✓ Underdeveloped cooperation of partners in establishing the system of social economy ✓ Unwillingness of employers to employ individuals from vulnerable groups ✓ Insufficient financial resources for support and development of the social economy ✓ Availability of funds for subsidies to the unemployed ✓ Insufficient understanding of the concept of social economy

They stood out as weaknesses vulnerable groups are not officially defined,fiscal and tax policy are not sufficiently in the function of encouraging social entrepreneurship,negative overtone of everything associated with socialism,there is not enough stimulating legislation,there are not enough trained staff,there are not enough specialized institutions for professional treatment of vulnerable groups,there is no developed network of partnership cooperation and insufficient interest of local governments in self-development and employment.

5 THE ROLE OF SOCIAL ENTREPRENEURS

The term third sector encompasses various organizational forms: cooperatives, associations, societies, associations, foundations and social enterprises. In some systematizations, one can come across non-governmental organizations as a special organizational form, although non-governmental, ie non-profit, organizations essentially include all the listed organizational forms.

Social enterprise encourages positive social change and social inclusion. It supports civil society, the economic emancipation of vulnerable groups, and environmental and economic development, enabling communities to take responsibility for themselves. Social enterprises can improve the community's economy, create new jobs and solve social problems. They review some of the current policies and help the government improve the way public services are organized and provided. They can also raise the level of ethical business standards and corporate social responsibility. Social entrepreneurs are proof that financial success does not exclude responsible socially and environmentally responsible behaviour towards the social community and the environment.

Social entrepreneurs are individuals who offer innovative solutions to significant social problems in society. The social component is the most important element of their business. The job of a social entrepreneur is to recognize when a part of society is not functioning, and to solve that problem by changing the system, spreading solutions, convincing the whole society to make a new shift. Accordingly, we can distinguish seven types of social entrepreneurs [4]:

1. Social business entrepreneur - Create new business to overcome the shortcomings and failures of the market;

2. Social entrepreneur as a citizen - Identify shortcomings and failures in the market that can be overcome through the creation of new institutions or developing existing ones;

3. Social Entrepreneur of the Public Sector - Identify entrepreneurial approaches to using public funds to achieve much more successful goals;

4. Corporate Social Entrepreneur - Manage corporate behavior to guide it in the action of social entrepreneurship;

5. Social Entrepreneur Environment - Work in the public, private or third sector. Or in all three sectors;

6. Social Entrepreneur - New Philanthropist - Supply organizations with money and experience to increase social impact;

7. Potential social entrepreneur - They understand that they can also be social entrepreneurs, so they step forward and do it.

The necessity of entrepreneurship within the company arises from the reaction to three existing problems:

1. Rapidly growing number of new sophisticated competitors;

2. Feelings of distrust in traditional methods of corporate governance;

3. On the escape of individuals who leave corporations to continue as independent small entrepreneurs.

Social entrepreneurship promotes programs, products and services that provide new sources of income for the organization, improve the sustainability of the organization, but also stimulate the creation of social capital and economic development of society as a whole. Due to the fact that revenues are not provided by donors, organizations that provide such services have greater independence both in carrying out project activities and in ensuring their own financial sustainability. Social enterprises are increasingly recognized as a key factor in tackling social exclusion, as they can provide services to neglected, impoverished communities that are not of interest to the private sector. By organizing daily activities, such organizations do not have to create a surplus of income for shareholders, and thus social entrepreneurship encourages the sustainability of social change and civil society organizations. Long regarded as part of a marginal economy, social entrepreneurship is everywhere in the world as a new response to the challenges faced by megacities as small agglomerations: fight against exclusions, recycling of waste, fight against the pollution, promotion of culture ... All sectors are invested by social enterprises, whose activities are geared to the basic social and environmental needs of citizens. Because they carry models that often allow "better with less", because their agility allows them to develop solutions perfectly calibrated to the specificity of local issues, social entrepreneurs are undoubtedly major players in economic development and social inclusion in our territories.[5]

The social enterprise is based on a business plan. The company's strategic plan includes the vision and mission of the company, its goals, as well as the basic strategic directions that the company will follow in the realization of the set goals. In this case, the plan is the most common annual agenda, that is, the annual business plan that is consistent with the strategic plan. As such, it consists of short-term goals and strategies with associated plans that the company formulates in five main areas: marketing, production, research and development, organization and management and finance.[6] Just as business entrepreneurs create and transform the industries and economies, social entrepreneurs act as the change agents for society. Rather than waiting for government and private institutions to find solutions to the prevailing social problems, they prefer to take initiative to address such issues. They seize opportunities which others might have missed in order to improve the system. .[7]

Employment of socially marginalized groups, socially responsible business of companies and preservation of the environment are three segments on which the social economy and entrepreneurship are based. The biggest obstacles to the development of the social economy, ie eco-socially responsible economy are the lack of education and leadership in this area, but also the lack of an adequate institutional and legislative framework.

6 CONCLUSION

There is no generally accepted and unique definition of the third sector, ie the social economy. The concepts of the third sector and the social economy are very close, so these terms are often used as synonyms, although they do not have to be essentially and formally the same. Therefore, for practical purposes, it is most rational to accept the commitment that the third sector, ie the social economy, consists of all organizational forms that do not belong to the private for-profit or public sector.

The term "social enterprise" is associated with certain European countries, and most of all with the way the third sector is organized in France and northern Italy, while in other countries, such as Germany, the use of this term is associated with the adoption of European Union legislation. As the concept of social enterprises puts together cooperatives, associations, mutual aid societies and emphasizes the specific mission of these organizations to contribute to the well-being of their members or community more than to generate profit, the focus is on the relationship between profit and non-profit.

Unlike traditional cooperatives, social enterprises may be community-oriented or of some general interest, while unlike the non-profit sector, which encompasses the full range of advocacy and lobbying organizations, social enterprises have a specific mission to operate in for the welfare of its members or community. In relation to the “third sector” or “non-profit organization”, social enterprises are in one spectrum of these organizations, because they have important common characteristics - voluntary association, formal organizational structure and autonomous decision-making system. The specific characteristics of these actors are to undertake economic activities that not only develop entrepreneurship but also social capital, ie they are aimed at goals in the direction of improving the quality of life.

The main difference between a private (market) enterprise and a social enterprise is that the basic goal of a private enterprise is to make a profit that belongs to the owner (s), and in a social enterprise the well-being of the members of the enterprise or community. A private for-profit enterprise may, under certain conditions, obtain the status of a social enterprise.

The factors that have most influenced the development of the social economy in developed market economy countries are: Changes in the concept of the welfare economy; Failures in the functioning of the market in some spheres and activities (market fallers); New forms of employment promotion and cooperation between economic and social factors; Growing demand for social and local services.

Circumstances that have most influenced the need for the development of the social economy in transition countries and even in Serbia are: The need to strengthen the market power of vulnerable groups; The need to increase the number of new companies; The need to reduce poverty; The need to increase employment and reduce social exclusion through a system of social innovation; The need to meet the needs of special groups through the diversification of services.

The development of the social economy in the future will mostly depend on the creation of a social climate and appropriate moral norms and value systems; Successes in the implementation of the basic concept of socio-economic development of the state and special incentive measures.

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CHALLENGES AND OPPORTUNITIES FOR THE DEVELOPMENT OF RURAL ENTREPRENEURSHIP IN SERBIA

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Abstract

The time of the corona pandemic has shown that the economies of all the countries around the world are suffering from a greater or lesser recession. After the pandemic is over, nothing would ever be the same. Each country will have to look for its own path of development in the new circumstances. Serbia must seek its own chance for progress in the faster development of its own agriculture and villages. Rural entrepreneurship has a special role in this. The aim of this paper is to point out the importance of rural entrepreneurship as a great development opportunity for the villages of Serbia.

Keywords: rural entrepreneurship; entrepreneurial programs, villages of Serbia, development, quality of life.

1 INTRODUCTION

All the developed countries in the world have based their economic development on the enterpreneurial people and entrepreneurship. For their part, they have achieved a systematic approach to overall development creating an appropriate environment, above all, for the development of competent professionals and entrepreneurs whose ideas, innovations and knowledge are the basic driver of overall sustainable development [1]. To this end, a system of lifelong learning has been designed with the aim that each employee should acquire adequate knowledge and skills.

The outbreak of the Covid 19 corona virus pandemic disrupted the world economy and led to a global recession. It is estimated that nothing will be the same as it was before the pandemic, which would cause the design of new models of sustainable development.

Serbia, in its future development, must pay more attention to rural development as a condition for the survival of small villages, and to accelerate its overall development. A great chance for this component of sustainable development of Serbia is designing an optimal model of rural entrepreneurship. The aim of this paper is to point out the importance of rural entrepreneurship as a great development opportunity for the villages of Serbia.

2 CURRENT STATISTICS OF THE VILLAGES IN SERBIA

According to the official statistics for 2019, 64399 inhabitants were born in Serbia and 101,458 inhabitants had died, which is a natural population increase of -37059 inhabitants. In 2019, 5.34 inhabitants per 1,000 inhabitants had died. The fact that an increasing number of marriages are falling apart is a cause for concern and in 2019, there were 10,899 divorces out of 35,570 marriages. This trend continued this year as well, in which in the period January-July 2020 the number of live births was 35,210, which is 626 or 1.7% less compared to the same period last year. The number of deaths in the period January-July 2020 was 60,631, which is an increase of 961 or 1.6% compared to the same period last year [2].

The results of the last official census from 2011 showed that there were 2,487,886 households and 7,163,034 inhabitants in Serbia, and 2,914,990 (40.5%) live in rural areas. The inhabitants of Serbian villages are 43.6 years old on average, while the average age in towns is 41.3 years. If the present tendencies do not change by 2050, Serbia would have 6.3 million inhabitants, which would return it to the level of 100 years ago [3]. There are more than 260,000 unmarried men and 100,000 unmarried women in Serbia between four and five decades of age which have not started families yet. According to B. Gulan's estimates [3], in 2017, 2018, and 2019, 60,000 young people left Serbia, and about 400,000 of them returned around Easter 2020 due to the crisis caused by the corona virus, with their fate uncertain for now. According to the data of the Republic Fund for Pension and Disability Insurance (PIO), in 2019 there were 184,430 agricultural pensioners in Serbia whose average pension in 2018 was only 11,805 dinars, and the lowest amount of 11,272 dinars is received by 75.67% of agricultural pensioners.

There are 4,709 villages in Serbia, and 1,200 of them are in real danger of disappearing. In 86% of the villages the population is declining. There are less than 100 inhabitants in 1,034 villages. There are less than 50 inhabitants in 550 villages. There are currently about 100 empty settlements, and the same number of settlements with less than 10 inhabitants. There are no children under the age of 20 in more than 200 villages. The development of agriculture for the last three decades was 0.45% per year, and from 2000 to 2019 0.61%. In Serbia, 500 villages do not have an asphalt road, and in about 1000 villages there are no shops, 73% of villages in Serbia do not have a cultural center or a library. About 2,000 villages do not have a post office, and a kindergarten does not exist in 2,760 villages. There is no ambulance in two thirds of the villages. There are no primary schools in 230 villages, and there is only one student in each of the 200 primary schools. There are about 50,000 empty houses without owners in the villages, and 150,000 say that currently no one lives in them [3].

There are 570,000 agricultural holdings in Serbia today, which is 60,000 less than in 2012. The Republic of Serbia has 5.1 million hectares of agricultural land or 0.59 ha per inhabitant. Of that, 4,224,000 hectares consist of arable land, which is 0.47 ha per inhabitant. 3,470,000 hectares are currently being cultivated, while 800,000 hectares remain uncultivated. The average size of the estate is 5.5 hectares, and 2.5 hectares in the south. According to the SBS data from January 9, 2019, out of the total arable land, 1.5% or close to 46,823 hectares are irrigated, while in the world, on average, about 17% of arable land is irrigated. The share of livestock in the total agricultural production is about 30% (in the world it is more than 60%) [3].

Branislav Gulan [3] points out that serious warning indicators are the decline in the number of livestock from two to three percent in the last three decades. There are only 881,000 cattle in the stables, which is the historical minimum in Serbia. At the beginning of 2018, there were 12,000 cattle in Serbia for fattening, and that was sold to Turkey at a price of 34.2% above the average price due to the quality of cattle and absence of GMO feed. This year, exports have stopped and there is no one to buy 12,000 fattened cattle. At the beginning of the disintegration of the SFRY, Serbia exported about 30,000 tons of "baby beef" (veal), and today it is between 300 and 400 tons or 100 times less than then. At the beginning of 2019, Serbia had 2.7 million pigs, which is the lowest number of pigs since 1955. There are 1.71 million sheep in Serbia, which is a 18.12% increase compared to 2002, when there were 1.44 million heads. The number of goats in Serbia is around 196,000. Serbia has 16.2 million poultry, which in 2018 amounted to 0.56% of EU production.

In the study Agricultural land in the Republic of Serbia [4], it was stated that from 1960 to 2012, cooperatives lacked 400,000 hectares of land, which in terms of money amounts to two to four billion euros. In the event that the money is returned to the cooperatives, Serbian villages could be revived.

The development of agriculture and rural areas cannot be observed on its own. It must be integrated into the sustainable development of Serbia and the EU, but also other partners of Serbia to which Serbia must adapt.

3 SUSTAINABLE DEVELOPMENT GOALS

Sustainable development is a paradigm of the modern world development. According to the definition of the UN Commission on Environment and Development (WCED), published in 1987, it means "development that meets the needs of the current generation, without compromising the possibility for future generations to meet their own needs". This phenomenon is intensively studied both in the world and in our country ([5], [6], [7], [8], [9], [10]). This is a holistic and “intergenerational” approach, which contains the following basic components of sustainable development: economic development, social development and environmental protection (Figure 1). Obviously, these three pillars are not enough and they also lack the fourth pillar: good governance, proposed by Jeffrey Sachs, all in order to fully meet the 17 sustainable development goals set by the United Nations General Assembly (Figure 2) in its resolution A / RES / 70/1 - Transforming our world: the 2030 Agenda for Sustainable Development from September 2015.

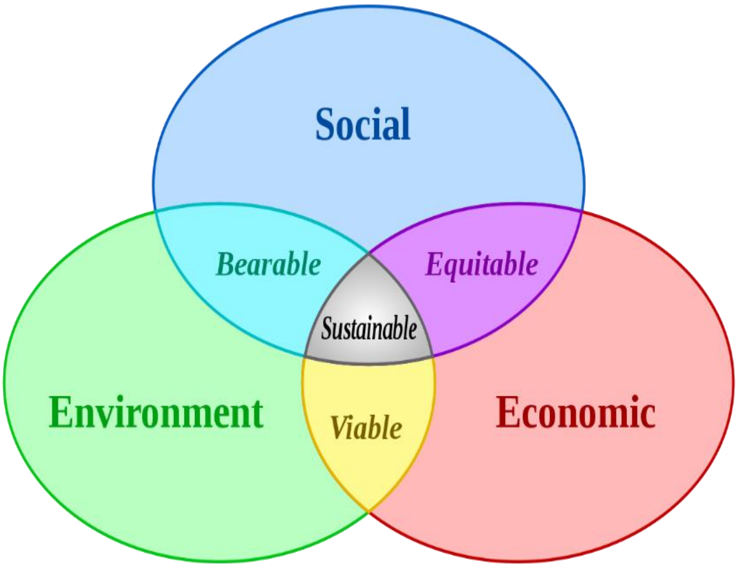

Figure 1. Sustainable development scheme [11]

Figure 2: Goals of sustainable development [12]

Sachs [13] directs good governance to governments but also to multinational companies, as the most powerful actors in world movements. Governments must focus on development activities:

• Social services (health and education)

• Providing modern infrastructure (roads, ports, electricity)

• Protection of individuals (primarily from crime and violence)

• Basic sciences and new technologies, as well as

• Strict implementation of regulations in order to protect the environment.

Multinational companies will need to be more considerate of the requirements of respecting the law and the natural environment, as well as to help the communities in which they operate on a higher level.

The latest crisis will force humanity to make intensive changes. There will also be the imposition of will by the powerful, but also open conflicts. In the end, negotiations must be done and a solution must be reached for further world economic growth to be based on a systemic approach that will enable future generations to have enough resources and energy and a good quality of life.

Serbia, as a small economy, must design its own concept of sustainable development well, respecting all the opportunities provided to it by its surroundings, but also give the right answers to the threats that are going to continue appearing every day. One's own strengths must be maximized and weaknesses diminished. In this concept, agriculture and rural areas can significantly improve the future development of Serbia. Rural entrepreneurship and the creation of conditions for its accelerated development deserve special attention.

4 RURAL ENTREPRENEURSHIP – A CHANCE FOR THE DEVELOPMENT OF RURAL AREAS OF SERBIA

Sociologists studying the villages agree that there is nothing to do in the cities of Serbia, and on the other hand there is no one to work in the villages [14]. The saying goes that the village has always saved Serbia, so its development is the salvation for Serbia. Rural entrepreneurship in Serbian agribusiness and European and other integrations can significantly contribute to this [15].

Agrarian (agricultural) and rural (village) entrepreneurship are derived from the concepts of multifunctional agriculture, ie integrated rural and sustainable development of agriculture and villages of developed European countries, as opposed to monofunctional agricultural development in Asia and Africa and profit-oriented model of agricultural development in Latin America.

Multifunctionality of agriculture means providing food production and other useful outputs, without market price, but which society subsidizes (food safety in accordance with HACCP standard, equal access to healthy food, quality rural conditions for healthy living and protection of living and working environment: biodiversity, flood protection, erosion, pests, noise, air, water and soil pollution, etc.). Satisfying all these conditions ensures a sustainable agricultural system. It implies full satisfaction of the needs of the current generation while providing conditions for future generations to meet their needs. Integral rural development includes, in addition to primary agriculture and processing industry, trade, rural tourism, crafts, water management, forestry, hunting, fishing, as well as other service activities that accompany agriculture and activities related to agribusiness. All these accompanying activities are the subject of agricultural and rural entrepreneurship, which include:

1. Small and medium enterprises, whose activity is in the field of agriculture, forestry, water management and fisheries, as well as their production, processing and service business systems in the villages,
2. Private shops (production and service) of rural crafts and trades,
3. Small enterprises and workshops of domestic handicrafts and travel agencies, and
4. Entrepreneurial engagement in the implementation of projects and programs within agricultura, forestry, water management and fisheries in the villages.

The Government of the Republic of Serbia considers an entrepreneur as a person capable and with knowledge that enables him to move economic resources from one area of lower, to another area of higher productivity and higher profit. An agrarian and rural entrepreneur is a person who takes the risk to invest his capital and knowledge in establishing, organizing and running the business of his business system or some other business venture and applying innovation in order to make a profit on invested capital and knowledge in agriculture and rural areas. Our legislation considers a medium-sized company as a business system that at the date of preparation of the financial report meets at least two of the following three criteria:

1. the average number of employees is between 50 and 250;
2. the anual total income is from 2,500 to 10 million euros (equivalent in dinars);
3. the average property value is from 1 million to 5 million euros (equivalent in dinars).

Business systems that do not meet the requirements for a medium-sized enterprise are classified as small enterprises. Entrepreneurs also belong to small companies, ie legal entities.

Registered agricultural households are also of great importance for rural development. At the end of 2018, there were 442,553 of them in Serbia, of which 383,116 were active (Table 1). They are a huge potential for the development of agricultural and rural entrepreneurship. They, as well as other entrepreneurs, should be provided with a well-designed concept of lifelong learning.

Table 1. Of agricultural holdings registered in the register of agricultural holdings by organizational form on December 31, 2018

NAME OF ORGANIZATIONAL FORM	TOTAL NUMBER OF AGRICULTURAL HOLDINGS	UMBER OF AGRICULTURAL HOLDINGS IN ACTIVE STATUS
Family farm	439.291	380.280
Companies	2.446	2.121
Entrepreneurs	347	326
Agricultural cooperatives	321	255
Agricultural holdings with the status of a legal entity	137	123
Scientific research organizations	11	11
Total	442.553	383.116

5 THE CONCEPT OF LIFELONG ENTREPRENEURIAL EDUCATION

A successful entrepreneur constantly desires and acquires new knowledge and experiences and successfully implements them in his practice. This means that he permanently educates himself and trains all his life. "Permanent education is an invitation addressed to every person to lead a constant struggle against prejudices, ready-made ideas, dead conventions, stereotypes, successive crystallizations of life" [16]. Whoever does not use the chance to constantly improve and upgrade, sooner or later stops being an entrepreneur, because he fails to understand his business ventures in the right way.

A prerequisite for the survival and constant growth and development of entrepreneurial business is the possession of a sufficient amount of information and knowledge to make the right decisions, in order to achieve the desired business goals. It is often a problem for an entrepreneur to extract quality information from the multitude of data he acquires and turn it into important and relevant information for making his business decisions, and that part belongs to lifelong learning. “The goals of such education, which is realized at different levels, include: raising awareness of participants in the educational process about the importance and significance of taking responsibility for their own destiny, abandoning the philosophy of "getting a job" and accepting the philosophy of "create a job yourself", developing and promoting entrepreneurial qualities (creativity, perceiving business challenges and opportunities in its surroundings, taking risks, flexibility and adaptability, persistence and perseverance, action orientation, responsibility for the achieved results) that are applicable in all areas of work and actions and acceptance of change as a way of life "[17].

All the necessary knowledge is acquired through lifelong entrepreneurial education and training, which can be divided into:

1. Education of children and the youth, and
2. Education and training of adults.

Forms of lifelong education (Figure 3) include formal, non-formal and informal education. This coincides with the opinion of Robert Kiosaki, who talks about the formal and the school of life, where in the first we are taught not to make mistakes, and in the second we make a mistake and draw experiences from it ([18], [19]).

FORMS OF LIFELONG EDUCATION AND TRAINING		
FORMAL	NON-FORMAL	INFORMAL
- Preschool - Elementary - Middle (high school) - High (university) - Doctoral studies	- Training - Courses - Conferences - Seminars - Online training etc.	- Experience

Figure 3 – Forms of lifelong education and training (source: authors)

Practice has shown that the family and the immediate environment significantly influence the formation of a successful entrepreneur. The family, as a rule, is the source of education for a successful entrepreneur. Its members more or less participate in the creation of an entrepreneur, and in his formation as a good man. "Besides school, the family is the place of learning that has the greatest impact on the social dimension of learning" [20].

Learning in the official institutions of the educational system is extremely important for the development and formation of the personality of the future entrepreneur. Therefore, it is invaluable to organize sections, workshops and courses that will promote business and enable young people to comprehend and understand that their survival and beautiful life depends on whether they will become successful or not. On the other hand, through these forms of education the student is directed to develop creative thinking, through comprehensive consideration of problems and situations as well as giving possible solutions to them. In this way, students acquire the habit of constantly researching, asking questions, learning and gaining lasting knowledge, which will be very useful in their further life and work. Through these forms of education, students learn how a business system is created and functions in a market environment (learn: how to design and develop a new product / service, how to research the market, how to plan marketing activities, how to sell, how to run a business, the way business books are kept and other useful jobs important for the entrepreneurial way of thinking). Also, virtual business systems and simulations, both for elementary and college students, hold a significant place.

The educational system must provide more knowledge that is practically applicable, which is achieved by the presence of a quality system of so-called dual education. A major limitation to the realization of this concept in Serbia is the insufficient connection between the economy and the education system. This resulted poorly in the young people's opinions on entrepreneurship and opportunities for independent business. "More than half of young people (57%) see employment in the public sector as a secure job, compared to 21% of young people with the opposite opinion." [21], and "almost half of young people (44%) consider working in the civil service to be the best professional experience. 29% do not think like this, and 27% are not sure" [20]. The educational system of Serbia must be transformed in order to change, first of all, the way of thinking not only of young adults but the remainder of the adult population as well regarding entrepreneurship, while focusing not only on the formal but also on all other ways of acquiring knowledge [22].

Adult education today is primarily based on the actions of family, friends, peers, and later colleagues and the workplace itself. This education is not compulsory, but without it there is no successful entrepreneur which acquires significant practical knowledge and experience this way.

By doing business the entrepreneur, on his own successes and mistakes, gains experience as a consequence of the decisions made and activities realized. Every entrepreneur is an individual which is constantly developing with new impressions, impulses and experiences and is over time beginning to learn from other people's mistakes more than from his own. Therefore, a successful entrepreneur listens to the advice of experienced people and monitors the behavior of competitors. He does not ignore his wrong moves, but he does not give up because of them. After that, they will make better decisions and be more successful.

The entrepreneur should also use the opportunities for self-improvement provided by the state and the National Employment Service, which offers several free additional education programs for people who need it:

- Professional practice
- Acquiring practical knowledge
- Clubs for active job seeking
- Retraining and additional qualification
- Training for starting one’s own business
- Training for active job searching
- Training for the needs of the job market
- Training at the request of the employers
- Functional elementary education of adults. [23]

Also, the Republic Chamber of Commerce and its branches provide entrepreneurs with very useful training on all current issues related to the business of economic entities. Business entities themselves are ready to accept a certain number of people for training both within the model of "dual education" during high school and in adult education, which provides more positive effects:

- People can gain additional knowledge and maybe find a job,
- Employers can train their potential new employees and receive certain subsidies,
- The society and the state benefit due to the part of the population improving further and potentially reducing unemployment [22].

The possibilities provided by the Internet in support of the lifelong education of each individual should not be neglected either.

6 CONCLUSION

The world after the corona pandemic will not be the same as before. It is inevitable that its transformation and recomposition will take place. Every business entity will look into ways to survive, but also to develop in the conditions of sustainable development.

Serbia should seek its own path of sustainable development, relying on the developed world and its friends.

In the future development of Serbia, a qualitatively new role and place should be played by agribusiness, which cannot be realized without agrarian and rural entrepreneurship. Entrepreneurs for rural development should be mobilized both from the ranks of inventive individuals as well as from individuals from registered agricultural holdings.

The state of Serbia must transform its education system and adapt it to the real needs of the economy and society. In doing so, it must equate the evaluation of the knowledge of individuals acquired through various forms of formal, non-formal and informal education.

The concept of lifelong learning is very important in the formation of successful entrepreneurs. It implies the creation of an optimal combination of all forms of education by establishing and implementing the right relationship between the traditional and modern model.

The formal education system must be based on entrepreneurial principles in which individuals will prepare for their successful business life. Curricula must be adapted to the participants and the level of education at which they are applied.

Society must create an optimal environment and business climate for shaping people's personalities through the acceptance and adoption of entrepreneurial spirit, as an important factor on the road to a better future.

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BALANCE SHEET ANALYSIS WITH THE AIM OF IMPROVING FINANCIAL REPORTING – A CASE STUDY OF NECTAR COMPANY

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Abstract

This paper presents in the form of a case study the process of analysis of the balance sheet and income statement of the company Nectar. The research presented in the paper is based on the analysis of the official set of basic financial reports, as well as other publicly available data on the company. As the time component is very important for research of this type, b+ reports were observed in the paper during 4 years, ie for the period 2015-2018. It is especially important that in the Republic of Serbia, as a country with a very large agricultural potential, companies engaged in the processing of fruits and vegetables operate successfully. The aim of the research is to assess the financial result and financial position of a given company by examining the structure and dynamics of total income and the distribution of total income, profitability and opportunities to improve the financial position. The results of the research indicate that the value of intangible investments in the observed economic entity has increased, the value of long-term financial investments has decreased, as well as the capital has increased over time. Operating revenues show moderate stagnation, but with a positive trend, which is a consequence of the positive financial result from regular operations.

Keywords: financial analysis, financial reports, balance sheet, profit, performance indicators

1 INTODUCTION

Financial analysis deals with the research and quantification of functional relationships that exist between balance sheet items, balance sheets and success, in order to enable a credible assessment of the financial position and activities of the company. [1] It can be said that financial analysis is actually a set of methods, procedures and instruments for disclosing, showing and interpreting information about the condition and success of a company based on its financial statements. [2] Generally speaking, the analysis of financial statements is an assessment of the past achievements of the company and the prediction of future achievements in the function of information support of the decision-making process, which are essentially financial decisions. The purpose of financial reporting is to provide all stakeholders (stakeholders) with information on the profitable, asset and financial position of the company, as well as changes in those positions. [3] In this regard, the financial condition of the company is of interest to all its stakeholders. The balance sheet or financial report is an accounting, business-financial, statistical, economic and social phenomenon. [4] The main financial statements used in the ratio analysis are the balance sheet and income statement.

This paper presents in the form of a case study the process of analysis of the balance sheet and income statement of the company Nectar. Due to the volume of data, only the balance sheet is presented in the paper, but as the balance sheet and income statement are always linked, we will also talk about the items in the income statement, in order to make the analysis more complete. The paper consists of six chapters. We are already at the end of the first chapter - the introduction. The second part provides an overview of the literature used, the third part of the paper hypothetical-methodological framework of the work by explaining the objectives of the research, the methods used and an overview of hypotheses. The fourth part of the paper presents the results of the research and tabular balance sheets. We conclude the paper with concluding remarks and recommendations to other researchers to continue the analysis.

2 LITERATURE REVIEW

If we say that the subject of analysis is the balance sheet and income statement, then the goal of any balance sheet analysis is the analysis of financial results - including the structure and dynamics of total income and distribution of total income, sources of financial results, profitability, risk of financial results and the possibility of leaving the loss zone. as well as an analysis of the financial position, which includes analyzes of long-term and short-term financial balance, reproductive capacity, indebtedness, maintaining the real value of equity and the possibility of improving the financial position. These could be the general objectives of the analysis that financial analysts observe and study. [5] Among the specific goals we will single out: meeting the needs of stakeholders, analyzing future trends, evaluating the performance of companies, using accounting information to make decisions, determining company policy measures, etc. [6]

The objectives of financial analysis also differ according to the type of users of the subject analyzes. [7] Existing and potential investors (owners and potential buyers of shares) are interested in the overall business - financial destiny of the company. Since they are risk capital investors, ie they own all net increases in the company's net assets, as well as they bear all losses of the company during business and in case of liquidation, they also demand the broadest and most comprehensive goals of financial statement analysis. [8] Of course, they are interested, in addition to current and future financial security, also current and future liquidity, but also the profitability of the company. The most important thing for shareholders is, first of all, information about the current earning power, as well as the projection of the future earning power of the company whose shares it owns, ie whose shares it will potentially buy. [9] The interests of creditors are different from the previously described requirements of shareholders. Long-term creditors are bond buyers and long-term lenders. Common for bond buyers and providers of long-term loans is that their receivables are long-term tied in the company, ie that they are under long-term repayment by the company. [10] Having in mind their position, the basic goals of financial analysis that are important to them, unlike the goals of shareholders, are mostly focused on indicators of long-term financial security of companies and forecasts of cash flows. Short-term creditors are short-term creditors of the company, suppliers and other short-term creditors (creditors whose claims are tied to the company for up to one year). The goal of financial analysis, which primarily interests them, is primarily the short-term financial security of the company from which they claim. [11] Previously, short-term creditors expect to collect their receivables with interest within one year. There are of course other external users of financial statement analysis with different requirements from the analysis. [12] The union, for example, is interested in long-term job security, long-term maintenance, growth and development of the company, the level of wages and the like. The government is interested in global information on the company's progress so far, on the company's condition and balance sheets for the day, etc.

3 METHODOLOGICAL FRAMEWORK OF THE RESEARCH

The subject of this paper is a detailed analysis of the official financial statements of the limited liability company Nectar. The research presented in the paper is based on the analysis of the official set of basic financial reports, as well as other publicly available data on the company. The subject of the research is the analysis of publicly published regular annual reports of the company Nectar. In order for the analysis to be more detailed and precise, we will use the balance sheets in the period from 2015 to 2018. The very subject of this research has gained importance at this time because the quality interpretation of financial statements provides an opportunity to see a broader picture of the financial situation in the Republic of Serbia.

Nectar was chosen as the subject of analysis. as a company that deals with the production process from cooperation with fruit growers and the purchase of fruit to finished products: juices, nectars, alcoholic beverages, jams. This paper can be used for scientific purposes, due to the systematic presentation of the business analysis procedure of the company from the financial statements, as well as for social purposes, having in mind the importance of the company for the economy of the Republic of Serbia. It is especially important that in the Republic of Serbia, as a country with a very large agricultural potential, companies engaged in the processing of fruits and vegetables operate successfully. The aim of the research is to assess the financial result and financial position of a given company by examining the structure and dynamics of total income and the distribution of total income, profitability and opportunities to improve the financial position. The scientific goal of the research is to point out the importance of financial reporting of companies, from the point of view of making decisions on the issue of entering into business and financial relations. The social goal of the research is to calculate and interpret the mentioned indicators and planned balance sheet positions from the company's point of view, in order to support the decision-making process on entering credit and other financial positions in the future.

Analysis is the breaking down of facts and concepts into smaller parts and elements, which means that the subject to be analyzed needs to be complex. [12] From the above, it can be seen that the analysis uses a deductive method, ie it starts from the general and the analysis leads to the special. The inductive method is sometimes used in the analysis, with the aim of shortening the analysis time. [13] In this paper, we will base ourselves on the deductive method, in order to avoid the danger of error. The phases of the research are: [14]

1. problem definition - determining the purpose, goal and task of the analysis,
2. data collection,
3. analysis of results,
4. compiling alternative solutions.

The paper starts from the general hypothesis that the company Nectar operates stably in the observed period. Special hypotheses were added to the general hypothesis:

- The amount of total revenues recorded a slight increase in the observed period.
- There is room for increasing business in foreign markets.
- Nectar is one of the socially responsible companies.

4 RESULTS AND DISCUSION

The company's assets are visible in the balance sheet. [15] It shows what the company owns, as opposed to liabilities showing where the funds come from. [16] The assets of an enterprise constitute its assets, and the assets in the analysis of the financial statements are included in the analysis of assets. The analysis of the structure of total assets divides the assets into: unpaid subscribed capital, invested capital, operating assets and loss above the amount of capital, ie in one word business assets. Operating assets are further divided into fixed assets and current assets. Tables 1 also show the balance sheet items (assets and liabilities) for the period 2015-2018. year according to the data from the site of the Agency for Business Registers of the Republic of Serbia

Table 1: Assets of the balance sheet of the company Nectar for the period 2015-2018. years

POSITION	STRUCTURE (%)				INDEX		
	2018	2017	2016	2015	2018	2017	2016
FIXED ASSETS	51,31	51,78	51,92	51,62	1,11	1,05	1,02
Intangible assets	0,13	0,03	0,09	0,008	17,9	4,4	1,23
Property, plant and equipment	16,22	15,08	13,92	13,12	1,38	1,21	1,08
Long term investments	34,91	36,63	37,87	38,45	1,01	1,004	0,99
Long-term receivables	0,05	0,04	0,04	0,04	1,38	0,89	0,93
CURRENT ASSETS	48,69	48,22	48,08	48,38	1,12	1,05	1,01
Supplies	28,39	30,45	30,14	29,07	1,09	1,1	1,05
Short-term receivables	11,82	12,46	10,51	10,88	1,21	1,21	0,98
Short-term financial investments	0,04	0,01	0,01	0,07	0,6	0,23	0,19
Cash equivalents and cash	7,7	4,21	6,21	7,67	1,12	0,58	0,82
Value added tax	0,02	0,23	0,54	0,25	0,1	0,99	2,17
Active accruals	0,71	0,86	0,67	0,44	1,78	2,03	1,52
TOTAL ASSETS	100	100	100	100	1,11	1,05	1,01

Source: [15]

Table 2: Liabilities of the balance sheet of the company “Nectar” for the period 2015-2018. years

POSITION	STRUCTURE (%)				(%) INDEX		
	2018	2017	2016	2015	2018	2017	2016
CAPITAL	50,25	50,91	47,25	43,95	1,27	1,22	1,09
Basic capital	0,77	0,82	0,85	0,85	1	1	1
Reserves	0,04	0,04	0,04	0,04	1	1	1
Revaluation reserves				2,71			

Unrealized losses	0,004	0,004	0,004	0,05	0,08	0,08	0,08
Retained earnings	49,44	50,05	46,36	40,35	1,36	1,31	1,16
LONGTERM RESERVATIONS AND OBLIGATIONS	20,46	21,97	27,99	30,52	0,74	0,76	0,93
Long-term provisions	0,27	0,27	0,16	0,21	1,36	1,28	0,74
Long-term liabilities	20,19	21,7	27,83	30,31	0,74	0,75	0,93
DEFERRED TAX LIABILITIES	0,23	0,33	0,35	0,45	0,58	0,77	0,81
SHORT-TERM LIABILITIES	29,06	26,79	24,41	25,08	1,29	1,13	0,99
Short-term financial liabilities	14,38	11,32	8,61	8,53	1,88	1,39	1,02
Advances received deposits and bails	2,53	1,48	2,28	4,22	0,67	0,37	0,55
Business duties	10,53	12,69	11,57	10,67	1,10	1,25	1,10
Other short-term liabilities	0,89	0,79	1,63	1,35	0,74	0,62	1,23
Tax liabilities	0,04	0,13	0,04	0,03	1,54	4,87	1,21
Accrued expenses and deferred revenue	0,69	0,38	0,28	0,28	2,70	1,43	0,98
LIABILITIES	100	100	100	100	1,11	1,05	1,01
OFF-BALANCE SHEET LIABILITIES	4,27	5,03	3,51	1,99	2,38	2,65	1,78

Source: [15]

5 CONCLUSIONS

Nectar represents one of the largest processors of fruits and vegetables in the territory of the Republic of Serbia. Thanks to one of the most famous and popular marketing slogans "it doesn't matter", the juices of this company are one of the most recognizable on the shelves of all small and large stores, markets and supermarkets. Through many years of work and very frequent innovations, the mentioned company has gained a leading position in our market, and we believe that the reputation and tradition oblige them to create and nurture the created positions even more. [16]

By analyzing the balance sheet, we could conclude the following:

- The fixed assets of the company have not changed much in the observed period, but there is an increase in intangible assets, which may be due to innovation, marketing activities or socially responsible business. Through various campaigns such as the introduction of packaging of plant origin, investing in green energy, applying for the trademark "guard house" of the Serbian Chamber of Commerce or opening a counseling center and in vitro fertilization center, we could conclude that Nectar is one of the socially responsible companies operating in to the Republic of Serbia, which supports the confirmation of a special hypothesis 3.
- There was a decrease in the value of long-term financial placements, while in short-term receivables there was an increase in balance sheet items.
- Capital increases in the observed period, to a greater extent in the period 2015-2016. years, than in the next observed period, but the trend is certainly positive. This may be a consequence of the increase in the value of the item "retained earnings" and positive business in the observed period.
- The amounts from the received advances tell us that the customers have confidence in working with the company Nectar.

By analyzing the income statement, we could conclude the following:

- Operating revenues show moderate stagnation in the observed period, but we can say that the trend is stable. Analyzing the structure of revenues, we concluded that Nectar generated most of its revenues from operating revenues. As a typical company should operate, these percentages are around 90%, in 2015 operating revenues accounted for 93.4%, in 2016 they accounted for 92.3%, in 2017 the share of operating revenues was 89.7% and In 2018, the share of business revenues is 91.99%. Analyzing the income statements, one can see the negative trend of financial income, but also the growth of other income. On the expenditure side, the situation is similar, with Nectar recording positive results in each of the observed years, with the highest net profit in 2017, when total revenues are the highest.
- Revenues from sales in the country are about 30% higher than revenues from sales abroad, but we should not say that the export of manufactured goods is not a statistically significant item in total revenues. One of the recommendations of this research could be that there is a space for the improvement of foreign business, which supports the second post-hypothesis.
- An increase in the amount of gross wages in the observed period may be an indicator of more stable operations and investment of the company in the income of workers, provided that there were no major deviations in the increase in the number of workers. This factor analysis could be the beginning of some new, future research.
- High difference in the burden of operating income on variable material costs in enterprises and competition can be caused by: higher physical consumption of materials, fuels, energy and production services per performance in enterprises than in competition, poorer structure of production performance in enterprises than in competition and poorer global parity sales and purchase prices with the company than with the competition.
- During the analyzed period, the company achieved a positive financial result from regular operations every year, ie it achieved a positive financial result from both financing and operating revenues. The financial result from other revenues was positive only in 2015.

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III HRM PRACTICES AND GREEN ORGANIZATION

INFLUENCE OF THE HRM PRACTICES ON PSYCHOLOGICAL CAPITAL IN ORGANIZATIONS

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Abstract

This research paper is focused on analysing the existing HRM (Human Resources Management) practices in different organizations in Bulgaria and how they influence the psychological capital and its aspects. A short theoretical overview of the two concepts is done. 359 employed professionals from different companies in Bulgaria took part in the study. HRM practices were explored based on four aspects. "Work characteristics" have the highest mean value of M=3.78, SD=0.81, followed by "Managerial styles and values" with M=3.40, SD=0.86, "Remuneration and social benefits" with M=3.39, SD=1.00 and the lowest is the perception of the "Recruitment systems and performance appraisal" - M=3.11, SD=0.91. Psychological capital has as well 4 dimensions. Those are: hope (M=4.10, SD=0.66) – most strongly presented; resilience (M=4.02, SD=0.66); self-efficacy (M=4.01, SD=0.70) and the lowest valued is optimism (M=3.83, SD=0.70). Further analysis of the relationships between the two constructs show that the correlations are significant at the 0.01 level and vary between r=0.183 and r=0.471. It turns out that work characteristics is the strongest predictor of all 4 aspects of psychological capital. This is supported by many practical researches that claim the importance of the job that employees do for their well-being at work. The results of this research also reinforce the role of the strategy for HRM and how it supports the creation, maintenance and enforcement of the psychological capital in organizations and proposes many opportunities for developing and implementing working business models for great achievements.

Keywords: HRM, practices, psychological capital

1 INTRODUCTION

Human resources management is a topic widely explored by different scientific and business areas. From a theoretical point of view this is a very important research that focuses on how people are being managed in the organizations and more specifically how they are hired, trained, developed, motivated, retained, etc. There is another concept that has gained great interest recently - the psychological capital. It is defined through the positive organization behaviour and enhancing the performance by adequately managing the employees' strengths, capacity and potential. This view is an inevitable part of the whole HRM strategy. The better this strategy is defined and the HRM system is organized, the more positive will be the perceptions amongst employees about their self-efficacy, hope for the future and optimism as well as their resilience to all the organizational changes that happen.

2 THEORETICAL OVERVIEW OF HRM PRACTICES AND PSYCHOLOGICAL CAPITAL

2.1 HRM practices

The idea of human resource management is relatively new, compared to other spheres of business, economics and psychology. The concept started to develop at the end of the 18th century with the industrial revolution boom and labour organization. Frederick Taylor's "scientific management" develops the idea of work specialization and educating the workforce in very specific skills which leads to the establishment of the so called "assembly lines" [1]. However, the human factor is neglected and people start losing motivation and interest in their work. So something needs to be done to change that. Later, in the 1930s, Elton Meyo conducts the well-known Hawthorne studies. It turned out that performance is interrelated not with the work itself (only) but with motivation, satisfaction, personal needs of the employees [2]. This put an accent on the behavioural aspects of the human resources management and the key factor for successful management – the human one. It also leads to further investigations on the individual factors that may affect performance and well-being at work.

Human resource management can be defined as a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organizations [2]. It was defined by Boxall and Purcell [3, p.1] as “all those activities associated with the management of employment relationships in the firm”. This includes: personnel selection, recruitment, on boarding, training, development, compensations and benefits, retention, definition of employment needs, competency mapping, appraisals, career paths, performance management, turnover, health and safety, motivation and many others. It is a wide concept that is modified accordingly the specific business needs of each industry. Despite that it should be somehow centrally operationalized. The Society for Human Resource Management (SHRM) and its affiliated Certification Institute have identified six broad functional areas of human resource management [4]: strategic management, workforce planning and employment, human resource development, total rewards and risk management. Those are constantly changing in parallel with the specifics of the different business sectors.

As a whole, HRM is a broad scientific field and every scholar is analysing it from his/her own perspective. It also has some main goals [2, p.5]:

- support the organization in achieving its objectives by developing and implementing human resource (HR) strategies that are integrated with the business strategy(strategic HRM);
- contribute to the development of a high-performance culture;
- ensure that the organization has the talented, skilled and engaged people it needs;
- create a positive employment relationship between management and employees and a climate of mutual trust;
- encourage the application of an ethical approach to people management.

A new perspective in the human resource management starts to develop in the 1980s and 1990s when the organization is treated as a key competitive advantage that should be managed and developed effectively. Strategic planning becomes crucial management element [5]. The Chartered Institute of Personnel and Development (CIPD, http://www.cipd.co.uk/) has even developed a holistic concept that includes terms like „strategic“, „added value“, „client advantage“ and the idea for „cheaper, faster, easier“ production of goods and services [6]. The market economics and the „spirit of capitalism“ define the temps and direction of the development of the organizations. The human resource management is part of the whole strategic policy of the company and human capital is the main production force and source of customer satisfaction and profitability. Selection, recruitment, talent acquisition, management and retention are the basics of outstanding results of the business process. Those, who know how to manage this talent and workforce, are actually the one leading the company to success.

In the recent 20 years there is a change in the concept for human resource management. One perspective is based on the model proposed by David Guest [7] for personnel management and human resource management. The main differentiation is in the understanding of several crucial characteristics which divide the two concepts generally as administrative and bureaucratically vs. strategically oriented. Those aspects are related to the nature of the human resources approach – either short-term or long-term; psychological contract (based on compliance or willing commitment); job design; hierarchical or flexible organizational structure; remuneration; recruitment; training and development opportunities; trust in employee relations; acceptance of the HR function and criteria for effectiveness of it, etc. [7], [1], [8], [9], [10], [11].

Some other authors use similar classifications. Armstrong [12] speaks about 4 types of management – people management, personnel management, human resource management, human capital management. Linda Reidy [5] makes a parallel between personnel and human resource management on the basis of 4 factors – integration, strategy, employees-managers relations and organizational design. The workforce becomes more flexible and multi-functional. The recruitment processes focus on the professional and educational background but together with that – on the adaptability and fit to the existing teams [13], [6]. So the main goal of the HR experts is to meet the best company with the best employees.

Another very popular classification of the HRM models is the one of the “hard” and the “soft”. This differentiation is quite popular in the business but it also has a solid theoretical background. Usually, the hard models treat the human resource as equal to all the other resources in the company. The focus is on the organization itself, its goals and functional needs. The soft models, on the other side, are built on the personality traits, emotions and behaviours of the employees. This somehow reflects the “X and Y” theories of McGregor where the first emphasizes the production processes and the final result and the second one – people's satisfaction and personal value for reaching the goals [14], [5], [12]. One more well-known model is the "7-s model" of the McKinsey Consulting Group. It also divides the "hard" and the "soft" in the HR. The hard part includes the structure, systems and strategy and the soft one – style (of the management), staff, skills and shared values. This somehow is a continuation of what was previously said. When the focus is on the personnel management, the important thing is understanding the organization as a structure that functions due to different systems and long-term strategy. Employees are valued as a means for reaching the goals. When you want satisfied, motivated and involved people, you choose inspiring leaders that appreciate and develop skilled and talented professionals, share values and everyone is involved in the strategic planning and forecasting. This is actually the next step to strategic HRM where the human resource management is part of the whole organizational strategy [15].

2.2 Psychological capital

Psychological capital is a relatively new construct that gains wide scientific interest in the last 20-30 years. One of the first to analyse it is Martin Seligman whose researches are focused around the strengths, health and vitality of people. He suggests that when we are engaged ("in the flow") we invest in our future through building up psychological capital [16]. When it comes to the working context it is related with the synchronization of the personal and organizational goals. It is also a continuation of the human capital concept and claims that performance can be improved once the focus is put on the strengths, capacity and potential of the employees [17], [18]. According to Luthans and colleagues there are four main states or dimensions of the positive psychological capital [19], [20], [21]:

- Self-efficacy – the faith and security in the own capabilities to mobilize cognitive resources for reaching specific results. It is developed through mastering of the skills, social persuasion, positive feedback, etc.
- Hope – having the faith and means for reaching the goals. It can be reached through goal setting, taking the initiative, planning, preparation, showing self-confidence, etc.
- Optimism – owning a descriptive style that relates positive events to constant internal and widely accepted reasons. This means that each individual should have realistic and flexible perspectives and accept the past as it is. It is also about valuing the present and searching for opportunities for the future. When all that is perceived, an optimistic way of thinking and acting is developed.
- Resilience – this is the ability of the individual to recover from failures and bad circumstances and turn it into positive changes. It can be perceived through strategies focused on processes, assets and taking balanced risks.

As a whole psychological capital is perceived as a positive resource for coping with all the organizational changes. The feeling of "lack of control" may decrease the confidence of the people in organizations and make them view more pessimism and desperation in what is happening. In addition they might weaken their flexibility, resilience and coping abilities [22]. As a consequence of that there is a visible decrease in performance, motivation and morale, low psychological engagement and well-being. In order to improve that, individuals and organizations should use the development of psychological capital as competitive advantage. In relation to the HRM practices this means that the most desired companies are those that offer opportunities for career development, personal growth, learning programs, flexibility in managing one's own daily life at work [18], [23]. This just reinforces the importance of how HRM practices are constructed, managed and also applied in the real work life. All the effects then can be seen in the psychological capital, organizational climate, employee satisfaction performance results and many more.

3 RESEARCH METHODOLOGY

The main objective of this research paper is to explore the employees' perceptions about the HRM practices and how they influence the psychological capital in the organizations. We assume that all of them will correlate positively based on the theoretical review and further some of the HRM practices will show as strong predictors of the different dimensions of the psychological capital.

The questionnaire that examines the HRM practices contains 38 items measured by a 5-degree Likert scale from 1 – Fully disagree to 5 – Fully agree. It is a combination of several other questionnaires – one, developed by Snezhana Ilieva about the HRM [24], the organizational diagnosis questionnaire of Weisbord [25] and some additional items added based on different models for strategic human resources management [12]. Participants should have in mind their current organization. After the principal components factorial analysis with Varimax rotation, 4 scales have been created: “Managerial styles and values” (18 items, $\alpha=0.95$), “Recruitment systems and performance appraisal” (11 items, $\alpha=0.92$), “Work characteristics” (6 items, $\alpha=0.82$), “Remuneration and social benefits” (3 items, $\alpha=0.72$). The internal consistency of the whole questionnaire is 0.97, which is a very high statistical result.

The psychological capital questionnaire uses 24 items and is developed by Luthans and colleagues [22]. It is also measured by a 5-degree Likert scale from 1 – Fully disagree to 5 – Fully agree. The internal consistency of the whole questionnaire is 0.93, which is again a very good statistical results. The four subscales (dimensions of the psychological capital) also show very good statistical characteristics: self-efficacy ($\alpha=0.84$), hope ($\alpha=0.83$), resilience ($\alpha=0.83$) and optimism ($\alpha=0.78$). Each of them consists of 6 items.

4 SAMPLE

359 participants took part in this study – all of them employed in companies from different industries in Bulgaria. Out of those who responded 49,58% are men and 50,42% – women. Based on age, most of the people are between 26 and 35 years old (51,27% of those who have given an answer), followed by those between 36 and 45 years (29,18%), 46-55 years (10,48%), under 25 years (5,67%) and over 55 years (3,4%). 80 % of the respondents have university degree. Total work experience is divided in 5 groups: 26,63% of the participants who responded to that positional characteristics have total work experience between 11 and 15 years, followed by those between 6 and 10 years (26,35%), up to 5 years (20,4%), over 20 years (14,16%) and people with total work experience of 16-20 years (12,46%). The work experience within the current organization varies between 0 and 35 years with a mean value of M=4,64. Based on the industry, most represented are the professionals from “Information Technology” – 29%, followed by “Construction, Architecture and Installing Activities” (17,8%), “Human Resources” (11,4%), “Financial, Banking and Insurance Institutions” (8,4%), etc. Hierarchy level as a demographic factor is applied to 295 respondents (except for those from “Construction, Architecture and Installing Activities” sector): “Senior Specialists” (25,1%), “Specialists” (22,8%), mid-level management (12,8%), “Senior Management” and “Junior Specialists” (both 7,2%), and “Team Leaders” (7%).

5 RESULTS ANALYSIS OF HRM PRACTICES AND PSYCHOLOGICAL CAPITAL DIMENSIONS

Based on the descriptive statistics done “Work characteristics” have the highest mean value of M=3.78, SD=0.81, followed by “Managerial styles and values” with M=3.40, SD=0.86, “Remuneration and social benefits” with M=3.39, SD=1.00 and the lowest is the perception of the “Recruitment systems and performance appraisal” - M=3.11, SD=0.91.

There is a tendency in the recent years showing that employees have become more “picky” when they choose their next work place. It is not only about the good name of the company, the positive feedback, the excellent social image or the long-term perspective for stability and career progression in just one company. Basic things like work conditions, flexible working hours, location of the office become essential. Work-life balance is crucial for the whole employee satisfaction and effectiveness of the organization and opportunities related to that might be the deal breakers. Together with that, people want to be challenged at their work. They want to participate in new and exciting projects that will give them the chance to prove themselves, to learn new things, to climb the career ladder. The essence of the work is also a stimulator for greater involvement and personal input when it is interesting, dynamic and innovative. This stimulates the positive organizational climate, the well-being and the psychological atmosphere in the company as well.

Another very important part of the human resource management is the perception of the managerial styles and values orientation. Leading by example is the really successful model of managing an organization. It is not only about the mission, vision, strategic orientation that position it on the market. It is about the established internal norms and regulations, behavioural models, good practices, etc. Employees should follow the order created by the examples of their managers and colleagues. They believe that engaging in initiatives that support and promote the corporate identity will increase the benefits that they will gain personally and for the team and the organization.

Remuneration has always been an important part of the employee-organization relationship. Salary, social benefits, bonuses and other are always put on the table when employees negotiate their future relationship with a certain organization. Employees value the justified distribution of the payment based not only of the ranges for the role but on the personal input as well. Remuneration might be very subjective and tricky aspect of the HRM systems and it should be treated really carefully after the employees' perceptions are deeply analysed.

Recruitment systems and performance appraisal is rated the lowest within the sample. This somehow might be accepted by the subjective understanding of those processes. This is the aspect of the HRM that might be influenced by the employees to the greatest extend. Selection and recruitment is the first process within an organization that a new joiner encounters. Based on the initial impressions and shared expectations further relations are established. That's why it is very important those to be clear, understood by the both sides. There should have direct and measurable performance criteria, steps for reaching and evaluating them. And this processes should be open and not subjected to personal and unprofessional motives because this will cause decrease in employee motivation, satisfaction and effectiveness [24], [9], [11].

The other explored construct - psychological capital - has 4 dimensions as well. Those are: hope (M=4.10, SD=0.66) – most strongly presented; resilience (M=4.02, SD=0.66); self-efficacy (M=4.01, SD=0.70) and the lowest valued is optimism (M=3.83, SD=0.70).

What we can notice is that the most important thing for all the participants in the survey is the belief in their own strengths and capabilities to manage every single situation. It is about the positive vision about the future and that based on your own skills and capabilities one can achieve a lot. Shortly after we have the resilience, representing the ability to overcome all kind of situations. Individuals cannot control everything and when they experience negative moments or unpleasant circumstances they should not give up. What happened in the past remains there. People should learn to live in the present and learning from the mistakes to build up their bright future.

Another aspect of psychological capital - self-efficacy - is also highly rated though placed 3rd (differences are small). This orientation to the self establishes a good self-awareness of what is possible and can be done by each of us. The faith and security in the own capabilities to mobilize cognitive resources for reaching specific results is developed through mastering of the skills, social persuasion, positive feedback, etc.

It seems that in this sample optimism is the lowest valued aspect of the psychological capital. This somehow can be explained with the inborn negativism of many Bulgarian generations due to the different socio-economical changes that happened in the country. More or less Bulgarians are prone to see in grey than seeing the real opportunities. Despite that the results are above the average which is positive sign that the mindset is changing. Owning a descriptive style that relates positive events to constant internal and widely accepted reasons is the way to become more optimistic. This means that each individual should have realistic and flexible perspectives and accept the past as it is. It is also about valuing the present and searching for opportunities for the future. When all that is perceived, an optimistic way of thinking and acting is developed.

6 IMPACT OF THE HRM PRACTICES ON PSYCHOLOGICAL CAPITAL IN ORGANIZATIONS

The main goal of this research paper is to explore the influence of the HRM practices on psychological capital in organizations. A correlation analysis was conducted as a first step to analyse the relationships between the two constructs. All the correlations are significant at the 0.01 level and vary between r=0.183 and r=0.471. The highest values are for work characteristics and managerial styles and values from the HRM practices and optimism and hope from psychological capital. Full results are presented in Table 1. What we can notice is that the HRM practices do influence the psychological capital in all aspects. Once again it is confirmed how important the meaningful job is for the employees. The more flexible, challenging and opportunities giving it is, the greater is the hope and optimism of the people that they can manage all the changes happing in the company. This also stimulates the self-reflection and self-analysis of the own key strengths and abilities to resist to all unexpected circumstances. Managers have a key role in those process as well. Leading by example, exemplifying the organizational values, goals, mission and vision empowers the employees and builds up the "can do" way of thinking.

Another important HRM practice is the remuneration and social benefits. It has always been a key element of employee satisfaction, motivation, involvement. It is not only about how much one is being paid. It is about the individual contributions, justice and openness in the communication and the negotiations around the salary and all the other social benefits. It is also related with the fair performance evaluation, equal opportunities for taking a new role, objective and result-orientated (not personal and subjective) appraisal process. When employees feel valued and see that they are treated equally, what is achieved by them is seen and appreciated they become more positive and their psychological well-being is improved in all of its aspects.

Table 1. Correlations between the HRM practices and the dimensions of psychological capital, N=359

HRM Practices	**Psychological Capital Dimensions - r**			
	Self-efficacy	Optimism	Hope	Resilience
Recruitment systems and performance appraisal	0.242**	0.324**	0.250**	0.183**
Managerial styles and values	0.340**	0.414**	0.352**	0.309**
Work characteristics	0.386**	0.445**	0.471**	0.343**
Remuneration and social benefits	0.357**	0.337**	0.273**	0.273**

**. Correlation is significant at the 0.01 level (2-tailed).

As a further step this study aimed to investigate what are the real predictors of the development of the positive psychological capital in the organizations. This is shown in the regression analysis results (Table 2.) that point work characteristics as the strongest predictor of all four dimensions of psychological capital (all significant at the 0.001 level and β values varying from 0.269 to 0.494).

Table 2. Impact of the HRM practices on psychological capital, N=359

HRM Practices	**Psychological Capital Dimensions - β**			
	Self-efficacy *Adjusted R^2 = 0,169*	Optimism *Adjusted R^2 = 0,212*	Hope *Adjusted R^2 = 0,236*	Resilience *Adjusted R^2 = 0,115*
Recruitment systems and performance appraisal			-0.257**	
Managerial styles and values		0.196**	0.210*	
Work characteristics	0.269***	0.304***	0.494***	0.343***
Remuneration and social benefits	0.195**			

Regression is significant at the following levels:
***p<0.001; **p<0.01; *p<0.05

Going back to the results and analysis of the HRM practices we may reconfirm once again how the HRM concept has changed over time and it is no more only about personnel administration but is about true partnership [7], [17] between the employees, HR people and the business. The role of the manager, of the leader is crucial for building trust and creating long-term perspectives [17], [11]. Employees need freedom, flexibility and sense of ownership of what they are doing. Only in this way they can feel important, valued and part of something bigger, successful and socially responsible. That is why it is not surprising that work characteristics are the strongest predictor of all four aspects of psychological capital – the highest values are for the hope (β=0.494, $p<0.001$), followed by resilience (β=0.343, $p<0.001$), optimism (β=0.304, $p<0.001$) and self-efficacy (β=0.269, $p<0.001$). Then the managarial styles and values contribute for the presence of hope (β=0.210, $p<0.05$) and optimism (β=0.196, $p<0.01$) as aspects of psychological capital.

From a practical point of view it is crucial to understand how by designing the work itself the organization can empower employees to deeply investigate their positive sides, hidden powers and rely on those for reaching the desired results. Flexibility in work, self-management and prioritizing of tasks may help people be more optimistic about the future and resistent to all the unpleasant circumstances part of the inevitable organizational changes. This will improve the self-perception and self-assessment of the individuals and will support them in gaining positive experiences and further developed based on past and current successes. In order all that to be possible, strong and powerful leaders are needed and organizational values tested by the time. This is a pre-requisite for creating a brigher future and positive attitudes towards the unexpected or even the expected to come.

The least predictive power is the one of the remuneration and social benefits and it influences only the self-efficacy ($\beta=0.195$, $p<0.01$). This result show that the resilience, hope and optimism are not affected by the salary that employees are getting paid as in their essence they are somehow personal pre-dispositions that are not related to external, material factors. Though, the self-efficacy is measured from time to time by the money one gets as an exchange of the services provided. The higher the payment is the more valuable the work done is.

One surprising result is the negative predictive power of recruitment systems and performance appraisal upon hope ($\beta= -0.257$, $p<0.01$), though they correlated positively ($r=0.25$, $p<0.01$). Statistically this can be explained by the fact that more predictors were included in the model though not all of them showed statistical significance. What the result is indicative for is that actually the hope in employees, having the faith and means for reaching the goals is reduced when the recruitment process and performance appraisals are more open and objective. It seems that the standards set for all may limit the individuals in the range of skills they can use to advance in their career, get a specific role or be appraised based on the individual contributions. The criteria set for taking a specific role might as well somehow discriminate somebody who is not a perfect match and does not cover all the requirements. Together with that the clear career path set, equal resources distribution and training opportunities may be perceived as limitation of meeting the individual employee's needs. For sure those results can be further analysed and investigated deeper.

7 CONCLUSION

Researches in recent years have shown that HRM practices have a wide influence on many constructs in the organizational context, one of which is the psychological capital [18], [19], [20], [21], [22]. Going further, the whole business strategy determines the direction in which the workforce in the organization is managed. That is why the human element is becoming so powerful and much more attention is paid on it. More specifically, in this research we indicate that key for building positive, optimistic, resilient employees, focused on their self-efficacy, the HRM strategy should be focused around providing work that is challenging, flexible, interesting; leaders that are perceived as role models and values that from organizational are easily transferred into personal.

Of course this study has its limitations as well. The number of participants and their demographic profile might be extended. The research methodoly may be refined – adding more instruments and conducting further statistical analyses. Other perspectives of HRM practices and psychological capital might be considered as well.

Despite all that, the results are a good basis to build on in the future. They might be discussed directly with business organizations and work in collaboration with them to established good practices of how to increase the psychological capital in the company. Some directions might be around job rotations, open sessions with influential leaders, giving wider perspective on remuneration and social benefits and involving employees more in improving the recruitment and performance appraisal process. All that should be done after a deep analysis of each specific organization and involving all stakeholders in the process.

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THE IMPACT OF SAFETY CLIMATE ON ORGANIZATIONAL HEALTH POLITICS AND INDIVIDUAL BEHAVIOUR

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Abstract

Relatively little previous research has investigated the mechanisms by which safety climate affects organizational health practices and individual health behavior. This paper aims to report a study that addresses mainly managers' and workers' perceptions of safety and health behavior in the workplace. The research is conducted in a nuclear power plant using the NOSACQ-50 questionnaire for measurement of safety climate in organization and two other scales designed for the purpose of the study - organizational health practices and individual health behaviour. The sample includes 425 employees divided in different groups according demographic and positional factors. Differences by education and position in the organizational hierarchy are established. The organizational safety climate consists the following dimensions: management safety priority, commitment and competence; management safety empowerment; and management safety justice; as well as shared perceptions of workers' safety commitment; workers' safety priority and risk non-acceptance; safety communication, learning, and trust in co-workers' safety competence; and workers' trust in the efficacy of safety systems. The results of correlation and regression analysis show that organizational safety climate exerted a significant impact on the efficacy of organizational health practices, and was positively related to employees' self reports of preventive individual health behavior as well as participation in health-related activities. Management safety justice and workers' safety priority and risk non-acceptance predict the individual health behavior of employees. It is concluded that some established safety issues can be resolved by the implementation of management practices for health and safety performance improvement.

Keywords: safety climate; safety performance; individual behaviour; health politics.

1 INTRODUCTION

The present work is an empirical study of the organizational climate as a factor for safety and health prevention in the workplace. Subject of scientific analysis is the thesis that the workplace safety climate determines the level of efficiency of the organizational practices for health prevention and the individual health behaviors.

Accidents in high-risk industries cause significant dangers and huge damage. They lead to excessive operating costs and even loss of life. Costs such as the physical and psychological suffering of individuals and families, the reduced ability to fulfill social roles and other non-material damage are not included in the cost of workplace accidents. Consequently, work-related incidents cause significant financial and personal losses to individuals and communities as well as to organizations. Organizational behavior towards ensuring and maintaining safety must necessarily include the pursuit of the creation and implementation of effective practices for the prevention of the physical, emotional and mental health of employees in the organization. Health prevention is more comprehensive when it comes to both organizational and individual behaviors that strive to maintain a good level of health. The lack of effective health prevention practices introduces conditions that could reduce the ability to adequately perform work tasks, risk conditions for safety, and low productivity.

The origin of the term safety climate is related to many studies in the field of organizational culture and although the terms climate and culture are often used as interchangeable, a number of researchers are trying to distinguish these two concepts. A distinction is made between the concepts safety culture and safety climate, considering that safety climate is a snapshot of employee' perceptions, attitudes and beliefs, while the safety culture is shaped as a stable trait reflecting the basic values, norms, assumptions and expectations. [1]

Safety climate is also defined as "the temporal state measure of safety culture, subject to commonalities among individual perceptions of the organization. It is therefore situationally based, refers to the perceived state of safety at a particular place at a particular time, is relatively unstable, and subject to change depending on the features of the current environment or prevailing conditions". [2]

The managerial approach of clear safety commitment defines high levels of safety culture and influences employees' perceptions, ensuring good safety performance. [3]

Employees with the necessary knowledge of safe workplace behavior tend to implement management safety policies, which subsequently reduces the number of incidents. [4], [5], [6], [7]

Safety climate can vary from one position to another within an organization, at different levels of the organization, and at the workgroup level. [8], [9], [10], [11], [12]

A definition of culture of national safety and health prevention is adopted by the International Social Security Association in the Seoul Declaration. The notion describes a culture in which the right to a safe and healthy working environment is respected at all levels where governments, employers and workers are actively involved in ensuring a safe and healthy working environment through a system of specific rights, responsibilities, duties and practices and in which prevention has the highest priority. [13]

One of the areas of research on which this study focuses is related to preventive health actions or behaviors of employees who are believed to contribute to positive health status. Health behavior is explained as that personal committed behavior, whether intentional or not, which has a protective or preventive value in maintaining or improving one's health. It is characterized by a number of actions such as: sensible and balanced diet; enough time for sleep; maintaining a first aid kit at home; avoiding or refusing to rent personal belongings; exercise. A number of studies is summarized that use preventive health behavior as an independent variable and their results show the supporting link between positive health practices and better health/ lower morbidity and mortality rates. Thus, today it is clear that favorable health status is associated with adequate sleep (7 to 8 hours a day), participation in recreational activities, regular exercise, regular medical examinations and, in general, self-care and conscious personal responsibility. Poor health is associated with sleep deprivation, smoking, irregular eating, being overweight and consuming five or more alcoholic beverages, even on occasions. Researchers believe that studying the relationship between individual behaviors for health prevention can provide a basis for developing strategies to promote good health. In general, preventive health behavior imply that individuals deliberately engage in that behavior as maintaining their health is the primary goal of their actions. [14]

Healthy organization is defined as a organizational culture that supports and stimulates the mental and physical health of employees, in addition to productivity and organizational effectiveness. [15] The American Psychological Association determines the psychologically healthy organization in terms of the resources it offers to its employees such as: health maintenance programs; employee assistance programs; flexible working conditions; health and safety programs; and initiatives to prevent stress in work. [16] E. Kelloway and A. Day (2005) introduce the perspective that a healthy organization not only addresses employees' health problems but also tries to prevent them. [17]

The study of health prevention in the organization, according to the theory of social exchange, implies that if the employee perceives his relationship with the organization as being qualitative in terms of the importance it attaches to his welfare, then that employee is inclined to maintain behavior, which will also benefit the organization itself. [18], [19]

2 METHODOLOGY

For the research objectives the methodology of P. Kines et al. for assessing safety in the workplace is applied. [20] To measure the level of effectiveness of the organizational practices for health prevention and the individual health behaviors of the employees in the surveyed organization two scales are constructed. This survey allows to outline the contours of the organizational profile for health prevention and the mechanisms for maintaining safety in workplace of one of the most high-risk sectors in Bulgaria.

The Nordic Occupational Safety Questionnaire (NOSACQ-50) is used to measure the safety climate in the organization. NOSACQ-50 has been developed by a team of northern researchers on occupational safety and is based on both the theories of organizational safety climate and previous international empirical research and results. [20], [21] The NOSACQ-50 consists of 50 items grouped into a seven factor structure, or the shared perceptions of: management safety priority, commitment and competence; management safety empowerment; management safety justice; workers' safety commitment; workers' safety priority and risk non-acceptance; safety communication, learning, and trust in co-workers' safety competence; and workers' trust in the efficacy of safety systems. The organizational safety climate is assessed by the participants in this study using the 4-step Likert response scale: 1 - Totally disagree; 2 - Disagree; 3 - Agree; 4 - Totally agree, indicating the degree of agreement with each of the allegations.

The questionnaire shows good psychometric qualities. The reliability of the method and its internal consistency is very good ($\alpha = 0.924$). The Cronbach's Alpha coefficient for each subscale is as follows: management safety priority, commitment and competence - 0.745; management safety empowerment - 0.735; management safety justice - 0.745; workers' safety commitment - 0.815; workers' safety priority and risk non-acceptance - 0.472; safety communication, learning, and trust in co-workers' safety competence - 0.817; and workers' trust in the efficacy of safety systems - 0.778.

For the purposes of this study, a separate *health prevention tool* is constructed and tailored to the specifics of the surveyed organization and its preventive health practices including the preventative individual health behaviors of the employees. The questionnaire consists of 24 items grouped into *two subscales*: *organizational health prevention practices* and *workers' individual health behavior*. The organizational practices for health prevention include selected assertions concerning practices used by the organization to maintain good health of its workers such as: regular medical examinations; additional medical insurance; updating position when changed health status; conditions for various sport activities, out of work; good conditions for food and rest in the workplace, etc. The scale of individual health behavior covers issues related to workers' personal care and responsibility for their own health including items such as: "I am the one who is responsible for my health."; "I regularly spend time on sports and movement in nature."; "I take care of my health only when I get sick."; "I smoke every day".

The *health prevention tool* shows high reliability and internal consistency of the items ($\alpha = 0.841$). Cronbach's alpha of the two subscales is as follows: organizational health prevention practices - 0.872; individual health behavior - 0.679. The health prevention scale is assessed through a 5-degree Likert scale: 1 - Totally disagree; 2 - Rather disagree; 3 - I can not decide; 4 - Rather agree; 5 - Totally agree.

3 RESULTS OF THE RESEARCH

Subject of the present study are employees from a nuclear power plant. The sample covers 425 surveyed persons, which is approximately 11% of all employees in the organization. The workers are from different hierarchical levels, from different spheres of production, administration, engineering, maintenance, etc. The demographic profile of the respondents is outlined by sex, age, marital status, number of children in the family, education, years of service at the nuclear power plant, category of personnel, position, shift work. results

The data from the survey are processed with the statistical program IBM SPSS Statistics 23.0. The descriptive statistics reveal a perception of a relatively good level of safety in the workplace with a slight need for improvement. The average questionnaire value is 3.11, with a standard deviation of 0.315. The results also set a relatively high level of health prevention in the surveyed organization ($M = 4.01$, $SD = 0.449$). Employees assess at a fairly good level organizational practices to prevent their physical, mental and emotional health ($M = 3.98$, $SD = 0.583$).

A correlation analysis has been carried out to establish the correlations between safety climate in the workplace and health prevention in the organization. The results (see Table 1) reveal the existence of positive statistically significant correlations between all components of the organizational safety climate and health prevention - organizational practices and individual health behavior. The main trends of interdependence between these two constructs are outlined based on the strength rating of Pearson's correlation coefficients.

It is observed that the *individual health behavior* is in strongest correlation with the perception of safety climate characterized by *workers' trust in the efficacy of safety systems*. This shows that the clearer the safety objectives are, the higher the knowledge about the benefits of assessing and pre-planning safety is and the better the appreciating the role of safety training is, the more responsible employees are to their health and they try to manifest a systemic care. Conversely, the more negligent the employees' behavior towards their own health is, and the responsibility for it is blurred, the lower is their confidence in the efficiency of the safety systems.

Table 1. Correlations between the components of safety climate and health prevention in the organization

Safety climate	Health prevention	
	Organizational Practices	Individual health behavior
Management safety commitment and competence	,538**	,225**
Management safety empowerment	,565**	,236**
Management safety justice	**,585****	,220**
Workers' safety commitment	,508**	,181**
Workers' safety priority and risk non-acceptance	,448**	,183**
Safety communication, learning and trust	,431**	,174**
Workers' trust in the efficacy of safety systems	,471**	**,278****

* p< 0.05; ** p< 0.01

On the other hand, organizational health prevention practices are in strongest positive correlation with the *management safety justice*. The result reveals that the more accurately the information is collected by the management regarding incidents, the more closely the causes of the situation are invastigated, rather than the culprits, the higher is the employees' assessment of the efforts of the management for preventing their health. At the same time, employee dissatisfaction with health care policies and practices applied in the power plant leads to a lesser perception of management safety justice.

The results of the correlation analysis reveal, at second and third place, according to the weight of the correlation coefficient, the interdependencies of both the individual health behavior and the organizational practices for health prevention respectively with the management safety empowerment and the management safety priority, commitment and competence. This means that the maintenance of meaningful and workable management practices that stimulate employees to participate in safety development decisions leads the staff to an appreciation of management efforts for maintaining good health in the organization and increasing personal responsibility and striving for it. So does and a management behavior that reveals a prioritization of safety over production. At the same time, the higher the staff's assessment of organizational practices and policies for health prevention and personal health care is, the more the management is perceived by workers as committed, responsible, empowered, and able to maintain a good level of safety. The conclusions on the basis of the correlation analysis that established statistically significant interdependencies (see Table 2) reveal that management's attitude and behavior toward maintaining a safety climate in the workplace has a stronger positive correlation with employees' health prevention rather than workers' attitude and safety behavior.

Table 2. Correlations between safety climate components and health prevention in the organization

Safety climate	Health prevention	
	Organizational practices	Individual health behavior
Management safety attitude and behaviour	**,652****	**,262****
Workers' safety attitude and behaviour	,590**	,257**

* p< 0.05; ** p< 0.01

Overall, the results show a stronger positive correlation of the perception of safety climate in the workplace with the assessment of the existing organizational health prevention practices rather than with the employees' individual health behavior in the surveyed organization.

To determine the safety climate impact in the workplace safety on employee health prevention in the surveyed organization, a regression analysis is performed. The statistically significant values of β coefficients are presented in Table 3.

Predictors of organizational practices for health prevention - the effectiveness of existing organizational practices for employee health prevention is determined by five components of the organization's safety climate: management safety justice (b = 0.291, p <0.001), workers' commitment (β = 0.147, p <0.01), workers' safety priority and risk non-acceptance (β = 0.142; p <0.01) and management commitment and competence (β = 0.116; p <0.05).

The result reveals that collecting accurate information about incidents, hearing all employees and looking for the causes of the problem, not the culprits, the conviction of the management that anyone can affect safety and giving this opportunity to the employees highlight the efforts made by the organization to implement and maintain practices and policies to prevent the physical and mental health of all employees. All this is evidently supported by the high commitment of the managers, the prioritization of safety, the shared responsibility and efforts of the employees to maintain safety together with the high safety priority and the prudence of risk. This complex model explains 46.8% of the variation of organizational practices for health prevention in the organization ($\Delta R^2 = 0.468$).

Table 3. Influence of the perception of the safety climate on health prevention in the organization

Safety climate	**Health prevention**	
	Organizational practices	Individual health behaviour
Management safety commitment	0,116*	
Management safety empowerment	0,147**	
Management safety justice	0,291***	0,117*
Workers’ safety commitment	0,175***	
Workers’ safety priority and risk non-acceptance	0,142**	
Safety communication, learning and trust		
Workers’ trust in the efficacy of safety systems		0,225***
ΔR²	**0,468**	**0,088**

* p< 0.05; ** p< 0.01; *** p< 0.001

Predictors of individual health behavior of employees - responsibility and systemic care for one's own health are determined by two features of the safety climate: workers' trust in the efficacy of safety systems (β = 0.225, p <0.001) and management safety justice (β = 0.117; p< 0.05). This means that a positive assessment of safety training and the concept of advance planning of safety, along with the perception of just leadership, set a high level of personal responsibility and good health behavior. This is the only model that reveals a cause and effect relationship between the workplace safety climate and the individual health behavior of employees and explains only 0.88% of the variability of the dependent variable, part of the health prevention in the organization ($\Delta R^2 = 0.088$).

The results of the regression analysis shows the existence of statistically significant impact of the separate components of safety climate in the workplace on the organizational practices for health prevention and to a small extent on the individual health behavior of the employees.

4 CONSLUSION

The results of the conducted empirical study outline the leading management approaches for intervention in the development of safety climate in the organization. The key to safety is the commitment of the management to ensuring a high level of training and competence of employees, encouraging employees to work according to the established safety rules and procedures, limiting risk behaviors, reinforcing a high level of safety priority for employees, with support for initiatives to find new solutions and to inform about the risky conditions and immediate correction of safety issues. Raising the level of organizational safety climate can be accomplished through a comprehensive senior management strategy to evolve a training and development system for employees' individual competencies in terms of safety and to build trust in the safety systems. It is necessary to plan and design a comprehensive intervention method to assess the current level, to formulate the desired goals and to outline the concrete steps in the process of improving the safety climate in the organization.

The results allow also to establish guidelines for intervention at the mid level. The development of leadership competency training models for the middle management team aims at forming a team safety climate, delegating rights and responsibilities, involving employees in problem-solving and just dealing, providing comprehensive safety information, as well as analysis of risk behaviors and feedback to subordinates about their handling of safety.

The successful preventive health-care practices need a comprehensive approach, supported by management's willingness and patience to achieve long-term results. In general, the organization's health prevention strategy is maintained at an individual level through the implementation of organizational practices aimed at ensuring good physical and mental health of employees.

The data from the survey allows the health prevention system to be revised and enriched to prevent mental health of employees by introducing effective approaches to dealing with stress and building a high health culture among employees. Thus, the establishment of organizational practices and systems for the overall prevention of health and safety in the workplace can be identified as a key to the organization's strategic approach.

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GREEN ORGANIZATION STRATEGY

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Abstract

This study aims to point out the problems in the mass implementation of strategic greening of large areas of the planet, to analyze the necessary crucial steps to reset human relations with their environment, and to offer suggestions for a better understanding of social responsibility of organizational development. The main assumption of the analysis is based on the view that sporadically and spontaneously enviable results cannot be achieved in moments when the ecological balance is increasingly disturbed. It is necessary to lead to strategic organizational development through social institutions that will take responsibility for greening their environment. Using holistic and humanistic approaches to individual and organizational development, the analysis focus on individual freedom, lifetime education and training, consciousness on human values and ethical concerns related to the implementation of the organizational greening and corporate social responsibility. Additionally, there is a suggestion that a good part of the responsibility should be implemented by bidding acts of states and their institutions. Finally, it is proposed a strategic organizational development model.

Keywords: Corporate social responsibility, organizational development, organizational greening, environmentally friendly, strategy.

1 INTRODUCTION

Through the history of human civilization on the planet, there have been repeated attempts to adapt terrestrial resources and surfaces to man- by clearing forests, burning, leveling, and with many other treatments, and only recently, when the damage caused by it has become more visible, we start thinking more about how this relationship with our environment must change.

The problem of environmental pollution in many countries of the world threatens the continuity of human life, and the economic units started spending large amounts of money to reduce and control environmental pollution. Taking care of the environment is one of the most important issues and concerns to developing countries in recent times as well as developed countries, and part of the budgets of these countries is dedicated to the protection and preservation of the environment from the serious effects triggered by pollutants which are produced by industrial processes and technology. On this ground, the economic units should contribute economically to the improvement of the environment quality level. The success of the economical units, in the long run, will depend on their ability to balance future growth and preserve the natural environment. These units should therefore take into account the elements of environmental quality costs in determining and evaluating their operations and charging environmental costs to the cost of production. Therefore, environmental quality costs will play an important role in changing the behavior of strategic decision-makers and individual's concerned with the future of economic units, preserving the environment and working to increase profits and achieve competitive advantage via making the right decisions. [1]

In global competitive markets, many organizations undertake efforts to survive creating conditions in a destructive dynamic conditions and developing into an organizational unsustainable development. Organizational development change due to decisions that are made unstained, becomes unsustainable development change.

Sustainable organizational development is becoming possible through consecutive and evolutionary periods of steady growth with different dominant management styles to solve the problems leading to the emergence of different organizational structure arrangements and forms. The green organizational management philosophy is one tendency becoming one of this dominant organizational management model linked to sustainable organizational development practices. This green organizational management model is within an interdisciplinary theoretical framework supporting a holistic sustainable organizational development integrating the corporate social responsibility with a competitive advantage strategy.

The content of this study first analyzes the implications between organizational transformation, change and development to characterize them. After this characterization, the notion of greening organizations is considered to be transformed into one of the core competencies and become the competitive advantage of any organization. It continues to analyze the corporate social responsibility as a strategy to implement the sustainable organizational development. Finally, the study proposes a strategic organizational development framework before presenting the conclusions.

2 ORGANIZATIONAL TRANSFORMATION, CHANGE AND DEVELOPMENT

''Organizational culture can be viewed as a system of shared values defining what is important, and norms, defining appropriate attitudes and behaviors that guide members' attitudes and behaviors.'' O Reilly and Chatman. According to them, organizational culture should:

- Be amplified by the behaviors of leaders.
- Be embedded in a network of organizational practices.
- Have shared beliefs, values and assumptions held by members of an organization.
- Be visible in the 'way that work gets done' on a day-to-day basis.
- Be evident in the behaviors of individuals and groups. [2]

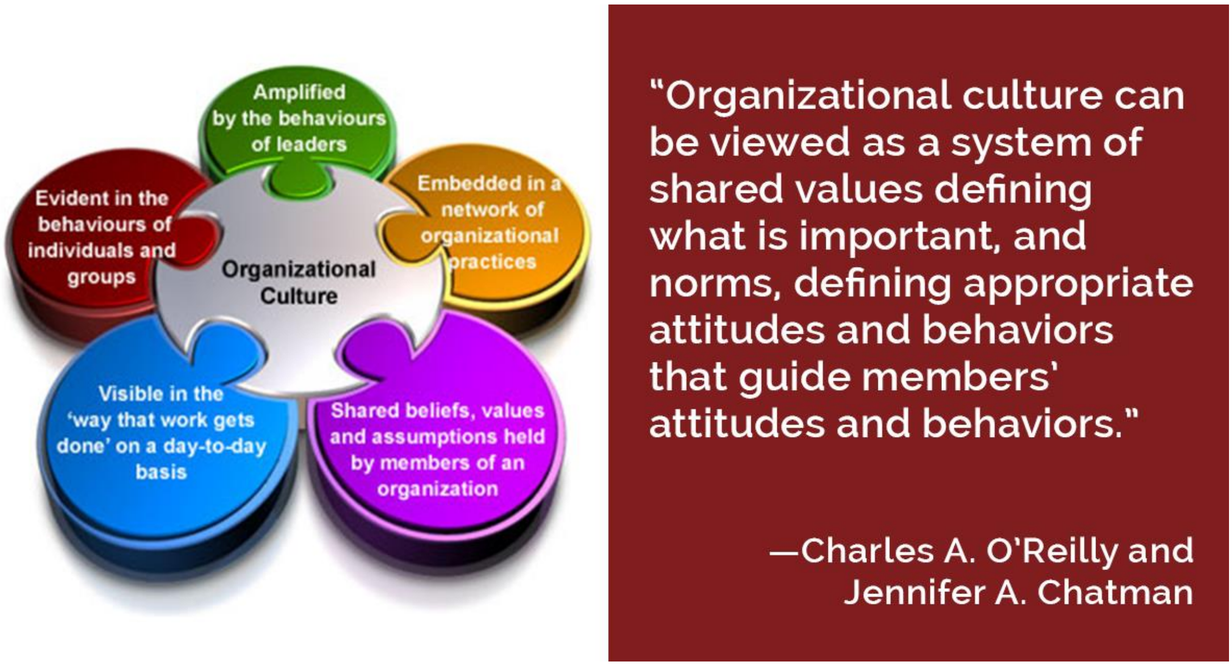

Figure 1. Organizational Culture [2]

The concept of organizational development encompasses the overall organizational health which has effects on the motivation, communication organizational cohesion and organizational behavior of the workforce and the structure. A heightened sense of motivation enables organizational development as adaptability. The sustainable organizational development and growth have effects on the overall organizational performance and growth. That's why it's very important to start putting efforts into the understanding of corporations and public organizations as consumers as well as an understanding of individuals as consumers.

Sustainable organizational development should be decided between the top management and the operational working areas, including the staffing personnel, to spot opportunities for individual and organizational growth and development. The top-down sustainable organizational development initiatives supported by bottom up implementation process builds on current work experiences and the workers become more responsible and committed to carrying on more actively on the activities and practices of the development projects and becoming.

Organizational change and organizing is a central characteristic of the contemporary organizational context of a global economy [3]. A sustainable organizational and individual development in the new economy must generate the changing capacity to adapt to an environment subject to the development elasticity. Management of sustainable organizational development in the context of the new economy and environment requires new organizational management principles and behaviors to develop organizational capacities and capabilities. Organizational development focus on managing flexible planned changes and an adaptive process approach due to the constant flow of information, changes and developments [4].

Organizational change theory [5] has dimensions of radical and incremental change based on their outcomes [6]. The organizational transformation and development processes based on the organizational structures development differ in relation to the specificities of the national economic system and the synergetic processes created between the sustainable organizational development and the level of innovation development. Organizational structure has a relevant role in organizational social and cognitive sustainable development [7]. Individual and organizational approaches lead to more meaningful, comprehensive and manageable work system supported by a post-bureaucratic organizational structure embedded in individual and organizational sustainable development.

Hiring and the constant development of individuals with the best job criteria and mindset moving in the same direction enable organizational development. Organizational practices based on a humanistic approach make more emphasis on communication, commitment, collaboration, self-regulation and self-control. Organic and flexible organizational collaboration emerges accidentally not focusing on conflicting organizational philosophy, visions and physical setting or experiencing uncertainty on the goals and other issues.

An organizational innovative model is based on self- organizational management processes, scientific and technological non-linear developments are more efficient and make contributions into the economic system development and growth. An organizational model on actions and institutions [8] and model of organizational learning [9] analyze in contradiction each other the nature of work in organizational settings. Sustainable organizational development need to accomplish indicators related to efforts to measure costs, value of production, human development, customer, revenue, profits, competition, etc., aimed to achieve a market position and share.

Management of organizational structure enables freedom related to core values and ethical standards. The organizations focusing on motivating their workers allowing them the freedom to express themselves improving the cohesion within their own work leading to sustainable organizational development and growth.

The nature of organizational development and transformation depicts a problem maze across private, public and third sectors which can be studied from evolutionary, involutionary, revolutionary and holo-evolutionary transformations [10]. Sustainable change and development in organizations is a multidisciplinary approach in which any discipline perspective complements the others resulting in a more balanced and complete framework and models [11]. A balanced organizational behavior and structure development increase the benefits of the organizational core competencies.

3 GREENING THE ORGANIZATION

The green organizational management philosophy studies human behavior in environmental management and sustainable development [12] [13]. Mishra, (2017) [14] explores green human resource management linked to sustainable organizational development practices in manufacturing organizations and proposes an interdisciplinary theoretical framework for a holistic sustainable organization by integrating green management and corporate social responsibility with competitive advantage strategy.

Green organization is an interdisciplinary theoretical framework used to develop human resource environmental-friendly behaviors, green competencies and attitudes, eco-friendly practices, policies, tools aligned with an environmental strategy crucial for pro-environmental performance [15]. A green organization environmental sustainable behaviors require not only perceptions but investments for green initiatives and practices such as training, purchasing, etc., aimed to earn brand reputation and value, control the impacts on the environment, acquisition and motivation of talent [16] [17]. Organizational greening and environmental management requires the cooperation and participation of all the stakeholders although the management level involvement is crucial to exercise influence in organizational decision-making promote the environmental behaviors towards green organizations [18]

[19]. The job description may include pro-environmental and green behaviors included in the duties aimed to promote organizational green and environmental initiatives as an important organizational greening goal.

Green stakeholders' empowerment motivates organizational citizenship behaviors to pursue green activities and enhance the greening of organization's outcomes [20] which have an impact on an environmental impact. Sustainable organizational development is related to the effectiveness of empowered workers making organizational decisions who feel more positive towards the management and use of their own capabilities.

Green organization policies, practices and systems can be represented as green human resource management designed to develop a workforce promoting green behavior in the organization for the benefit of natural environment, employees, individuals, business organizations and society at large [21]. This concept encompasses a broader picture and shows a developed awareness in the sense that one looks not only at the profit, but at the whole process, the consequences of that process, and the care for the environment as well as each individual (and employee). The development of strong ties between the organization and the society contributes to feeling a sense of identity and purpose. The new development is conceptualized as the elasticity of development as the variation sensitiveness to the variation of an influencing factor. The development of elasticity is dependent on an entrepreneurial behavior involving organizational and individual development factors.

Organizational greening initiatives for sustainable development should be cost-saving to attain a competitive advantage in specific areas such as product design, processes and service innovation involving the participation of the stakeholders in flexible initiatives and innovation processes of organizational greening. Greening organizational initiatives can be implemented through change principles and human resource practices at all the organizational levels.

The resource-based view argues that human resources are the most important source of sustainable organizational development. Organizational human resources practices have an influence on organizational innovation as a mediating variable influencing the sustainable organizational development practices. Policies and practices of human resources management organize the workplace structure and tasks, new individual and team procedures.

Teamwork has the potential to promote sustainable organizational development in the new economy challenging the functional structures of the traditional bureaucratic organizations. Among other benefits, teamwork will make it easier to establish and develop a sense of cooperation among colleagues, develop a sense of belonging to the company, as well as mutual trust among all employees, regardless of the position in which they work. Introducing employees to the greening strategy creates a feeling that something useful is being done for the planet, for themselves, and for future generations. Also, the company's good reputation is growing, both for employees and the environment.

Promoting environmental management and sustainable development is based on green performance management system [22] aligned with green behaviors, attitudes and activities within the organization, attuning the individual with the organizational goals. The Global Reporting Initiative (GRI) on sustainable development are practices geared towards large organizations and business companies to report their sustainable performance and sustainable activities such as social justice, environmental degradation, etc. Here, the initiative is in great collision with the multinational companies that make immeasurable profits in less developed environments leaving enormous damage to the population- by the devastation of the terrain, pollution of groundwater, and surface water and uncontrolled emissions (without or with minimal investment in purification filters). If the state does not prevent such behavior, it is necessary to engage local social structures, self-organizations, and even strikes.

An unavoidable element of environmental awareness is also an environmental behavior that should be developed and encouraged. The organizational pro-environmental vision and mission statements should emphasize the involvement and participation of top management and their integrated initiatives in organizational interrelations on green strategies and sustainable green growth practices [23] [24] [25]. Formalization and documentation of green recruitment, education and training, appraisal and rewards practices of a green human resource system provided by organizations may aim to promote sustainable environmental behavior.

Connecting all the organizational stakeholders with its interventions on natural resources, green technology, process, supply chain and green outcomes is relevant to deal with the factors hindering the organization and practices that encourage green behaviors for a successful organizational greening. These practices must be organized and followed under green initiatives at all organizational levels.

Green organizational practices accepted as innovative measures by management supporting the greening of the organization and involving green teams help to attain a desirable benefits and green outcomes. Organizational top-management involvement and support are crucial to motivate all the stakeholders involved in facilitating green environmental behaviors in the integration between green practices and activities in the greening of organizations [26].

Green purchasing is another organizational green practice focusing on the suppliers and green supply-chain. A green organization collaborates with its suppliers inculcating green initiatives and practices and in terms of environmental funding for joint research and development, learning and training, etc.

Organizational green practices and initiatives in environmental behavior need to be evaluated in terms of the environmental impact [27]. Green organizations are social and environmentally responsible organizations that value environment-friendly strategies, have the reputation of being green employers and attracting responsible environment-friendly talent [28]. Behind that must stand the key world organizations, as well as state administrations individually. It shouldn't just be ended with words of encouragement and praise- financial encouragement and support are necessary. Organizational reputation can be the result of a good organizational motivation and communication systems leading to enable the development of organizational identity. Developing a sense of individual knowledge, motivation, reputation, communication, education and teamwork aligned with the organizational reputation is key to enable organizational development. Taking an environmentally friendly approach is a part of a company's social responsibility.

4 CONCLUSIONS

Given the whole situation, and the fact that, for now, this is the only planet we can live on, organizations require innovative, flexible and adaptive management development to identify the different options for implementing decisions in actions to meet the global new economic challenges. And again, regardless of profit as the main one driving motivation, states must encourage, support, and protect companies entering the phase of eco-sustainable development.

The goal of Green organization strategy comes down to the need to change the business and goals of economic entities. Although the profitability of the business cannot be questioned, it must be brought into balance with ecological norms, which are so important today for maintaining a minimum of decent healthy life and flora and fauna.

Organizations are often perceived as one of the biggest contributors to climate change. To improve the sustainable organizational development, it is necessary to take into account the priorities, needs and understandings existing in a complex system to create and develop a well-functioning shared management and organizational structure. Organizational settings may mismatch work activities leading to organizational negative consequences, and therefore is necessary to reconsider the work realities and the new collaborative dialogue approaches to diagnose and redesign structures, practices, processes, etc., at all levels on organizational priorities and goals.

Holistic and humanistic approaches are a viable framework of reference to propose a strategic organizational development based on the green organizational management philosophy and the studies of human behavior in human resource management linked to environmental management and sustainable organizational development practices by integrating green management and corporate social responsibility with competitive advantage strategy. Although this type of corporate behavior is increasingly being promoted, it is still not sufficiently defined.

According to Griffin, just 100 companies are responsible for 71% of global emissions [29]. Now is the time for businesses to become part of the solution, cut down emissions and waste, and contribute to cultivating a livable planet. In today's world, going green is not just a question of how someone will do business, it is also an ethically correct decision, which must be made in order to save the planet for many more generations to come.

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IV CYBER SPACE

CRYPTOCURRENCIES: THE DIGITAL MONEY REVOLUTION OR YET ANOTHER RECURRENT SPECULATIVE BUBBLE

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Abstract

With the appearance and growing popularity of bitcoin, sensational stories about the digital revolution of the monetary system began. But, are people really fascinated by the idea of monetary freedom and the opportunities provided by new techology, or is the possibility of quick and easy earnings what really attracted investors?

The subject of our research is the cryptocurrency market, bitcoin as the most well-known cryptocurrency and four well-known alternative cryptocurrencies ethereum, xrp, litecoin and stellar. The aim of the research is to determine whether greed and fear of missed opportunities are the main drivers of price growth, while the foundations are put in the background. The task of the research is to test these markets for the presence of multiple episodes of speculative bubbles. A speculative bubble occurs when the price of an asset is significantly higher than its fundamental value. We have detected several periods of speculative bubbles in all observed markets and we can conclude that the possibility and desire for quick earnings is still the main motive for investing in this market.

Keywords: blockchain, cryptocurrencies, bitcoin, speculative bubbles

1 INTRODUCTION

Globalization has contributed to the fact that the market is no longer geographically limited or even narrowly geographically determined. Technology is rapidly evolving and modern, current technological changes are causing the emergence of new trends in the world [1]. The complexity of cross-border transactions, high transaction costs, necessity to involve a large number of intermediaries, lengthy procedures with excessive documentation, security problems, and the possibility of human error contribute to the growing need for digitalization. However, unlike physical money, digital money can potentially be easily replicated because more copies of the data can be made, while preserving the original record, which compromises the limited availability of that money and thus loses value. To solve this problem, digital money relies on an intermediary, who ensures and controls that money can be spent only once in the electronic payment system.

Meanwhile, an individual or group of authors under the pseudonym Satoshi Nakamoto [2], tried to solve this problem with an information innovation later called blockchain. He created a real "peer-to-peer" electronic money transfer system and the first world-famous cryptocurrency - bitcoin. A blockchain is a decentralized, distributed record or "general ledger" of transactions in which transactions are stored using a cryptographic technique in a permanent manner and which cannot be changed. The revolutionary innovation at the core of blockchain technology is reflected in the way information is stored and sent. Blockchain transfers control from the central entity and shares it among users. The peer to peer electronic payment system is based on cryptography and enables direct transactions between interested parties, eliminating the need for a trusted third party.

The potential for the development and application of distributed ledger technology and blockchain is huge, but so far it has the greatest application in the creation of digital assets - cryptocurrencies.

Eichengreen [3] concludes that speculative earnings, but not the function of payment, is the basic motive of investors in the cryptocurrency market. Therefore, this is the focus of our research, to determine whether the development of new technology has gone in the wrong direction and whether greed and speculative earnings are the main motive for investing in cryptocurrencies, thus creating multiple episodes of booming and bursting asset bubbles.

The episode of creating and bursting bubbles refers to a situation when the price of an asset starts to rise rapidly without any real reason. A bubble is formed when the price of an asset exceeds its fundamental value. This situation can arise when investors buy an asset at a price above its fundamental value expecting to be able to sell it at a higher price later. Speculative bubbles arise when investors irrationally manipulate with investment, expecting further price increases. A speculative bubble can be defined as a situation in which temporarily high prices are maintained mainly due to investor greed, and not due to a reliable assessment of the real value of the property. Initially, there is an expansion of investments financed by large capital inflows. The physical volume of production and consumption is growing rapidly. There is a period of euphoria and these assets are becoming more and more interesting for new investors. Optimistic investors remain in the market as long as prices rise and while financing is available. The bubble is created and grows until the moment when people stop believing that the price will continue to rise, the demand decreases, the price falls and the market collapses. Eventually, the inflated price of the property begins to fall, often very dramatically. Some investments made in the growth phase turn out to have very little value, so they are suspended or abandoned. Bubbles are most often caused by a combination of several factors, among which are changes in the market and the perception of speculative opportunities stimulated by the development of new technology and innovation, political and economic stimulans such as, for example, access to cheap loans. It is a misinterpretation that economic bubbles are fundamentally a lie. Large historical bubbles have arisen due to changes in the market that have opened up new possibilities [4].

2 LITERATURE REVIEW

The first implementation of blockchain technology was bitcoin, and therefore many equate blockchain technology with bitcoin. However, blockchain is much more than bitcoin, and the possibilities of this technology are far greater. Abadi and Brunnermeier [5] investigated when blockchain is more economically useful than centralized general ledger management. Their analysis requires a compromise between centralized and decentralized record keeping. Gartz and Linderbrandt [6] drew a parallel between cryptocurrencies and the Austrian school of economics. According to the Austrian School of Economics, minimal government intervention is optimal for the economy, and the current monetary system is not sustainable and it is necessary to return to the gold standard. According to some, bitcoin is the digital gold of today.

The opposite view is held by Budish [7] who believes that there are potentially serious economic restrictions on the use of blockchain. He concludes that the implementation of a "double consumption" attack is possible and that, although the costs for its implementation are extremely high, it is not excluded that it will be reported if the bitcoin blockchain becomes economically important enough to provoke sabotage.

Eichengreen [3] concludes that throughout history there has been a tendency for currencies and money issuance to be increasingly concentrated in the hands of central governments. He believes that the only reliable way to create a digital currency of stable value is for the central bank to put it into circulation.

Fundamental changes on the side of supply, demand, as well as in production costs, cannot fully explain the drastic jumps in financial asset prices. Economists would, therefore, define bubbles as an asset traded at a price higher than its fundamental value [8]. Bordalo et alia [9] believe that the key characteristic of bubble formation is an overemphasized reaction to fundamental news, which implies excessive expectations and misdiagnosis of price extrapolation. Bernanke [10] notes that although the creation of bubbles in retrospect is obvious, in the initial phase of its emergence, many economists believe that this growth is sustainable. Schiller [11] explains that speculative bubbles are the result of irrational enthusiasm and that they occur under the influence of structural, psychological and cultural factors. Bursting of speculative bubbles most often results in a long period of recession.

Financial crises and asset bubbles are directly and closely linked [12]. This is evidenced by the emergence and development of numerous crises as a result of the collapse of property prices. Among the most famous and impressive are: "Tulipmania" in the Netherlands 1634-1637, "South Sea Bubble" and "Mississippi Bubble" 1716-1720, British "railway" mania in the 1840s, the collapse of the real estate market in Florida in the 1920s, the stock market crash of 1929, the speculative bubble of the Japanese economy in the 1980s, the Dot-com bubble in the late 1990s, the Housing bubble in 2007. Based on an analysis of previous trade bubbles, Yip [13] identified three phases through which the bladder passes: the incubation phase, the inflating phase and the final phase (bursting phase).

Cheah and Fry [14] while analyzing the bitcoin market concluded that this market is prone to speculative bubbles, and that the fundamental value of bitcoin is zero. A group of authors [15] investigated the existence and timing of bubbles in the market of the two most popular cryptocurrencies, bitcoin and ethereum. They concluded that there are periods of clear bubble behavior.

To identify bubbles in the bitcoin market, Shu and Zhu [16] applied a log-periodic power law singularity (LPPLS) confidence indicator. Based on the LPPLS model, they identified both positive and negative bubbles using daily data on bitcoin price movements.

The existence of multiple episodes of bubbles in the bitcoin market was also noticed by Zheng-Zheng et alia [17]. They believe that the beginning of the formation of bubbles comes from exogenous shocks and that financial crises can contribute to the overflow of long-term bubbles into the cryptocurrency market, because in times of crisis, investors have a negative attitude towards fiat currencies.

Swartz [18] believes that bitcoin should not be regulated as a currency because it does not fulfill the basic functions of money as a medium of exchange, unit of account, or store of value. Instead, the author believes that the bitcoin should be regulated as a security.

While using autoregressive moving average (ARMA) modeling MacDonell [19] suggests that a primary force currently driving Bitcoin values is speculation by investors looking outside of traditional markets.

3 METODOLOGY

In order to investigate whether volatility, greed and the desire to make quick money is the main motive for investing in the cryptocurrency market, we analyzed the price movements of the most important and most famous cryptocurrency - bitcoin (BTC), whose market capitalization is about two thirds of market share and four popular alternative cryptocurrencies: ethereum (ETH), xrp, litecoin (LTC), and stellar (XLM). To determine the existence of multiple episodes of redundancy and collapse, we used the generalized supremum augmented Dickey-Fuller (GSADF) test, which relies on a recursive unit root augmented Dickey-Fuller (ADF) test, but uses flexible interval widths in implementation.

The data we used include weekly data on price movements in the interval of 300 weeks in the period from the first week of October 2014 to the last week of June 2020. for bitcoin, xrp, litecoin and stellar. For ethereum, we used an interval of 257 weeks in the period from the first week of August 2015 to the last week of June 2020. When calculating the price index, for the base period we took the third quarter of 2018.

The methodology we used in this paper encompasses a new bubble detection strategy developed by Phillips, Wu, and Yu (PWY) [20] and Phillips, Shi, and Yu (PSY) [21]. These strategies are based on recursive and rolling unit root ADF tests that allow us to detect bubbles in a series of data, as well as the period of their occurrence. These types of tests use a right tailed variation of the augmented Dickey-Fuller unit root test where the null hypothesis is the existence of a single root and the alternative hypothesis is a mild explosive process. PWY and PSY show that the use of recursive and rolling tests results in greater bubble detection power compared to standard tests on the entire sample. Phillips et alie [21] demonstrated through a Monte Carlo study that the PSY strategy gives better results than the PWY strategy in detecting the existence of multiple bubble episodes.

We performed tests for the detection and time stamping of bubbles in the market of observed cryptocurrencies using right tailed augmented Dickey-Fuller (Rtadf), a software add-in for the EViews program implemented by Itamar Caspi [22]. The add-in makes it easy to run time series tests that help detect and time determine the asset price bubble. This add-in calculates a test statistic, simulates the corresponding critical values of a constrained sample, and p values using the Monte Carlo simulation method, assuming a Gaussian (normal) distribution, and provides a graphical representation marked with a date stamp.

The basic idea, based on the theory of determining asset prices, indicates that the existence of a bubble component in the observed asset price should be manifested in its dynamics and stochastic property. More precisely, the theory predicts that if there is a bubble, prices should inherit their explosive property. The rejection of the null hypothesis in each of these tests can serve as empirical evidence of a asset price bubble.

4 DISCUSSION OF RESULTS

For the purpose of the research, we set the following hypotheses:

Null hypothesis: Time series has a unit root.

Alternative hypothesis: Multiple periodically collapsing bubbles.

The obtained results are presented in the following table (Table 1).

Table 1. – Generalized supremum augmented Dickey-Fuller test results

Null hypothesis: INDEX_Q3_2018___100 has a unit root					
	GSADF		Test critical values**:		
tested cryptocurrencies	t-Statistic	Prob.*	99% level	95% level	90% level
Bitcoin	12.7449	0.0000	2.6494	1.9456	1.7262
Ethereum	12.5424	0.0000	2.3318	1.8696	1.6171
XRP	16.7307	0.0000	2.6494	1.9456	1.7262
Litecoin	9.6985	0.0000	2.6494	1.9456	1.7262
Stellar	13.5633	0.0000	2.6494	1.9456	1.7262
*Right-tailed test					
**Critical values are based on a Monte Carlo simulation (run with EVIews)					

Source: Calculation of authors

As the obtained values of t-statistics are significantly higher than the critical values for all confidence intervals, and the p value weighs zero, we conclude that there is solid evidence against H0, and in favor of HA. In the observed period, there are multiple episodes of bubble formation and bursting in the bitcoin market and all observed alternative coins. We present further analysis graphically.

In the bitcoin market (Figure 1), we detected as many as nine periods of bubbling and bursting in the observed period, as follows: October 19, 2015 - November 9, 2015; 6/6/2016 - 6/20/2016; 19.12.2016.-2.1.2017; 5/1/2017 - 7/17/2017; 31.7.2017.-11.9.2017; 25.9.2017.-8.1.2018; 6.5.2019.-3.6.2019; 6/10/2019 - 7/8/2019; 9.3.2020.-16.3.2020. If we ignore the smaller and shorter periods of the bubbles, we are left with the two most important ones. A huge bubble from May 2017, which inflated for more than 8 months with minimal interruptions, and a bubble from May 2019, which lasted a little longer than two months.

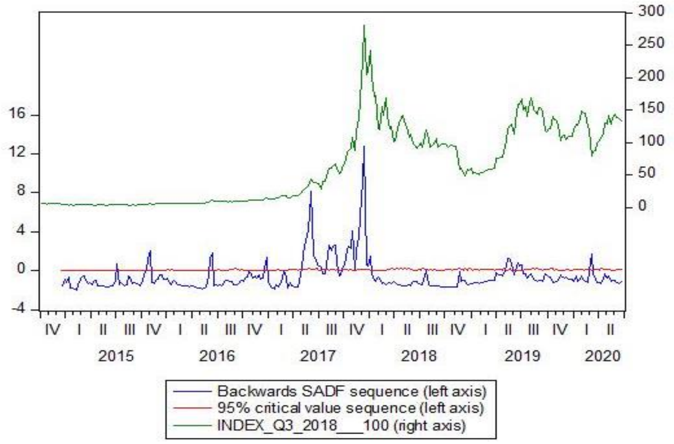

Figure 1. Bitcoin GSADF test

In the Ethereum market (Figure 2) we observe five episodes of bubbles: 18.1.2016.-15.2.2016; 22.2.2016.-14.3.2016; 20.2.2017.-3.7.2017; 11.12.2017.15.1.2018; 3.2.2020.-24.2.2020. Certainly the largest bubble formed during most of 2017, reached a peak and popped at the beginning and during 2018.

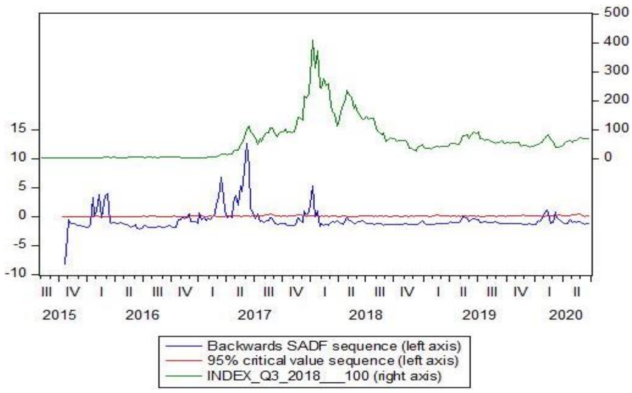

Figure 2. Ethereum GSADF test

In the XRP market (Figure 3), we detected 6 periods of speculative bubble formation and collapse: 15.6.2015-29.6.2015; 19.9.2016.-3.10.2016; 20.3.2017.-3.4.2017; 5/1/2017 - 6/26/2017; 11.12.2017-8.1.2018; 3.2.2020.-16.3.2020. The bubbles from 2017 clearly show us how much greed and irrational behavior of investors can lead to unimaginable sizes of bubbles, and later how quickly the bubble can blow out with great consequences.

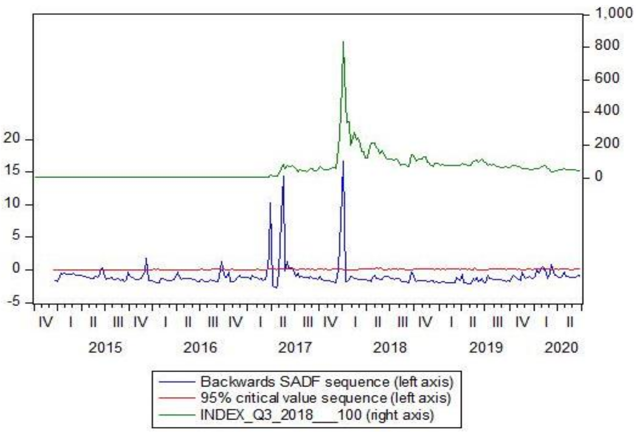

Figure 3. XRP GSADF test

In the litecoin market (Figure 4), we also note a large bubble that formed during most of 2017, almost without interruption from April 3, 2017 to January 1, 2018. Smaller but not insignificant episodes of price growth and collapse are also noticed in the middle of 2015; as well as in mid-2019.

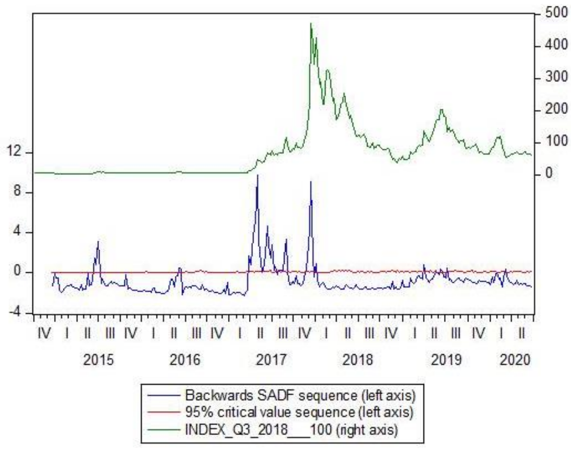

Figure 4. Litecoin GSADF test

In the stellar market (Figure 5), we also detected multiple periods of boom and crash. As with other observed cryptocurrencies, the largest bubble was created at the end of 2017, on November 27th. 2017-29 January 2018 Another significant bubble was detected in the second quarter of 2017, in the period March 27, 2017 - May 1, 2017.

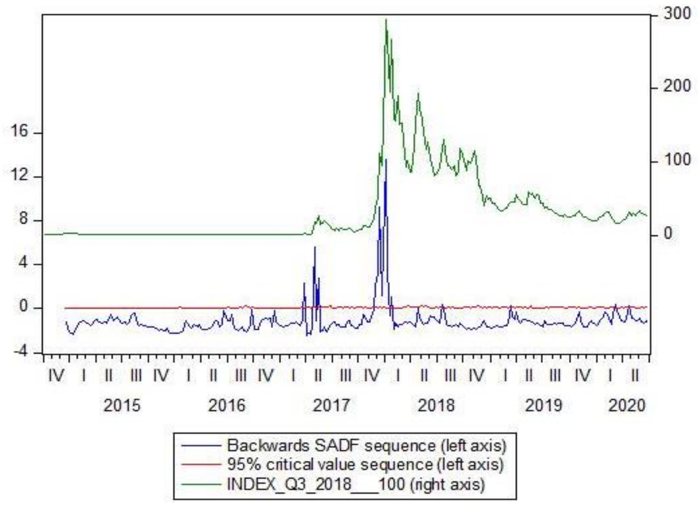

Figure 5. Stellar GSADF test

5 CONCLUSIONS

According to the conducted tests, there is no doubt that the price is the basic one, and for many investors it is the only driver of the cryptocurrency market. It is evident that ignorance, desire for quick earnings and fear of missed opportunities lead to the beginning of the creation of bubbles, and later the herd mentality raises the price to unattainable heights. When the price reaches a peak, as a rule, it follows an even faster and steeper drop and leaves big losses.

In all observed markets, we detected huge periods of speculative bubbles during most of 2017. In the alternative coin market, these periods are shorter but also more dramatic, with a faster rise and faster collapse than in the bitcoin market.

Without disputing the opportunities that this new technology brings, which are certainly great, but which have yet to be implemented and proven to be effective, we conclude that this market is still immature and in its infancy and that volatility is what makes it attractive, and the psychological factor that most triggers a change in prices. Adding that the cryptocurrency market is largely unregulated, and thus prone to manipulation, creates a suitable ground for the creation of recurring speculative bubbles.

We are of the opinion that due to the nature of this market, periods of ups and downs will continue in the coming period, but that due to numerous restrictions cryptocurrencies are not an ideal application of blockchain technology.

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FIGHT AGAINST CYBER-CRIME – LEGISLATIVE FRAMEWORK AND INSTITUTIONAL MECHANISMS

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Abstract

The technical and technological development of the modern world is marked by the era of computers that have conquered the entire living and working space of people. Life in the modern world is simply unthinkable without computers, which have brought a lot of benefits, but on the other hand, they have become an object of abuse and even a means of committing crimes. Cyber-crime is one of the most dangerous contemporary forms of crime, very often with elements of organized crime. The social response to cyber-crime starts from the legal framework at the international and national level, on which the operational mechanisms for the detection and prosecution of criminal acts and perpetrators in the field of cyber-crime rely. Due to the specifics of criminal acts in the field of cyber-crime, it is very difficult to prove them, prosecute and try the accused. In the final part, proposals for the improvement of certain legal and operational solutions are given.

Keywords: Cyber-crime, legislative framework, criminal code, informatics, forensics, Serbia, EU.

1 INTRODUCTION

After World War II, the United States, as the world's leading industrial country, initiated the introduction of computers in large companies and the state administration [1]. With the post-war renewal, the process gained in importance and computer systems became an integral part of business, life and work of modern society. The wave of computerization further affected the developed countries of the old continent and Japan, and then spread to developing countries and those in transition. Today, there is already talk of sixth generation (6G) of computers, the founder of which is the famous Steve Jobs, and his world-famous inventions, the iPhone and iPod, which conquered the world market. The life of people in modern society has become unthinkable without the use of computers in everyday life and work.

However, in addition to the positive side, computerization has unfortunately had negative effects, such as the alienation of the individual, the dependence of users on the Internet and social networks and various types of computer abuse. Certainly the most serious negative consequence of the process of computerization is the emergence and development of cyber-crime, as a special manifestation of crime in modern society. Today, cybercrime has reached its maximum in cyberspace and has various manifestations, the most common of which are attacks on computer systems, the production and transmission of computer viruses, and the spread of viruses via e-mail [2]. Particularly dangerous forms of cyber-crime are very current computer frauds and related forms of computer abuse.

The fight against cyber-crime includes engagement at the international and domestic level and measures at the legislative and criminal-operational level. The international context includes the activities of states and specialized international organizations (governmental and non-governmental), as subjects of international law and relations [3]. The most important activity refers to the adoption of international documents in this field in the form of conventions, resolutions, declarations, treaties. The adoption of international documents is followed by the ratification procedure in national parliaments and incorporation into the internal legal order, because the obligation of the signatory states is the harmonization of rights with international norms. The legislative one is followed by the criminal-operational response of states, and other entities, to the expansion of cyber-crime in modern society. States take measures at the domestic level, the most important of which is the multi-agency approach, while at the international level, the most important is international cooperation between states and specialized organizations in the fight against cyber-crime. In terms of content, cooperation includes the exchange of information, joint investigation teams, joint actions, staff training, technical assistance and other aspects of crime prevention [4].

At the beginning of the third millennium, the state and trends of cyber-crime indicate that it has expanded, because modern technical and technological solutions provide enormous opportunities for perpetrators. In addition to monitoring new forms of cyber-crime, it is necessary to constantly harmonize the legal framework as well as court practice and improve the criminal-operational activities of the police in detecting and prosecuting crimes and perpetrators. This means that members of the police and all law enforcement agencies are supposed to be equipped with an enviable level of knowledge in this area.

2 THE NOTION AND ELEMENTS OF CYBER-CRIME

In a historical review of the beginnings of cyber-crime, we recall that the first prosecuted case was in the USA (1966), when the falsification of banking data in Minneapolis happened. The first cyber-crime case in our region concerned the well-known Istarska banka in Pula, Croatia (1983) [5].

In a semantic sense, the term cyber-crime encompasses illegal activities that are performed on the computer or the computer is used as a means or purpose of execution. Execution actions can be various, such as unauthorized intrusion into someone else's computer system, then theft of computer data, online use of the execution system or assistance in committing fraud. The specificity of this phenomenon of crime is cyberspace (environment) which includes a computer network in which the elements of traditional society are in the form of so-called bytes and bits [6].

The term cyber-crime is not defined uniformly in the doctrine, but there are different solutions in relation to specific legal systems, states and authors. For the purposes of this research, we opted for the starting point of D. Parker who states that cyber-crime is a genus term for the abuse of computers and computer technologies in which the victim suffers a loss or could suffer a loss, and the perpetrator acts with the intention of gaining a benefit [7]. Most states define cybercrime from the point of view of criminal law as a term that encompasses the misuse of computer systems, programs and data that are incriminated by the provisions of national criminal laws. Criminal offenses of computer misuse are mainly divided into three large groups: 1) criminal offenses where the computer is the object of crime *(computer crime)*, 2) criminal offenses where the computer is a means of execution of the crime *(computer related crime)* and 3) criminal offenses of illegal use of the Internet *(net crime).* [8].

When defining cyber-crime, one should start from the known elements in the structure of criminal acts: the manner of execution, the means of execution and the consequences of the criminal act. The manner of committing an act from the corpus of cyber-crime includes the use of a computer, which is, as a rule, the basic means of execution, and the occurrence of a consequence [9]. In our opinion, cyber-crime is a specific form of crime in which computer technology and information systems are used as a way of committing crimes or computers are used as a means or goal of committing a crime, in which way a relevant consequence is achieved from the point of view of criminal law.

Considering that Serbia is a candidate country for accession to the EU, we remind you that cyber-crime is determined in detail by a special Directive 2013/40 / EU on attacks against information systems. According to art.2.a *Information system* means a device or group of inter-connected or related devices, one or more of which, pursuant to a program, automatically processes computer data, as well as computer data stored, processed, retrieved or transmitted by that device or group of devices for the purposes of its or their operation, use, protection and maintenance [10].

The characteristics of cyber-crime start from the special environment in which crimes of this type are committed. It is a specific virtual space, but today it is very visited and exposed to the public. In this regard, criminal offenses from this corpus have a complex structure, a specific manner of execution and special means of execution, a special object of protection and a high degree of social danger. The fact that the computer virtual environment is not limited, it does not know the state borders and physical barriers, so the consequences are much more severe.

Among other important characteristics of cyber-crime, we mention first the complex structure of these crimes, then the characteristics of the perpetrators, especially expert knowledge, skills and top expertise in the field of information technology and systems (ITS).

Furthermore, a significant feature of cyber-crime is the intention of the perpetrator to obtain an illegal property or non-property benefit by committing a criminal offense, or to harm another by committing criminal offenses from this corpus.

The state and trends of cyber-crime today are characterized by an extremely large dark number of these crimes, both in the world and in the former SFRY. To illustrate, official data from the FBI, as the most referenced institution in the world, indicate that less than 1% of cybercrime in the USA is detected, and that only 12% is reported [11]. The problem is even more complex if we consider not only the nature of this type of crime, but also the real difficulties in detecting, proving and prosecuting crimes and perpetrators. Of course, the FBI as a leader in this field has significant resources, an adequate legislative framework, a multi-agency approach and significant cooperation with specialized agencies and services such as the Computer Emergency Response Team (CERT) [12].

3 LEGISLATIVE FRAMEWORK FOR THE FIGHT AGAINST CYBER-CRIME

The social reaction to cyber-crime, and generally all emerging forms of crime, starts primarily from the legislative framework, which includes the norms of international and domestic law.

a) **The international legal framework** consists of provisions of international law of a general nature and special norms that have been adopted for the suppression of crime, i.e. cyber-crime. These are norms that are adopted at the multilateral, regional and bilateral level.

Globally, the most important source of international law in the fight against crime is the UN Convention against Transnational Organized Crime - UNCATOC [13], which is known to the general public as the Palermo Convention (2000). It is a revolutionary document adopted with the aim of a more efficient fight against organized crime, which in most cases includes cyber-crime. The most important solutions of the Convention concern the use of effective mechanisms for the fight against organized crime such as special investigative techniques (SIT) and methods (SIM), the establishment of special state bodies for combating organized crime (special police, prosecutor's office, court and prison) and the harmonization of national legislation with provisions of the Convention [14]. In the context of cyber-crime, the provisions of UNCATOC Art. 6 and Art. 7 are important because they point out to the laundering of crime money via the misuse of computers and computer systems and subsequently to the obligation of the State to form national regulatory bodies for the control of financial streams [15].

The most important international source for combating cyber-crime is the Convention on Cybercrime (CETS no.185) adopted under the auspices of the Council of Europe (Budapest, 2001). [16]. It is an international agreement recognized worldwide as a reference source that comprehensively provides for a legal (material, procedural), organizational and international framework for combating cyber-crime. In addition to cyber-crime, CETS also regulates the infringement of intellectual property rights through the misuse of computers, the misuse of minors for pornographic purposes and the establishment of a common criminal policy in this field. Regardless of the fact that it was adopted within the framework of the Council of Europe, the Convention was accepted by a number of countries outside Europe, such as the USA, Australia, Canada, Japan and others. The Convention provides for the harmonization of the legislation of the signatory states with its provisions and in that sense the systematization of criminal offenses (9) into several groups (4): a) Offences against confidentiality, integrity and availability of computer data and systems, b) Computer-related offenses, c) Content-related offenses and d) Offenses related to infringements of copyright and related rights. An important part of the Convention is dedicated to the need for international cooperation and legal assistance of the signatory states. We remind you that the Republic of Serbia has signed and ratified CETS with a special Law on Ratification of the Convention on High-Tech Crime [17].

The Additional Protocol to the Convention on Cybercrime, concerning the criminalization of acts of a racist and xenophobic nature committed through computer systems (Strasbourg, 2003) [18] was then adopted. The following behaviours will be established as criminal offenses: dissemination of racial and xenophobic material by computer, threats through computer systems motivated by racism and xenophobia, public insult of persons by computer systems due to belonging to a group differing in race, colour, national or ethnic origin and religion, using computer systems to distribute and make available material that denies, substantially diminishes, approves or justifies acts of genocide or crimes against humanity, as well as aiding and abetting perpetrators with intent to commit any of these crimes [18].

Within the EU, several important documents have been adopted to combat cybercrime, which we mention both because of the importance of the EU and because of Serbia's application for EU accession and harmonization of regulations. The most important documents, chronologically:

- Directive 2006/24 / EC (European Parliament and of the Council of 15 March 2006) on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58 / EC [19]. The document was adopted with the aim of a more efficient suppression of cybercrime on the basis of electronic traces and other relevant evidence.

- Directive 2009/24 / EC (European Parliament and of the Council of 23 April 2009) on the legal protection of computer programs [20], according to which the protection of original computer systems as one's own intellectual creation is envisaged.

- Directive 2013/40 / EU (European Parliament and of the Council, 12.08.2013) related to the prevention of cyber-attacks on information systems, which replaced the previously adopted Council Framework Decision 2005/222 / JHA [21]. In accordance with the document, EU member states are obliged to harmonize national legislation and incorporate specific criminal offenses: Illegal access to information systems, Illegal system interference, Illegal data interference, Illegal interception, Incitement, aiding and abetting and attempt. Liability of legal persons, aggravating circumstances and extended criminal behaviour are further envisaged.

At the level of the Balkan region, the most important conventions relate to international police cooperation in the fight against crime, which are the basis for cooperation and in the fight against cybercrime. These are primarily *the Police Cooperation Convention for Southeast Europe* (Wien, 2006) [22] and *the Convention of the Southeast European Law Enforcement Centre* (SELEC, Bucharest, 2009] [23]. These documents include well-known UNCATOC instruments and mechanism which encompass the exchange of information, joint investigation teams, joint actions, application of special investigative methods and techniques, engagement of special bodies (police, prosecutors, courts) [24].

The RS Ministry of the Interior has also signed a number of bilateral agreements and other international legal acts on international police cooperation with countries in the region, other countries and international organizations, which, among other things, provide for cooperation in combating cybercrime [25].

b) The national legal framework of the Republic of Serbia includes regulations in the field of criminal legislation, then acts of acceptance and ratification of international agreements in this field and other complementary norms.

The Criminal Code (CC) is a par excellence legal source which incriminates specific crimes in the field of cyber-crime. After the signing and ratification of important international agreements in this area, CC incorporated several criminal acts (8) of cyber-crime in Chapter XXVII, which is entitled Criminal Offenses against Computer Data Security.

The criminal offenses in question are the following:

- Damage to computer data and programs (art.298),

- Computer sabotage (art.299),

- Creation and introduction of computer viruses (art.300),

- Computer fraud (art.301),

- Unauthorized access to a protected computer, computer network and electronic data processing (art.302),

- Prevention and restriction of access to the public computer network (303) and

- Making, procuring and giving to others means for committing criminal acts against computer data security (art.304a) [26].

Other sources in the field of criminal law include the Criminal Procedure Code (CPC) [27], the Law on Liability of Legal Entities for Criminal Offenses [28], the Law on the Organization and Competence of State Bodies for Combating Cyber Crime [29], and the Law on International legal assistance in criminal matters [30]. There are other complementary regulations such as the Law on Electronic Communications [31], the Law on Special Powers for the Effective Protection of Intellectual Property Rights [32].

In our opinion, the provisions of the CPC are of special importance because they provide for general and special evidentiary actions that can be used in proceedings against perpetrators of cybercrimes, which are in the actual jurisdiction of the Special Department of the Prosecutor's Office for Combating Cyber-crime.

4 INSTITUTIONAL MECHANISMS FOR THE FIGHT AGAINST CYBER-CRIME

The criminal-operational response of the state to cyber-crime is legally articulated by the provisions of the mentioned Law on Organization and Competence of State Bodies for Combating Cyber Crime [29], which was adopted following the example of other developed countries and after accepting international documents in this field.

The most important subjects (institutions) for the fight against cyber-crime in the Republic of Serbia are: the Special Prosecutor's Office, the Service for the Fight against High-Tech Crime and the Department for the Fight against High-Tech Crime at the Higher Court in Belgrade (Articles 4-11). These bodies are responsible for detecting, prosecuting and trying criminal offenses: a) against the security of computer data, b) against intellectual property, non-intellectual property, economy and legal transactions in which computers, computer systems, computer networks and data are used as an object or means of execution and c) against the freedoms and rights of man and citizen, sexual freedom, public order and peace, constitutional order and security (Article 3).

a) The Special Prosecutor's Office for Cyber Crime is responsible for prosecuting the perpetrators of these crimes throughout the RS. This body is headed by a special prosecutor appointed by the Public Prosecutor and he has the same rights and duties as the public prosecutor. The prosecutor's office is directly superior to a specialized police department that deals with the fight against cyber-crime.

b) The Service for the Fight against Cyber Crime is an integral part of the Ministry of Interior of the Republic of Serbia and is part of the Criminal Police Department at its headquarters, within the Service for the Fight against Organized Crime. The head of this service is appointed by the Minister of the Interior after obtaining the opinion of the Special Prosecutor for Cyber Crime. The service started working at the end of 2008 and had initial difficulties due to the lack of adequate work premises, lack of equipment and lack of competent staff [33].

c) The Department for Combating Cybercrime at the Higher Court in Belgrade is competent for trials and judgments in the first instance, while the second instance body is the Court of Appeals in Belgrade.

d) Other bodies important for the suppression of cyber-crime in Serbia are also present, among them primarily the Ministry of Trade, Tourism and Telecommunications within the RS Government. The Ministry contributes to the harmonization of national regulations in the field of electronic communications with EU regulations, takes measures to encourage research and development of electronic communications, contributes to the development of scientific research in this field, etc. [34] There are also the Republic Agency for Electronic Communications (RATEL) and the Republic Broadcasting Agency (RBA) which were established by special laws – the Law on Electronic Communications and the Law on Broadcasting. These specialized agencies, as national regulatory bodies, can help protect the users of electronic communications, as well as work closely with the competent state authorities and international specialized organizations in this field. [15]

e) International cooperation, criminal law and police, is imperative in this field because cyberspace is unlimited and does not know physical and other barriers.

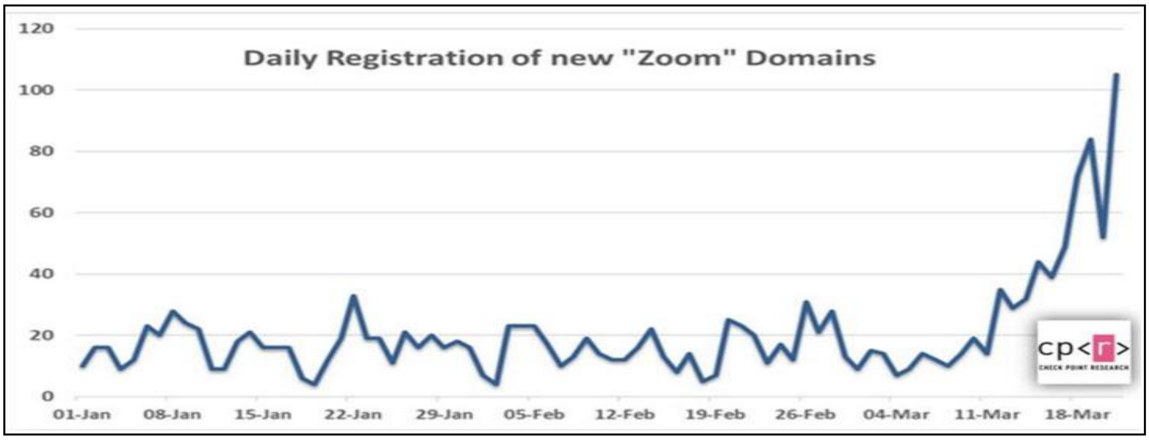
The main subjects and bearers of cooperation in our country are primarily law enforcement agencies – Public Prosecutor and the Ministry of the Interior, which have good cooperation with the competent authorities of other countries and specialized international organizations. The Ministry of the Interior has a particularly significant cooperation with Europol and Interpol as the leading specialized international organizations for the fight against crime. Within these organizations, special sections (crime areas) have been formed, which are in charge of monitoring, suppression, exchange of information and international cooperation in the field of cyber-crime. [35]

5 OVERVIEW AND STATISTICS OF THE MOST COMMON CYBER-ATTACKS

Reports, statistics and research are very important for cyber security and serve to draw attention to problems that are difficult to deal with. Institutions, the UN, Europol and Interpol warn of an increase in cybercrime, especially during the coronavirus pandemic. Some of the most common attacks are:

- **Malicious domains**

Due to the coronavirus pandemic, many organizations have switched to working from home. Network communication platforms have become crucial for many households and organizations that have targeted criminals. As a result, over the past few months, the registration of new domain names, including "Zoom", has increased. "Zoom" is a very popular cloud communication platform that offers the possibility of video and audio conferencing, virtual meetings and webinars. Since the beginning of the pandemic, this application has been used by millions of students, business people and employees in public sectors around the world. According to the Check Point survey, more than 1,700 new domains have been registered since the beginning of the year (Fig. 1) and 25% of them have been registered in the past week. Of these registered domains, 4% were found to contain suspicious characteristics. Cybercriminals are also targeting the official website classroom.google.com, which they imitated by using googloclassroom.



Picture 1. The number of newly registered false Zoom domains by weeks
Source: The Hacker [36]

- **Malware**

Malware, spyware and Trojans (Trojan horse) were found embedded in interactive folders and websites about the corona virus. The UN Security Council has warned that sending emails with malware that causes users to click on links that download malware to their computers or mobile devices has increased by as much as 600 percent.

- **Online frauds and phishing attacks**

Cybercriminals create fake websites linked to the COVID-19 pandemic to trick users into opening malicious attachments or clicking phishing links, leading to phishing or illegal access to personal accounts.

- **Ransomware**

Ransomware software can enter the systems of medical centres-hospitals and public institutions via e-mail containing infected links or attachments, compromised employee data, or it can enter the system using vulnerabilities. Hit by health crisis they cannot afford to be outside their systems, and criminals believe they will probably be paid a ransom.

5.1 Statistics of threats on the Internet

Kaspersky Lab has published its global report on online threats covering the period from January to March 2019. The report is based on data from users of the Kaspersky Security Network (KSN) infrastructure.

Kaspersky Lab's products detected 1,858,854 different cyber-attacks carried out via computer browsers in Serbia during the specified period. Every third user (34.1%) experienced some form of these threats during the period during which their devices were connected to the Internet. Based on these statistics, Serbia is in a very high 13th place in the world when it comes to dangers coming from the Internet. Research indicates that attacks that occur during Internet searches are the most common method for spreading malware. When it comes to local incidents on computers using KSN in Serbia, the products of the said Company detected 2,650,351 such incidents, which affected 42.7% of users in Serbia. This type of attack put Serbia on the 96th place in the world. Countries such as Yemen (72%), Uzbekistan (71.3%) and Afghanistan (71.3%) are on the top of the list. Statistics also showed that during this period, the number of attacks, for which servers hosted in Serbia were detected as a source, was only 34,485 which makes less than 1 per-mille of the global share and puts Serbia on the 65th place in the world. At the top of this list are the USA (52.46%), the Netherlands (21.28%), Germany (6.16%), France (2.71%) and Russia (1.38%).

Based on the presented data for 2019 of the Statistical Office of the Republic of Serbia on reported and convicted adults against the security of computer data in Tables 1 and 2, it can be concluded that cyber-crime differs from other types of crime in that its area of distribution is practically unlimited within telecommunication and computer connections, but it is very difficult to detect it (e.g. only 4 people were reported and found against the security of computer data, and only 2 people were convicted for computer fraud, etc.)

Table 1. *Reported adults according to the criminal offense*, 2019

	No.	**Region**			
		North of Serbia		South of Serbia	
		Belgrade	Vojvodina	Sumadija and West Serbia	South and East Serbia
Against computer data security	4	3	-	-	1
Unauthorized access to a secure computer, computer network and e-data processing	1	-	1	-	-
Unauthorized eavesdropping and recording	7	2	3	1	1
Unauthorized collection of personal data	32	8	2	4	18
Showing, obtaining and possessing pornographic material and exploiting a minor for pornography	29	25	-	2	2
Exploitation of a computer network or communication by other technical means for the commission of criminal offenses against sexual freedom of a minor	1	1	-	-	-
Unauthorized removal or alteration of electronic copyright and related rights information	1	-	-	-	1

Table 2. Convicted adults according to the criminal offense and imposed criminal sanctions, 2019.

Against computer data security	No.	Jail	Money fine	Suspended sentence	House arrest	Work in the public interest and confiscation of a driver's license	Reprimand	Correcstice measure
	4	2	1	1	-	-	-	-
Computer sabotage	1	-	-	1	-	-	-	-
Computer fraud	2	2	-	-	-	-	-	-
Unauthorized access to a secure computer, computer network and e-data processing	1	-	1	-	-	-	-	-
Showing, acquiring and possessing pornographic material and the exploitation of a minor for pornography	22	5	-	11	6	-	-	-

The initial results in the fight against cyber-crime in our country are encouraging, despite the initial great difficulties due to the lack of solid working conditions and lack of professional staff.

6 CONCLUSION

Cyber-crime is one of the most dangerous forms of crime in modern society that takes place in a specific space, which knows no barriers and produces very serious consequences. It is one of the most severe forms of organized crime, which is characterized by a high degree of social danger, difficulties in providing evidence and prosecuting perpetrators. The problem is all the greater because it is assumed that a large dark number of undetected crimes is cyber-crime, and for now the number of perpetrators who are adequately punished is minimal.

In response to the challenges of the emerging cyber-crime, more developed countries that were most affected by the new form of crime were the first to react. At the international level, the Convention on Cyber Crime (CETS no.185) was initiated and adopted as a par excellence legal source in this field, which regulates a number of important issues in substantive and procedural criminal law. The special significance of the Convention lies in the fact that the signatory states are committed to the harmonization of national legislation, the adoption of adequate measures to combat cybercrime and the promotion of international cooperation.

Our country has also signed and ratified CETS and incorporated several criminal acts into the national criminal legislation, which are systematized in a special chapter of the Criminal Code called Criminal Offenses against Computer Data Security. Following the example of the developed countries of the world, Serbia has established specialized bodies for the fight against cyber-crime – a special department of the Public Prosecutor's Office, a special police service for the suppression of cyber-crime and a special department of the court for the same matter. In the short period from their establishment until today (2008-2020), these bodies have achieved good initial results and justified their existence, so it is necessary to continue with the development of good practice and the improvement of international cooperation.

As an applicant country for EU accession, Serbia should continue to harmonize norms and develop good practice. Due to the broadness of certain incriminations of cyber-crime in the current Criminal Code, the possibility of legal and technical correction of certain criminal offenses should be considered, which can be done in one of the following amendments to the law. At the national level, the multi-agency approach needs to be improved, because in the fight against cybercrime, not only special bodies are enough, but other state bodies and organizations can significantly help. At the international level, cooperation with the most developed countries such as the USA (FBI and other law enforcement agencies), Interpol and Europol, which are leaders in this field, should be intensified. From the point of view of our national interests, we think that significant forms of cooperation are the exchange of operational information in the field of cyber-crime, then joint actions, technical assistance and especially staff training.

And what can be a short recommendation in terms of protection is to install the latest antivirus software on your computer and mobile devices, make backup copies of all important files and save everything in, for example, a cloud or on an external disk; check the legality of the company's website, provide a gateway to the email to prevent threats through unsolicited mail; download mobile applications or any software from trusted platforms only, etc.

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V CRM AND SUPPLY CHAIN MANAGEMENT

CUSTOMER RELATIONSHIP MANAGEMENT (CRM): A CONCEPTUALIZATION BASED ON STRATEGY TO INTEGRATE DIFFERENT PERSPECTIVES

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Abstract

What exactly is CRM? There are many different perspectives on the topic and sometimes they also seem in contrast one with another. This paper aims first of all to analyse the most important ones, explaining their role and importance, trying then to find a key element to unify them in an integrated and synergic whole. We then give a strict and precise delimitation to the normally rather generic concept of customer-centric approach and we also highlight the key role of a well-aimed customer retention as an integral part of CRM strategy. Finally, we refer to two models; the first to sum up in a logical hierarchical order the main perspectives and the second to complete the picture of CRM, describing the different parts by which it is made up, namely collaborative, operative and analytical CRM. In this way we try to provide a commonly strategy-based conceptualization of CRM.

Keywords: CRM perspectives. Strategy. Retention. CRM models

1 INTRODUCTION

Although CRM is widely accepted as a business approach, the impression is that it means different things for different people, so that apparently - as Fahran [1] states - there is no universally common and accepted definition for CRM and this may explain the long on-going debate in the literature about what it actually represents.

Apart from this, further investigation seems necessary to understand what are the main issues when companies adopt it; in other words, apart from understanding its nature and agree on a commonly accepted definition, it's not clear whether and how it may be of help to companies; on the contrary Alshawi [2] reports how there are mixed results as to how successful organizations have been implementing CRM solutions. We have also to add that while there has been a great effort in order to evaluate the effect of CRM on customers especially in terms of customer satisfaction and customer loyalty, its impact on firm's performance, according to Josiassen [3], has not received sufficient attention yet, while at the same time a high number of projects are reported to fail for different and not completely clear reasons.

For Zablah [4] the situation is even worse because he states how "the growing body of literature on CRM is somewhat inconsistent and highly fragmented. This is due, in large part, to the fact that a common conceptualization of the phenomenon is still lacking. Unfortunately, the ambiguity surrounding CRM's nature has also permeated the academic literature and, as a consequence, has generated research streams that address CRM from seemingly incongruent perspectives".

Therefore, we will first briefly analyse the most important perspectives from which CRM has been researched, and then we will try to understand in a better way its nature and what are the critical factors for its success.

2 THEORETICAL REVIEW ON DIFFERENT CRM PERSPECTIVES

Analysing the relevant literature, we identified many different approaches and we will now examine briefly the most important ones that are based on 8 different outlooks on CRM as follows:

1.Philosophy. The philosophical perspective - as Cambra-Fierro [5] et al. state - builds a bridge between the marketing concept and relationship marketing paradigm and focuses on the importance of creating customer value; as a business philosophy, CRM stresses that firms must organize around and be responsive to their customers and their changing needs.

2.Process. A second perspective views CRM as a process. According to Zablah [4], this perspective, considers that the relationship between customers and the company develops over time: so CRM processes are often studied as the lifetime stages of customer relationship, namely initiation, maintenance, retention, and termination.

3. Market orientation. Another interesting and important perspective - highlighted by Cambra-Fierro [5] et al. - is the so called Market orientation that focuses not only on satisfying the needs of customers but also to do it in a better way than competitors do.

4. Capacity. CRM is seen as a capacity - as Zablah [4] reports - because maintaining lasting relationships with customers is only possible if companies have a set of adequate resources and are flexible enough to constantly adapt and readapt their behaviour towards their customers.

5. Technology. Technology is an element of CRM that many authors' definitions have been highlighting for a long time and sometimes it seems more important than everything else but, as Cambra-Fierro [5] points out, technology though important is not all and considering CRM nothing more than a technology may be very dangerous. In this regard Dalla Pozza [6] posits clearly how: "One of the main initial reasons for the high failure rate of CRM projects is the focus on technology. CRM projects tend to fail if technological investment is the only consideration with no significant attention to, for instance, a clear definition of the customer-oriented strategy or the employee training effort that is necessary to instill a new customer-centric philosophy". Finally, extremely important is Josiassen's [3] contribution who reports that there has been an evolution in the way CRM bas been viewed, moving from a technological enabler of simple automated processes to a comprehensive approach to managing customer relationships.

6. Organization. Organizational factors - as Elkordy [7] states - refer directly or indirectly to the structural, operational, human, and managerial sides of the business entity; this means that firms must align their structure, management processes and above all the personnel with their market goals, in order to become more successful in responding to their customers. Cambra-Fierro [5] underlines how it is fundamental that the management is able to build up a good organizational structure, with the right people in the right place, taking special care of their motivation so that they are aligned with the organization's business processes.

7. Knowledge management. Knowledge management (KM) tends to be considered nowadays one of the key factors for gaining a competitive advantage for organizations; KM is the capability that concentrate on organizing the company's knowledge effectively and efficiently, the ability of an organization to capture, manage and deliver real time authenticated customer, products and services information to improve customer response and provide faster decision making, based on reliable information. Firms, in this way, may have sophisticated tools and mechanisms for generating and producing knowledge continuously, as Fahran [1] states.

8. Strategy. Finally, last but for sure not least, we have a last perspective that considers CRM as a strategy, referring with this to the corporate strategy, namely the way by which a company builds its competitive advantage to be successful in the market.

In this regard, Galka [8] states that Customer Relationship Management is "the foundation of contemporary marketing strategy" and he defines it as "a strategic methodology that's being embraced in increasing numbers by organizations looking to gain a competitive advantage". For Farhan [1], CRM is "a customer oriented business strategy that concentrate on improving customer satisfaction and customer loyalty rates by providing more personalized and customized services to the customers".

Nevertheless, considering strictly the wording of these statements, all this may sound nothing more than a repetition of what we already saw with the philosophical approach, according to which customers are the focal point for companies and their primary goal is creating value for them. On the contrary, in CRM strategy there is much more than that and consequently an effort should be made to outline the concept more clearly.

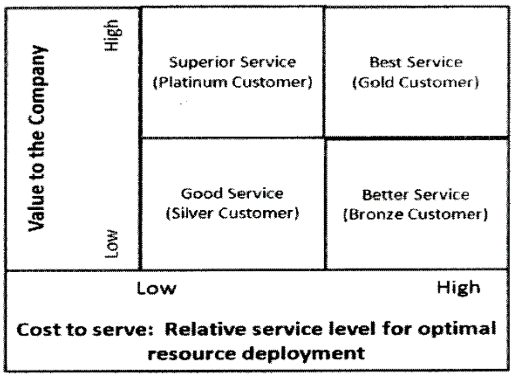
3 DEFINING CORRECTLY AND COMPLETELY CRM STRATEGY

We have to say that speaking in a generic way about customer-centred philosophy is not clear at all and that in some cases it may make little sense and even be wrong, unless of an appropriate delimitation of the concept. In fact, in case of a for-profit company, what would be the sense to make an effort and invest resources to maintain a long term relationship with a customer if he is unprofitable or, to put it in more general terms, if there is no possibility to have a present or future benefit, both at financial and strategic level, that may compensate for the costs incurred to manage the same customer?

As Dutu [9] points out; "As a strategy, CRM differentiates customers based on their loyalty and profitability. Customer relationships should be managed selectively, and resource allocations should be based on customer value. In this view, the goal of CRM is maximizing business performance by managing the customer relationship portfolio". This clarification may seem obvious and even trivial but on the contrary it is fundamental because in case of for-profit organizations the main goal is to make a profit and have a good return for the invested capital; customer satisfaction and loyalty in themselves are not the final goal but only the means by which the goal to make a profit is achieved. Zablah [4] posits that those who define CRM as a strategy also tend to emphasize that it enables firms to build the ''right'' type of relationship with each individual customer, which, in some instances, implies choosing not to build one at all. The focus of this view of CRM is not therefore only on how relationships are developed and maintained, but more so on how building the right type of relationships can have a substantial positive effect on corporate profitability.

Thakur [10] went more in-depth into the topic stating that firms should utilize the information they learn about their current and potential customers in order to properly segment them into specific groups and to treat them based on their projected profitability over time, to produce effective and efficient results for their businesses.

According to the author customers should be segmented into 4 categories, namely Platinum, Gold, Silver, and Bronze as indicated in the Figure. 1, analysing at the same time the relevant cost to serve them. By differentiating each customer within the portfolio matrix and allocating company resources accordingly, it is also suggested the operational strategy that the company should adopt for each category, as we can see in the Figure. 2, where we can find four different strategies, namely: Retention/Nurturing for Platinum, Development/Retention for Gold, Development/Filtering for Silver, Elimination/Filtering for Bronze.



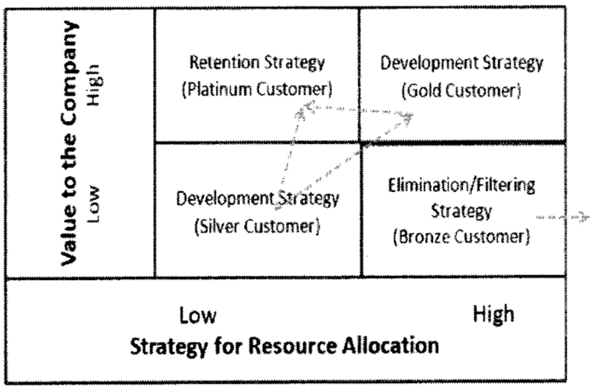


Figure 1. Cost to serve and value the Company Figure 2. Strategy and value to the company

We went a little further in this direction with our “satisfaction-profit matrix” [11] as indicated in the Fig. 3. To build the matrix we firstly capitalized on Wayland’s [12] contribution who state that it’s highly likely that profit may have a statistical distribution in 4 classes, along with the four standard classes of Normal distribution, especially in case of companies that do not have advanced accountancy systems. We then extended the same concept also to customer satisfaction level and, combining the two distributions, each divided in 4 classes, with customer satisfaction on the ordinate side and profitability on the abscissa, we obtain 16 classes of customers as indicated in the Figure. 3.

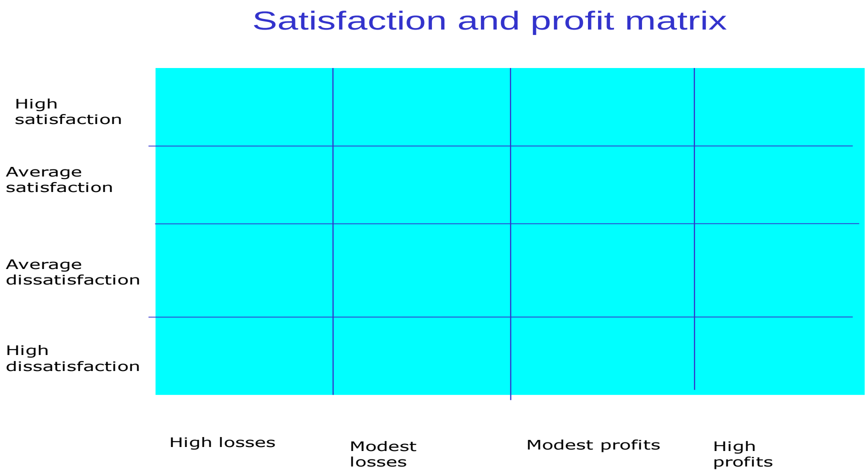


Figure 3 The Satisfaction-Profit matrix to identify 16 classes on the basis of profitability and customer satisfaction level

Two classes, such as the customers in the last group in the bottom-right and those in the top-left, are immediately drawn to our attention because they require immediate intervention. In the former group, we have high profitability combined with highly dissatisfied customers; a company should give absolute priority to intervening and ensuring that these customers do not leave the company for another supplier. In the latter group, on the other hand, we have customers who represent a serious loss for the company—probably because they don’t pay enough for the company’s services—but, who are, alas, highly satisfied. It should be noted that the level of customer satisfaction could play in this case a negative role, as customers are likely to remain “loyal” indefinitely and therefore worsening the damage over time and this should be a serious warning regarding the danger to speak in a generic way about loyalty. In such cases it is essential to take immediate and corrective action, or, for lack of other alternatives, to try and disinvest as soon as possible (contractual clauses and commercial “good manners” permitting, so as to avoid negative fallout in terms of company image).

Apart from these two classes, using the model, companies can obviously personalize their approach towards the other 14 classes, allocating in the appropriate way their resources to improve their financial situation.

We can conclude therefore how a correct CRM strategy means being selective, namely differentiate customers, developing – as Plakoyiannaki [13] states - clear market segments and customer portfolios, enabling the measurement and targeting of profitable customers. In this regard Ryals [14], in an even more incisive way, suggests that customers should be treated as a portfolio of assets or investments to be actively managed in order to maximize profitability. The author also adds that the relationship between risk and return might not be linear, meaning by this that “some investments in certain customers or projects would have an exceptionally high payoff, despite being relatively low risk. Such investments would be powerfully value-creating, if they could be identified and acted on”. Substantially the author, apart from stressing the idea that companies should not only consider present customer profitability but focus carefully on their future potential, introduces also another important aspect to take into account, namely the level of risk associated with each customer. Sometimes – as she says – the risk is low and the potentiality in terms of profit is high, sometimes on the contrary it is vice versa and this can definitely makes a great difference while managing the portfolio .

Having now highlighted the absolute necessity to focus primarily on present and especially on potential profitability, we now need to draw the attention on another fundamental aspect regarding CRM strategy, namely the importance of the retention of profitable customers versus the aggressive and often indiscriminate sales policy that - as we described in-depth in one of our contributions [15] - normally companies tend to adopt to develop their business,

4 RETENTION OF PROFITABLE CUSTOMERS VERSUS AND INDISCRIMINATE SALES POLICY

If we consider the Figure. 4, we can see that if a company has 100 customers in an initial situation A_0, with 20% of new sales and 85% of retention rate as average values over an year, it will have 105 customers as final result; in case the company wishes a better outcome, for instance to have 110, we can see that the same result may be achieved either by changing the rate of acquisitions from 20% to 25% and leaving the retention unchanged (example A_1) or by increasing the retention from 85% to 90% and leaving the new acquisitions unchanged (example A_2). In both cases, we will have an increase of 5 units with a total amount of customers of 110.

Company	A_0	A_1	A_2
Initial customers	100	100	100
New acquisitions	20	25	20
Retention	85	85	90
Losses	15	15	10
Final customers	105	110	110

Figure 4. Retention versus new sales

Therefore, it may seem that using one way or the other does not make any difference and that we obtain the same result but it's not at all like that because - as indicated in one of our contributions on CRM [16] - with conditions being equal, if one had to choose between investing in keeping a customer or acquiring a new one, there is no doubt that the former option is better for various reasons that we will now consider.

To begin with, it is widely accepted that the cost of acquiring a new customer is much higher than the cost of keeping one; obviously, there is no precise value that can be applied across all situations and, in fact, various authors say it may vary from 3 to 6 times or 5 to 12 times higher. In any case, it is not the exact percentage that is important, but rather the overall agreement that acquisition costs are much higher than retention costs. Another main point is evaluating correctly the real costs we incur when we lose a customer. For instance if we lose a €50,000 yearly contract, how much are we actually losing? €50,000?" The answer is: "Of course not!" In fact we need to refer to the customer lifetime value, namely to the current net value of all contributions, present and future, of a customer during his relationship with the company. Apart from this, the longer a customer remains in the organization, the more possibilities there may be for other business opportunities (cross-selling, selling upgrades or new business), which can easily be started with an existing customer because of their spontaneous new needs, or needs proactively identified - or even induced - by a smart supplier acting as a consultant.

Finally, it should be noted that if a company loses a customer because of dissatisfaction, negative word-of-mouth should be expected to follow, a kind of "demarketing" activity that will certainly threaten damaging consequences for the organization, even though these are difficult to quantify.

Therefore, for companies chiefly investing in a sales policy, there are many drawbacks that can severely impact on financial outcomes while, on the contrary, if we consider organizations mainly investing in retention, there is evidence of considerable extra benefits. In fact, Reicheld and Sasser [17] carried out an analysis aimed at evaluating how, thanks to retention, profit tends to increase over time, because of the synergic integration of different profit drivers, such as cross and upgrade selling, cost reductions, positive word of mouth, and possibility to apply a premium price. To summarize all these aspects and highlight the phenomenon, they elaborated the rather impressive graph in Figure.5.

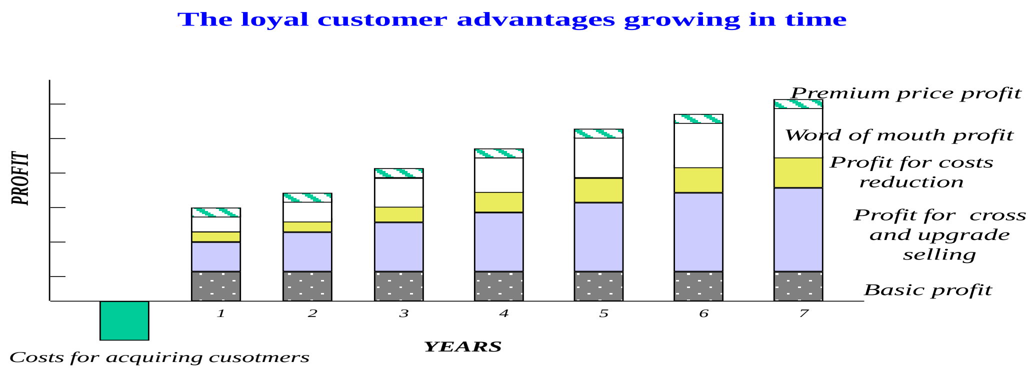


Figure 5 Synergic effects of customer satisfaction on profitability. Source: Reicheld, F. & Sasser, E. (1990).

5 STRATEGY, A UNIFYING AND INTEGRATING FACTOR OF DIVERGENT PERSPECTIVES

We have seen many different perspectives on CRM but still remains the problem of how orienting ourselves in this multitude of conceptualizations and obtain an integrated functional view that considers the multiple facets of CRM. In this regard Kumar and Reinartz - as Dalla Pozza [6] reports - emphasize that each CRM dimension is necessary, although not sufficient, to implement CRM successfully and be competitive; for this a company should be on par with its competition across all its CRM dimensions and facilitate the positive orchestration of them. Keramati et al. - as Dalla Pozza [6] reports - points out that the harmonious integration of the different CRM dimensions plays a crucial role in CRM's ability to create value for the customer and, in this regard, a good indication comes from Cambra-Fierro [5] who posits that “a strategic approach considers in an aggregate form the other perspectives”.

This seems absolutely logical considering that strategic aspects normally precede and substantially pre-determine operational and tactical ones and this also means that strategy, in the way we already described it, on one hand will have to be the starting point and, on the other, the unifying element of different perspectives. In fact, if the strategy of the organization is the pursuit of profitability on the base of customer satisfaction and loyalty of profitable customers in long-term relationships, it’s more than obvious that all other CRM perspectives will have to be managed in such a way to be in line with this strategy and integrated among them in a functional whole.

If we agree that strategy comes first of all, what does this mean in practice? Strategy cannot be only an abstract idea, it must be implemented and, in this regard, Dalla Pozza [6] clearly posits that unless top management supports a clear customer-centric strategy, CRM cannot deliver good results; therefore the first requirement is that the management believes in the same strategy and actively works to implement it.

If managers are really customer oriented – and only in this case – they will be able to make a second fundamental step namely to build up the right organization so to have a successful CRM. In this regard Elkordy [2] highlights the fundamental importance that top management shares and communicate customer oriented values and norms to their employees, in order to build a CRM mindset throughout the organization. Substantially customer orientation must become part of the organizational culture that provides implicit values and beliefs on which norms of accepted behaviour are based.

Beyond this, obviously both management and employees will need a suitable place where to work and therefore we will also need an aligned organization; in this regard (Dalla Pozza [6] very clearly links together people and organizational aspects positing that a successful customer-centric strategy draws its strength primarily from a strong focus on people and from an aligned organization. Only when the internal organization has been correctly aligned, trained, and designed around the customer, can companies provide superior customer service and build strong customer relationships with profitable customers. This implies substantially a good organizational model with well-designed and efficient processes to be supported by the specific necessary technology. To be noted that this last one should be implemented only after – and in no case before - all processes have been defined and aligned with the organization goals in order that it may provide a specific support and produce all necessary information for every member of the company.

In this regard Soltani [18] summarizes the most recurrent four mistakes that companies should avoid when implementing a CRM system, namely:

a. implementing CRM before designing a customer strategy
b. rolling out CRM before changing the organization to match
c. supposing that the CRM technology is the best
d. supposing that CRM software alone can increase performance.

6 TOWARDS A UNIFYING MODEL

Zablah [6], specifying in regard to strategy that firms must continually assess and prioritize customers based on their expected life time value, makes an effort towards what he calls a conceptual framework for CRM and he posits that "the strategic perspective provides the most conclusive evidence regarding the intended output of the CRM process", The author indicates the relevant managerial implications and state that having specified a relationship management strategy, firms can proceed to define the relevant CRM processes and process roles. This includes providing a detailed mapping and description of the relevant processes (knowledge and interaction management) and sub-processes, as well as an allocation of responsibilities for process activities among individuals and groups. Once the CRM processes have been defined and roles assigned, managers must assess the state of their CRM capabilities to ensure that they have the requisite resources to effectively execute the activities related to each of the CRM processes.

In general, CRM capabilities refer to the mix of human, physical (including technological), and organizational resources that enable firms to execute the knowledge and interaction management processes. He then indicates his framework for implementing a successful CRM system, as shown in the Figure. 6, where he also indicates a last step regarding the necessity of monitoring, evaluate and improve continuously the results.

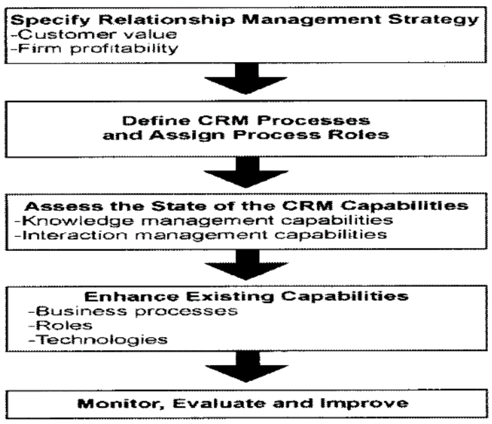


Figure. 6. Zablah's conceptual framework for CRM

What to say about this model? As we said, it seems really an excellent, logical synthesis of different perspectives on CRM that gives to all perspectives the importance they deserve integrating them at the same time in a hierarchical functional way and thereby offering also precise indications about the steps to follow to implement a successful CRM system.

However, although the model marks a fundamental step in clarifying the concept of CRM and a functional integration of the different views, it is just the logical skeleton of CRM that still must be - so to say - adequately "dressed up". In fact as many authors indicate, such as Elkordy [7], Soltani [18] et al., a CRM system, to be up and running in the best way, must be based on three different but strictly integrated parts, namely collaborative, operative and analytical CRM that, in an extremely synthetic way, may described as follows:

- Collaborative CRM which refers to all the communication channels available for potential and actual customers to handle and optimize all kind of interactions.
- Operational CRM, namely the automation of business processes to make them swift and efficient.
- Analytical CRM, which deals with using the knowledge gathered in interaction with customers, but also in every possible useful circumstance both inside and outside the company, in order to produce guidelines to support management decisions.

In this regard, an excellent contribution comes from Payne [19], who provides the best complete model that we were able to find in the literature, as we can see in the Figure. 7, where the author, perfectly in line with the necessity of strategy as the first key driver, completes the CRM picture with all its parts, too.

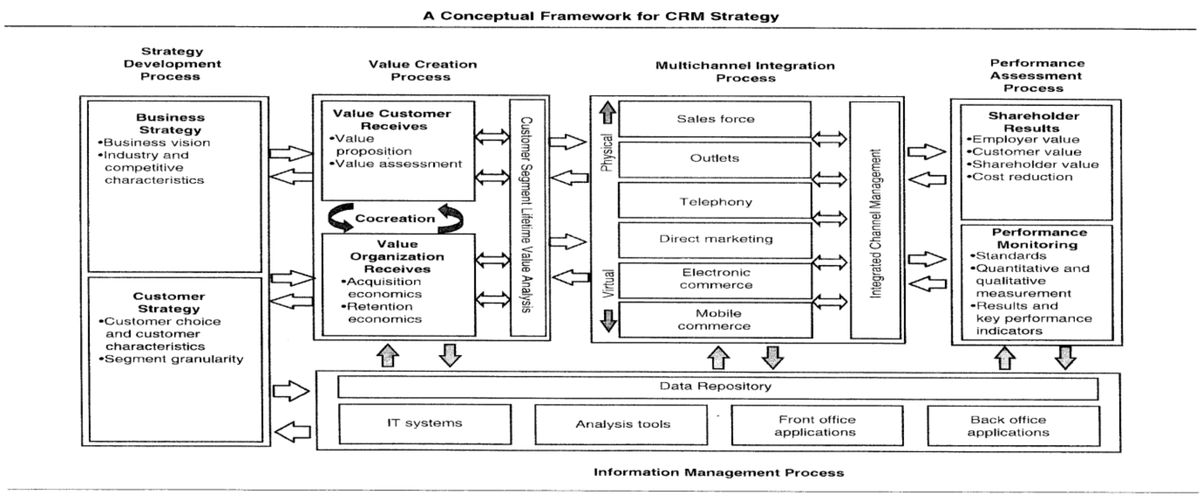


Figure. 7. Payne and Frow conceptual framework for CRM strategy

7 CONCLUSIONS AND FUTURE OUTLOOK

We believe we were able to clarify the essence of a customer-centric approach that must not be generic but strictly focus on profitable customers in order to maximize profit; we also saw how companies that invest in retention may have much better means of achieving their objectives than those who immerse themselves in continuously researching new customers. For companies that have been in the market for some time and have already built up a reasonable portfolio of customers, the focus must be, with absolute priority, on the retention of their profitable customers taking special care of their satisfaction. Nevertheless, to implement such a well-aimed retention, an efficient information system will be necessary to provide accurate data, especially regarding the profitability of each activity and the satisfaction level of every customer, in order to make possible highly targeted interventions in the portfolio.

After analysing the different. quite often divergent perspectives on CRM, we have also seen how a strategic approach may unify in a logical and synergic whole all the other ways to consider it; after that, we also investigated the different models available in the literature and we selected two, both strategy-based; the first is a simple but effective schema by Zablah [4] that indicates how and in which order the different perspectives must combine and the second, by Payne[19],that also shows a complete picture about CRM indicating the three different parts and functions that composes it, namely the collaborative, operative and analytical CRM.

This approach to CRM is a good synthesis of divergent perspectives and provides also a guide for CRM implementation as well as implicitly offer an explanation for the many failures reported by the literature.

In this regard, while we believe that in this way CRM nature is rather well clarified and that the models we have seen may be a very useful guide for its implementation, we are convinced that a lot should still be done to widespread the correct information and culture about CRM. In particular entrepreneurs should be helped to get rid of the solely technology perspective about CRM, and it should be clear for them that nowadays making a successful business is up to their creativity and entrepreneurial competences and that in no way can only be a matter of having the latest technology. In a world where competition is continuously growing, the only possibility to make an honest profit is to be able to offer customers products or services that really meet their needs and for this - as Nikitovich [20] states – “instead of trying to persuade customers to buy product already produced, they should offer only those products for which previous research has proven that customers want them”. On top of this, they should take care to do this in a better way than other competitors can do. Unfortunately, as Chen [21] reports, companies, especially at the beginning of their experience with CRM, seemed enthralled by idyllic possibilities depicted by software vendors. In such a situation quite often there has been “a knee-jerk reaction is to buy off-the shelf applications, cobble together a database of web traffic and launch an eCRM initiative”. Unfortunately many such efforts have met with poor results because as, we have seen, the first requirement is a really customer oriented management and the entire organization accordingly re-aligned.

Considering the key role and the impact of entrepreneurs on socio-economic systems, we believe that enhancing in the appropriate way a sound CRM culture might help to overcome the financial crisis that we are having since a long time and most likely to give an important boost to Economy.

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CONSUMER PREFERENCES AS A KEY FACTOR IN DEFINING THE ONLINE PROMOTIONAL STRATEGIES – CASE STUDY OF THE CITY OF ČAČAK (MORAVICA ADMINISTRATIVE DISTRICT, REPUBLIC OF SERBIA)

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Abstract

The analysis of the orientation of consumers towards the use of certain forms of informing through new technologies is an important factor in choosing the basic components that will be used by marketers. Accordingly, consumer preferences should be seen as a key factor in defining online promotional strategies. The aim of this paper is to point out the preferences of consumers towards the use of online forms of information, i.e. promotion activities. The results confirm the leading position of Web sites and social networks in the field of promotion through modern information and communication technologies. The contribution of this paper is reflected in pointing out the frequency of use of the online media by consumers in the territory of the city of Čačak (Moravica administrative district, Republic of Serbia), which is important information for marketers focused on this territory. This paper represents a good basis for further research in terms of determining specific ways of using modern technologies, as well as for temporal and territorial comparisons and identification of changes, i.e. differences and determining their causes.

Keywords: Promotion, Internet, consumer behavior, Websites, social networks, e-mail.

1 Introduction

New technologies represent a true source of new opportunities for conducting promotion activities. Despite the fact that their potential is considerable, the acceptance of modern technological solutions in the population that is defined as the target has a determining character. This primarily refers to the very essence of all marketing activities, which is something that can be perfectly designed, but if it does not meet the needs of the consumers, its marketing inadequacies comes into the limelight. Over time, the attitude of consumers towards a certain technology can change, both for the better and for the worse, and marketers should recognize the opportunity in every change and use it at the same time. As a consequence it is necessary to research the target market in terms of preferences for certain forms of technology and contacting with them, and based on the obtained results to create adequate promotional strategies. The mentioned preferences can differ depending on many characteristics of the target population – gender, age, education, territory, etc.

The subject of this paper are the promotional strategies based on the use of modern technologies and preferences that consumers from the territory of the city of Čačak (Moravica administrative district, Republic of Serbia) have towards their use.

The aim of this paper is to determine the form of information/promotion through modern technology that consumers from the territory of the city of Čačak prefer to use.

The hypothesis of this paper is that Web sites and social networks are the most important forms of online information from the aspect of consumer preferences from the territory of the city of Čačak according to their use.

The following sections of the paper will show that there is a theoretical overview that refers to the use of modern technologies, and above all the Internet, for the purpose of promotion. The existing research related to the territory of the city of Čačak and, more broadly, the Moravica administrative district will also be pointed to.

2 Theoretical structure

Promotion affects the success of companies in the market, which was shown by the example of the impact of promotion on export performance [1]. Accordingly, marketing activities (and within them promotional activities) are important within the national business as well as in the field of business internationalization [2]. Nowadays, promotion is increasingly supported by modern information and communication technologies. The development of technology and its increasing presence in everyday life have led to the changes in habits, ways of thinking and overall consumer behavior. The increasing use of various forms of technological means among individuals forms the basis for the use of the same technologies in order to analyze them, in order to achieve the best possible segmentation, targeting and ultimately positioning in the minds of consumers. Globally, modern technologies that can be used in marketing are most simply divided into (1) Internet-based technologies and (2) technologies that do not require the use of the Internet.

Electronic marketing can be seen as "a set of all activities aimed at selling products and services to target consumers, using the Internet and online services, using online tools and services in a way that is consistent with the overall marketing program of the company" [3].

Information technology "means, in a broader sense, any form of technology that people use to work with information. In a narrower sense, the term is related to a combination of three technologies: computer, communication and microelectronic technologies, whose integration took place in the mid-1950s. XX century with the advent of the first commercial computers [3].

According to [4], some of the marketing tactics used in everyday online business, i.e. in cyberspace, are: Building customer loyalty, Direct promotion, demonstration and distribution of products, Market education, Public relations (PR), Product research and development, and Customer Service and Support.

Nowadays, "marketing is focused on creating transparent customers. Individual consumers are identified in accordance with the data – traces they leave behind. This data is systematically collected and with the help of expert systems is grouped, processed and enriched with other data to be used as a basis for digital marketing – high-precision marketing" [4].

So far, a relatively small number of authors have dealt with Internet promotion on the territory of the city of Čačak and, more broadly, the Moravica administrative district. These are primarily works published during 2018 and 2019 and relate to: local tourist organizations and hotels (Facebook) [5]; local tourism organizations (Websites, Facebook, Instagram, Twitter, YouTube) [6]; media companies (Websites, Facebook, Instagram, Twitter, YouTube) [7]; young people (telephone (calls and messages), websites, social networks, blogs, mailing lists, forums and discussion groups) [8]; tourist events (Websites, Facebook, Instagram, Twitter, YouTube) [9]; tourist events (Websites, Facebook, Instagram, Twitter, YouTube, search engine position) [10]. Precisely due to the small number of papers related to the application of Internet promotional activities in the city of Čačak, this paper will provide a significant contribution to this topic.

3 Website marketing

Many marketers have websites and use them for promotional purposes. In addition to owning a Web site, a significant issue relates to the characteristics of the Web site and the activities based on it that distinguish a successful from a failed or less successful Web site. The five secrets of a website's success are: 1) the quality of being interesting and informative, 2) information is easily found on the website, 3) meeting the needs of users, 4) regularly updating the content and 5) advertising your website [11].

Of course, in order for a Web site to be able to successfully promote marketers' products, it is necessary for it to be well presented to future users beforehand – the Web site itself should be promoted. This can be done by highlighting it on promotional printed material, on other media (radio, television, newspapers, magazines, etc.). There is a possibility of including the Website in the databases of companies and other organizations, the search of which would yield the interested person the URL to the official presentation (similar to the search of telephone directories). It is also possible to promote your website through the sites of other partner or affiliated organizations, which is usually accompanied by reciprocal measures. The position that a website occupies in Internet search engines (Google, Yahoo!, Bing, etc.) has a great influence on whether a potential buyer (1) will find a website, as well as (2) whether he will visit it (belief that the most relevant search results are presented at the top), which gave rise to the growing importance of Search Engine Optimization (SEO) in achieving business success. In that sense, it is often the case that advertising websites is done by choosing keywords on search engines, or simply through the so-called "Browser advertising". Advertising using banners on other sites whose visitors are assumed to have the characteristics of the target market of the marketing company can give good results, but like any form of advertising requires certain costs. Using social networks can be a much faster way for customers to get acquainted with the company's offer, and even with its Web site where they get additional information. Use of social networks such as Facebook, Twitter, Instagram, etc. in modern business conditions does not present a choice, but a necessity of constant presence in the so-called "Virtual world". Their most common companion is also the official YouTube channel where the focus is on videos that should interest potential buyers.

According to [12], there are five essential tips in the field of using Social Web in business, of which three are desirable behaviors (listen, collaborate, measure) and two are to be avoided. "These are the difficulties of facing up to the changes required in some form for most business, and the tendency to assign all of this "social stuff" to marketing, as if it were something marketing alone could control." [12]. The same authors state that "relationships and interactions are typically built around a set of primary participant activities." Three of the primary actions are: friending and following, reputation management and moderation along with the development of conduct and use policies (aka Terms of Use) that are essential to maintaining a healthy, collaborative environment. Each of these plays a fundamental role in developing purpose driven communities — think support sites, supplier networks, and employee knowledge sharing — and, therefore, in implementing a successful social business strategy. [12].

4 Social Network Marketing

According to [13] the activities that companies can carry out through social networks as guerrilla marketing tools are profiles, groups, pages, events, notes and photos, messages, markets, sharing/published content, networks, mini content and news. A simplified view of The Social Feedback Cycle can be seen in Figure. 1.

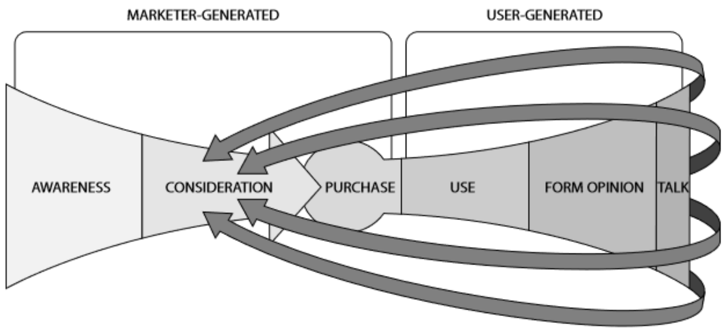

Figure. 1. The Social Feedback Cycle

Source: [12]

According to [14], social network marketing advantages (brand intelligence, a new marketing channel, cost saving, connections, brand awareness) and social network marketing pitfalls are indicated and analyzed (aggressive advertising, lack of e-commerce abilities, legal issues, lack of band control, data mining) on the one hand, and social network marketing opportunities (public awareness, involvement, mobile handset advertisements) and social network marketing threats (economic downfall, ethics, third party advertisement platforms) on the other hand.

5 Email Marketing

According to [4] there are eight models of e-mail marketing: (1) user-based email, (2) company newsletter, (3) service reminder, (4) marketing lists of permitted user access, (5) sponsored email magazines, (6) sponsored discussion lists, (7) lawyer marketing, and (8) affiliate marketing. According to the same source, the first three models are intended for existing and potential users who are buying for the first time, and the other five for acquiring new users.

The types of emails that marketers could use in activities to promote their business according to [15] are: new content email, product updates, newsletter of a digital magazine, event invitation, dedicated send, co-marketing emails, confirmation or thank you emails, welcome email.

Regardless of which form of email or email marketing is used, it is important to adjust their content to the characteristics of the recipient (when it comes to mail specifically created for a particular individual) or the number of people who will receive it. It is also necessary to give them a reason to respond to the received e-mail, which reflects the difference between a carefully created email marketing campaign and simply sending of emails, so that it could not be said that this form of promotion is unsed. Guidelines for Seth Godin [16] Kotler and Keller have formulated the four basic instructions: give the customer a reason to respond, personalize the content of your emails, offer something the customer cannot get through direct mail, allow customers to easily log out [17].

Susie Boyer and Ben Werner on behalf of Oracle® state that in order to achieve business success, it is imperative to point out examples of best practice in this area, with a special focus on:

1. Design processes to facilitate your marketing efforts,
2. Build your mailing lists the right way,
3. Comply with international spam regulations,
4. Make sure your email reaches your customer's inboxes,
5. Make each mailing an excellent customer experience. [18]

Ellison analyzes "what people like to share from their newsletter or email material that is sent by your company", such as: How To's and lists, images and videos, infographics, debatable Issues [15].

6 Description of the research

The research was conducted in 2018 on a sample of 117 inhabitants of the city of Čačak, as the administrative center of the Moravica administrative district (Republic of Serbia). The structure of respondents is dominated by persons with secondary education (75.21%), females (58.97%) and employees (50.43%). The age structure is fairly uniform considering all three age groups (up to 30, from 30 to 50, over 50 years), with a small advantage to the group over 50 years (35.04%).

The research is primarily focused on websites, social networks and subscribing to mailing lists. In order to obtain the most accurate results of the use of these forms of Internet information by the inhabitants of the city of Čačak (Moravica administrative district, Republic of Serbia), the questions were grouped into two groups.

The first group (first question) refers to the most commonly used forms of informing about offers via the Internet, where in addition to Web sites, social networks and subscribing to mailing lists, blogs, forums and discussion groups, banners, search-related advertisements and mobile applications are listed. In this question, the selection of the "most commonly" used forms of information is extremely simplified and based on the choice of one or more answers from a larger number of offered.

The second group of questions is a set of three individual questions related to the frequency of use of Web sites, social networks and emails/subscriptions to mailing lists to be informed about offers. Given that the three forms are considered separately, and the frequency of use is expressed through three aspects (I do not use, sometimes, often), this group of questions provides more detailed information about websites, social networks and email/mailing lists compared to the first question.

The results from the first and second groups of questions together will give a clearer picture of the real orientation towards the use of different forms of information about marketers' offers, and above all three separate forms – Web sites, social networks and email/mailing lists.

7 Research results

When informing about the existence of the offer and its characteristics via the Internet, respondents stated that they mostly use Web sites (74; 63.25%) and social networks (60; 51.28%), but also search-related advertisements (33 ; 28.21%), subscribing to mailing lists (11; 9.40%), blogs (8; 6.84%), forums and discussion groups (4; 3.42%), mobile applications (2; 1, 71%) and banners (1; 0.85%), while the Internet is not used by almost a fifth of respondents (23; 19.66%) – Table 1.

Table 1. The most common forms of informing about the offers using the Internet

	Number of respondents	% of respondents	% respondents who use the internet	% answers
Web sites	74	63.25	78.72	38.34
Social networks	60	51.28	63.83	31.09
Blogs	8	6.84	8.51	4.15
Subscribing to mailing lists	11	9.40	11.70	5.70
Forums and discussion groups	4	3.42	4.26	2.07
Banners	1	0.85	1.06	0.52
Search related advertisement	33	28.21	35.11	17.10
Mobile applications	2	1.71	2.13	1.04
I do not use the Internet	**23**	**19.66**	**24.47**	

Source: Authors

The frequency of using informational Web sites about existing or new products in most respondents who use the Internet is "sometimes" (54; 57.45%), in slightly more than a third "often" (32; 34.04%), and a small percentage is of those who do not use it (8; 8.51%) – Figure. 2.

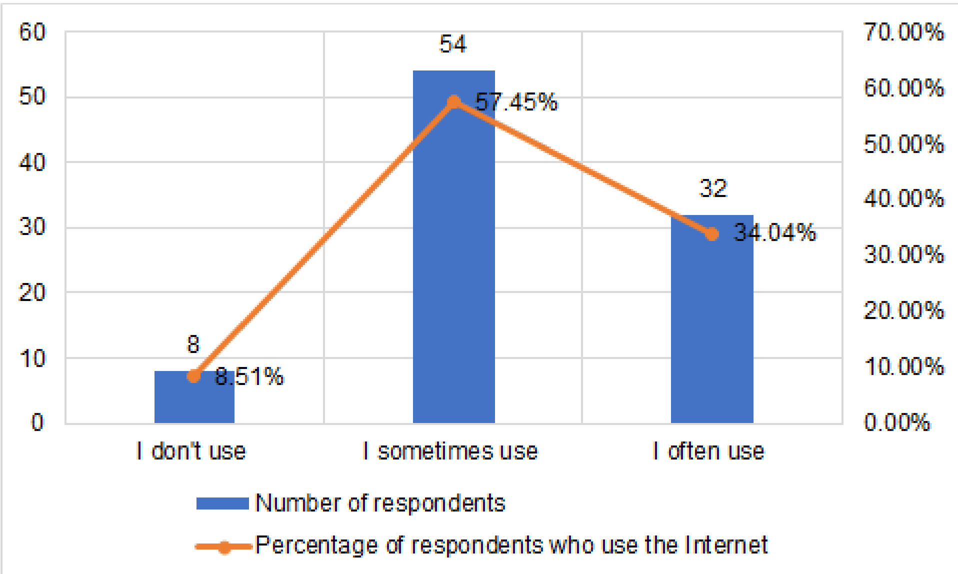

Figure 2. Frequency of using Web sites for product information (respondents who use the Internet)

Source: Authors

The use of social networks to inform about existing or new products (Figure. 3) is mostly “often” (36; 38.30%) or “sometimes” (35; 37.23%) among respondents who use the Internet, but many respondents answered that they do not use social networks for this purpose (23; 27.47%).

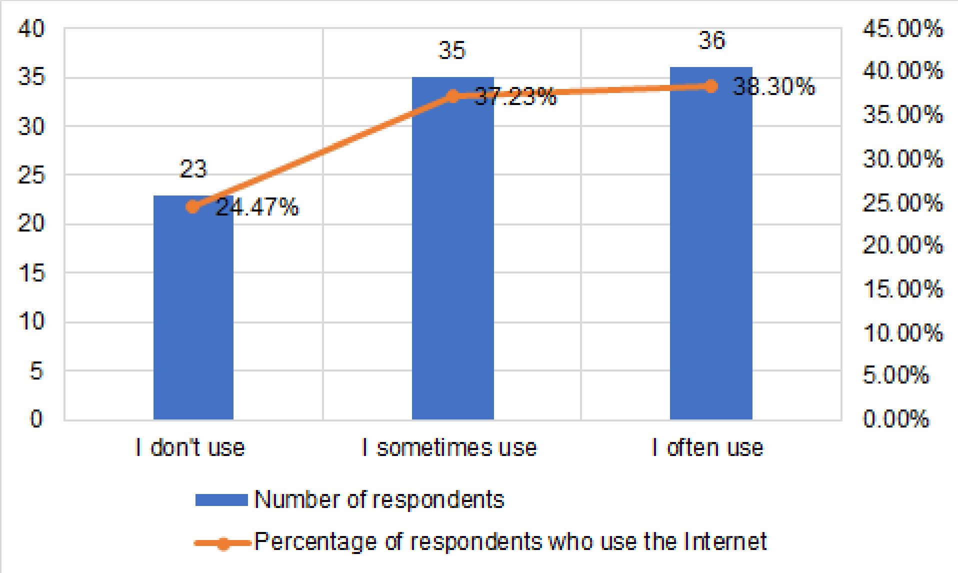

Figure 3. Frequency of using social networks for product information (respondents who use the Internet)

Source: Authors

The use of subscribing to mailing lists in order to be informed about existing or new products is represented by "sometimes" (51; 54.26%) in a large percentage of respondents who use the Internet, and a large percentage of non-users are present (41; 43.62%), and frequent use is almost negligible (2; 2.13%) – Figure. 4.

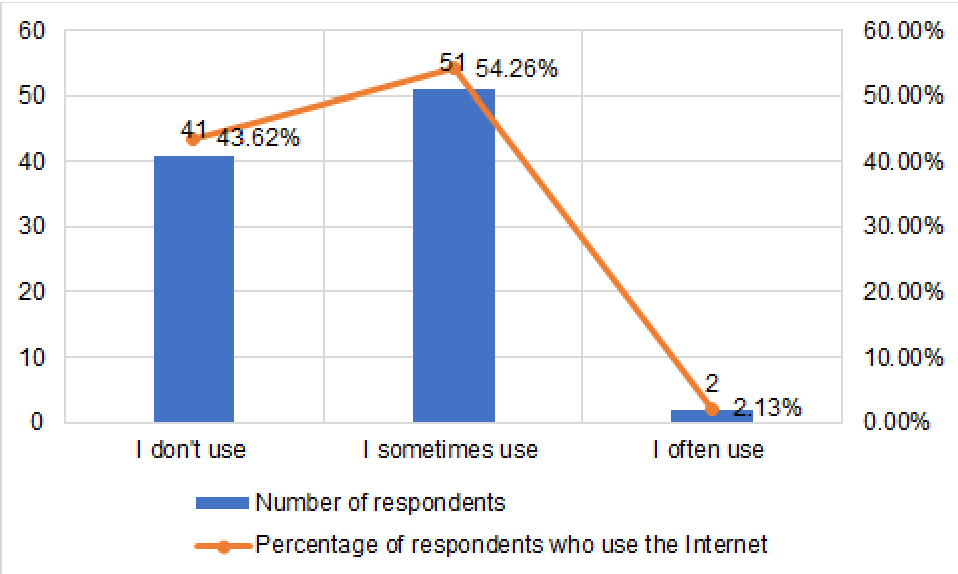

Figure 4. Frequency of using mailing lists to inform about products (respondents who use the Internet)

Source: Authors

By comparing websites, social networks and email (subscribing to mailing lists), it can be concluded that respondents most often use social networks (38.30%), followed by Web sites (34.04%) and in the smallest percentage of email and subscribing on the mailing list (2.13%). The answer "sometimes" is most present in more than half of the respondents who use the Internet in the case of Web sites (57.45%) and social networks (54.26%), as well as in slightly more than a third of respondents (37.23%) when talking about e-mail and subscribing to mailing lists. Email and subscription to mailing lists takes the first place when it comes to the percentage of non-use (43.62%), followed by social networks (24.47%) and Web sites (8.51%). A comparative view can be seen in Figure. 5.

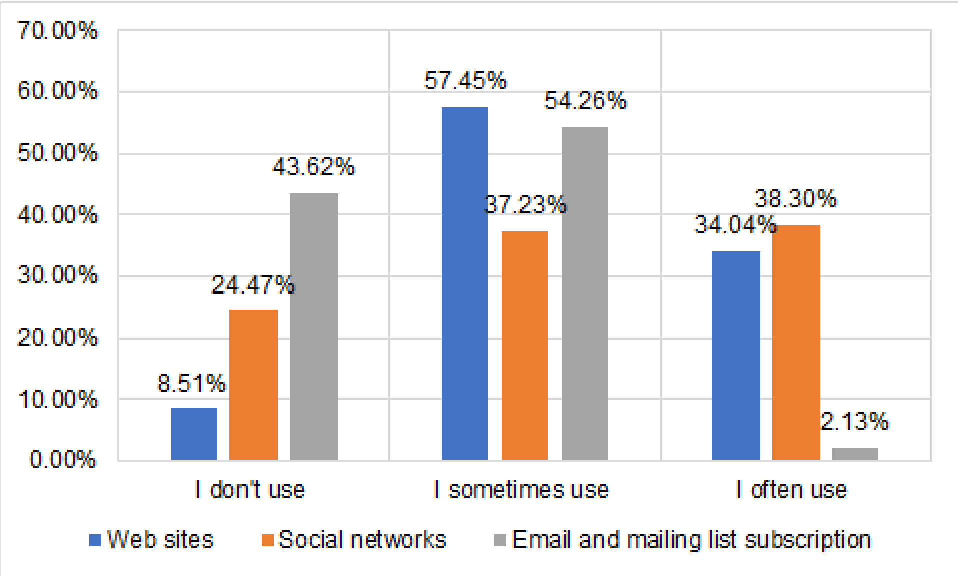

Figure 5. Comparative presentation of the frequency of using Web sites, social networks and emails (subscribing to mailing lists) for information/promotion (respondents who use the Internet)

Source: Authors

On the other hand, if the number of persons who do not use the Internet (23) would be added to the number of persons who do not use Web sites, social networks and email and subscribing to mailing lists (data from the second group of questions), data that Web sites are not used by 31 persons, social networks are not used by 46 persons and email and subscription to mailing lists is not used by 64 persons – Figure. 6.

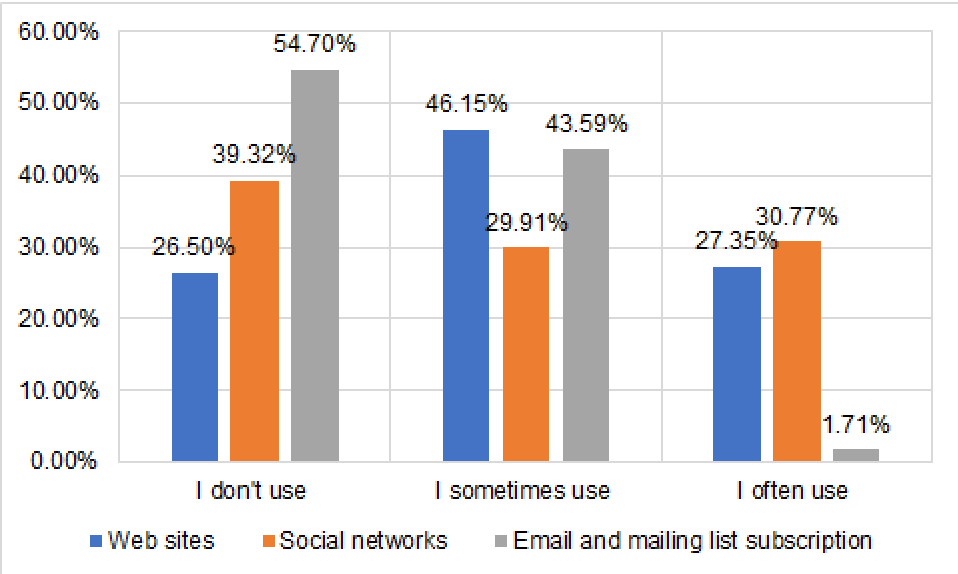

Figure 6. Comparative presentation of the frequency of using Web sites, social networks and emails and subscribing to mailing lists (total number of respondents)

Source: Authors

Based on all the presented data, it can be concluded that it is best for marketers to base their promotional activities aimed at the population of the city of Čačak on Web sites and social networks, given that they are characterized by the highest degree of use and frequency of use when it comes to Internet technologies. The hypothesis of the paper, which states that Web sites and social networks are the most important forms of online information from the aspect of consumer preferences from the territory of the city of Čačak according to their use, is hereby confirmed.

8 Conclusion

With its development, the Internet has provided marketers with almost unimaginable opportunities to achieve their goals. The growing focus on the use of the Internet in all spheres of life has led to the need to integrate the Internet into existing marketing mix instruments, and thus into elements of the promotional mix. Overall, an increasing part of society uses the Internet, which makes the Internet, online or digital communication increasingly important. This paper showed the need for marketers to focus on the use of the Internet in targeting the target population in the city of Čačak (Moravica administrative district, Republic of Serbia), given that the vast majority use the Internet to inform themselves about the marketers' offers (80.34%). The most important forms of information are through Web sites and social networks, since more than half of the respondents use them for the stated purposes.

The obtained results of this paper contribute to a small group of works related to Internet promotion in the Moravica administrative district, but also practical, i.e. expert contribution pointing out the characteristics of the inhabitants of the city of Čačak, which is very useful for marketers who are currently or potentially planning to target this population. Also, the paper provides a good basis for future research aimed at identifying specific ways in which the Internet and certain forms of information are used by residents of Čačak, as well as for comparison for other similar areas in the Republic of Serbia and other countries and comparison from the time aspect. In this way, more detailed data would be obtained and differences that territorially or temporally exist and could potentially arise would be indicated.

The Internet plays a significant role in the world of promotional activities. That role will certainly not be diminished in the future. The Internet has become an integral part of people's lives, so Internet communication has become an integral part of the overall activities of marketers.

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SUPPLY CHAIN MANAGEMENT - STRATEGIC FOCUS INSTEAD OF BALANCE OF OBJECTIVES

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Abstract

In recent decades, the business environment has changed dramatically, primarily in the sense that environmental conditions are constantly changing, and even dramatically. This primarily refers to the change in the behavior of consumers and customers who are making increasingly specific demands. Therefore, it was necessary to change the models of management and organization radically. The financial goals and measures of business success of a company (enterprise) are no longer sufficient for successful management. Attempts to achieve a balanced approach through the BSC have not yielded good results in dynamic conditions. With the value chain theory M. Porter has opportunities to create new governance models and a new strategic approach centered on creating value for customers and consumers, and competitiveness. Customers and consumers (rather than internal factors) have become the source of all business initiatives, which has also led to the creation of a supply chain concept that allows for clear strategic focus and operational efficiency in value creation and delivery. Supply chain management takes place primarily through a system of qualitative target performance activities and processes and their measuresž

Keywords: Business management, goal balance, strategic focus, system of performance and measures.

1 INTRODUCTION

The basic characteristic of the modern business and social environment is the dynamism of changes. Changes in the environment (after the 1960s and 70s) are reflected, above all, in the rapid development of globalization, in the growth of competition, in the development of technologies and especially information and communication, customer orientation and grouping of customers in all segments, flexibility and constant product innovation and shortening the product life cycle. In the new conditions, the way of organizing business, the way of applying and the way of management are dramatically changing. Today, companies have a mission to meet the requirements of customers and consumers, that is, strategic goals, and to create values that customers or market segments value, in a specific way and in the current moment. It is then a priority (priority principle) for top management and executors.

The strategic approach is key, but also the tactical level at which capabilities are developed, and the operational aspect that enables the achievement of best practice performance. This is the necessary consistency of goals of all hierarchical levels.

Today, the organization of the supply chain represents a tactical and operational response to market, competitive and other environmental conditions. Developed as a concept and form of business organization, the supply chain can represent a very complex structure, but can be significantly simplified through the principles of the concept and organization of the supply chain and through the management model. The principles of supply chain management are essentially related to the principles of change dynamism, on the basis of which a supply chain management model is created, with all the specific characteristics. One of the key principles of the organization is that the profit and costs of the company through the supply chain are not managed directly, but through the management of the performance of activities and processes of the supply chain system. This can effectively achieve the company's competitiveness strategy, financial and other goals.

Customers are most often interested in four categories of performance, which are defined for the company and the supply chain as goals: quality, time (speed), service performance and costs, but also for innovation and constant adjustment of the offer to their needs. This performance is not equally important for every supply chain, nor can the supply chain as an operating system be the best in all categories of performance. The performance categories that the supply chain (or the company through its supply chain) chooses represent support for the strategic focus and are part of the planning system.

If the statement that something that cannot be measured cannot be managed is true, then the statement that something that is not planned cannot be measured is equally true. In this sense, the key segments of the enterprise management process in the supply chain are planning and performance measurement that allows analysis and feedback for system corrections.

Traditional performance and performance measures were predominantly financial and quantitative. The context of the constituted and integrated supply chain places everything on a different basis in relation to the measurements in the enterprise. When creating the necessary organization of the operating system of the enterprise through the supply chain, the strategic focus and the key business idea should be recognized which is implemented through the supply chain system. A balanced system of goals, performance and measures will not lead to effective management decisions and will not bring the necessary dynamism of strategic direction.

2 BUSINESS MANAGEMENT IN MODERN DYNAMIC CONDITIONS

In order to acquire and maintain competitiveness, it is of special importance to connect companies and develop specific and effective forms of partnership and cooperation. "Partnership must be linked to strategy, defining the purpose of partnership defines and the willingness to change the way of cooperation with changes in the environment." (Blanchard, 2010, p. 171). Supply chain companies must constantly work on developing their products and improving processes, to have the ability to innovate and improve product quality, where it is necessary to involve the suppliers and other partners.

"Management in a modern environment and environment takes place through the design (planning) of the organization, through active coordination of all specific aspects of business, through the implementation and execution of operations, and through measurement and analysis and optimization of business processes, in order to effectively and efficiently achieve business goals." (Davis, Brabänder, 2007, p. 7). The business organization environment we are talking about today is the supply chain environment in which the enterprise's competitiveness strategies are implemented, through a joint supply chain strategy.

The competitiveness strategy of enterprises companies in the supply chain defines where and with what values it can be the best.

Today, two (generic) types of enterprise competitiveness strategies can be defined:

- responsive (response to all customer requirements, usually in narrower market segments through a high level of service – availability, small delivery lots, packaging, additional product functions, after-sales service), and
- cost and operational efficiency strategies (usually for mass markets).

In practice, competitiveness strategies are usually hybrid and specific (and thus differentiating), with the dominance of elements of one or another strategy. In general, all strategies are market and customer oriented because low costs (prices) are also part of a responsive attitude towards the market. Competitiveness strategies create a strategic focus and key performance, a business model for the supply chain context and supply chain strategy, and finally an organization in line with the target performance and system of measures (Fig. 1).

Supply chain strategy defines the organizational design of the overall supply chain (network design), the required level of services, the way of inventory management, target performance and performance measures, (Harrison, Van Hoek, 2002, p. 210) i.e. the way of competing and realizing business strategies of the company.

Both strategies are based on a strong focus on key competitiveness factors, ie the ability to create selected values and the performance of delivery efficiency.

In the analysis of competitors, enterprises (companies) can analyze the technical and technological elements of competition, their current resources, financial balances and the visible part of the organization and operating system. Based on that, it will be understood what the competition is currently doing, with the help of which resources, and what the current result is. However, what is invisible are the strategic intentions and plans from which new initiatives for future movements always arise. That is why strategy is a basic factor in the competitive struggle: in dynamic conditions, the competitive position is temporary and therefore requires constant initiatives, which can be effective only if they come from a competitive strategy. A enterprise's competitiveness strategy is what differentiates a enterprise in the market from other companies. On these differences the enterprise builds, adapts and develops its supply chain and competitiveness capability, with the necessary strategic values, tactical and operational components.

3 DEFINING THE SUPPLY CHAIN

Defining the supply chain is not easy, especially if all aspects of the supply chain concept need to be defined at the same time: creation, management and operation.

Such a broad definition could read: *the supply chain is a complex structure of business organization by several* enterprises *and strategic business units of different* enterprise*, which, as a new entity, is directed towards a particular market, starting from the strategic values represented by* enterprises*; it is a structure that can create the necessary processes and operations that are jointly and coherently managed and that aims to effectively achieve the competitiveness, business and strategic goals of the* enterprise*s in the chain.* One of the modern truths about doing business in modern conditions is that competition no longer takes place between enterprises, but between their supply chains.

The context of the supply chain as an operating system is in fact support for the strategic options of the entire reproductive chain of enterprises in the system. The key strategic options are no longer just (and above all) internal factors: low costs through economies of scale, or a high level of capital investment and technical equipment that prevents competition from entering the industry, nor corporate profit rates. The supply chain, as the operating system and strategic assets of enterprises in the supply chain, today should define and provide the necessary activities and resources, and enable efficient process, and the achievement of strategic goals defined by the market. The supply chain itself is a combination of a number of tangible and intangible factors. Value is not created and realized only by improving primary activities, but also through the integration of both primary and secondary (supporting) activities in flows and across the supply chain. Supply chain, through the creation and delivery of value, conceived and focused on efficient customer and consumer service, responsiveness in every sense, in order to achieve competitiveness and customer satisfaction, and thus all other business goals of the enterprise.

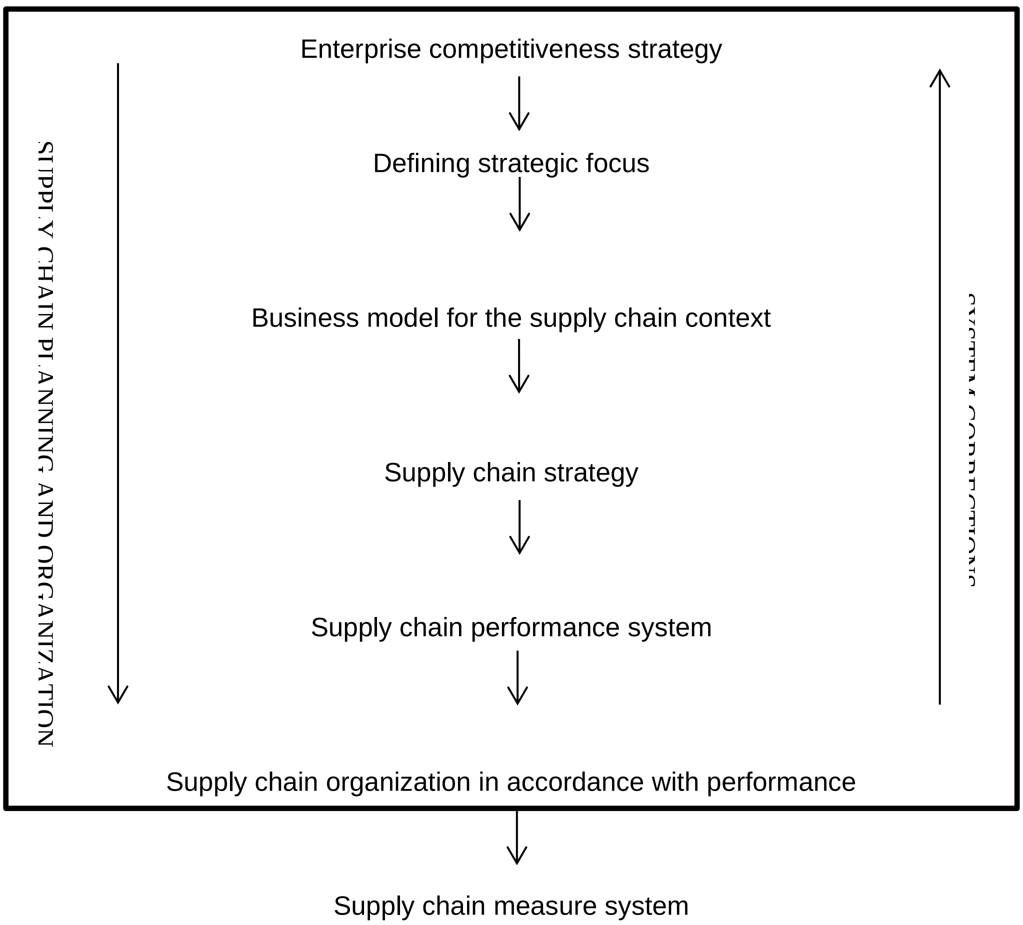

Figure. 1. Hierarchy of management decisions of the supply chain enterprises

The supply chain is a model of organizational action which creates conditions for continuous and effective functioning of the business model of the enterprise and the achievement of business goals. In the context of the supply chain, elements of the business model – customer relations, product innovation and business infrastructure management, are supported by key target performance and key organizational components of the supply chain: relevant integration, organization of complementary core competencies in the supply chain, and supply chain strategy. Thus, through the business model in the context of the supply chain, the traditional financial model has also changed. “Financial models do not refer to absolute values; they refer to (partnership) relationships. A good financial model demonstrates the relationships and trade-offs that make up the profitable potential of a business idea. If you understand relationships, revenue drivers, cost drivers and critical success factors (in the market), you also understand the core of the business.” (Savyer, 2015, p. 4).

4 PERFORMANCE MANAGEMENT OF ACTIVITIES AND PROCESSES IN THE SUPPLY CHAIN

The starting point for creating a supply chain and performance system is the mission and vision of the enterprise and the researched needs of a certain market or segment, on the basis of whose values the competitiveness strategy of the enterprise is created. The supply chain for a certain market is created primarily on the basis of these harmonized values from competitiveness strategies (enterprises or strategic business units of different enterprises).

The supply chain performance system must be set first in accordance with the enduring values on the basis of which the strategy and goals are created, with performance and priorities based on current needs and requirements of customers and markets, and then in accordance with all elements of management, organizational and operational structure supply chain.

The business management model aims to simplify a complex system. The modern model of business management through the supply chain (SCM, Supply Chain Management), contains four basic phases that are continuously or cyclically repeated:

- joint performance and organization planning,

- measurement and control,

- analysis of measurement results, and improvements or enhancements of activities and processes.

However, in practice, the supply chain management process is more complex and dynamic and requires a number of management activities:

a) ***Creating the structure of the supply chain*** based on the researched demand and defined relevant market segments and competitiveness strategy, creating the configuration and business model through the supply chain,

b) ***planning of target levels of value chain performance*** through synchronization and mapping of organization and value flow in the processes of procurement, production, distribution and execution of orders,

c) ***business planning*** for a certain period and coordination of plans with partners,

d) ***operational planning***,

e) ***coordination of activities*** through the execution of operational plans,

f) ***measurement*** and identification of unsatisfactory results and differences between the plan and the state of execution,

g) ***analysis*** of information obtained by the measurement process, synthesis of conclusions and understanding of the problem, reporting on the extent of deviations from the target performance levels,
h) ***planning actions and programs to improve the performance*** of the supply chain process,
i) ***implementation of improvements*** and verification of operational and tactical values in the short-term cycle,

j) ***reengineering*** based on strategic analysis and conclusions on strategic values, new supply chain configuration for a longer period, and verification of tactical and operational solutions.

The performance system is created (planned) at the strategic level from the top management and then disaggregated from the strategic, through the tactical, to the operational level of the supply chain. The system of measures at the operational level enables the analysis of data and information by creating indicators from the operational to the tactical and strategic level. This allows the selection of corrective actions for improvements at all levels, as well as for continuous improvements of systems and competencies. Feedback information from the measurement process moves in the opposite direction.

The key segments of the supply chain management process, which are part of the overall business management process, are:

- planning (at all hierarchical levels) according to a top-down methodology (and approach) that is operationalized along the entire course of the supply chain, and

- measuring the performance of activities and processes and analysis, which can result in management decisions and corrections at all levels of the organization according to the bottom-up approach and methodology.

The supply chain strategy, performance system and supply chain measure system, as well as the necessary indicators for the enterprise, derive from the enterprise's competitiveness strategy, forming a unified planning system.

*4.1 **Supply chain planning***

There are different forms of joint planning in the supply chain, from planning at different hierarchical levels and defining (harmonizing) target performance values and organizations, to explicit business planning of different time horizons, which in the supply chain should also have the character of harmonized or joint planning. Supply chain planning, and in the supply chain, is a joint planning of the necessary activities and processes and their performance, the required resources and organization, in accordance with the performance of the value chain - *the target level of performance of products and services*.

The issue of supply chain planning is closely related to the level of integration of management and operational processes. Joint plans, in any form and segment, are the basis for coordinating all types of joint decisions. "In short, we define collaborative planning as a joint decision-making process to harmonize the plans of individual supply chain members in order to achieve coordination in conditions of information asymmetry." (Günther, Meyr, ed., Stadtler, 2009, p. 4). In a fully integrated supply chain, in fact, there should no longer be any asymmetry in access to information, because information systems are integrated. In a system where there is asymmetry, all information is usually held by the focal company (founder of the supply chain), and when making decisions, only the information necessary to make a particular decision is revealed. This is actually a range of levels of integration and levels of joint planning - from full integration, to sporadic joint decision-making. Important for these considerations is the type of highly integrated supply chain that implies a level of integration high enough to allow for continuity of joint planning. Otherwise, it is not a supply chain entity, but a partnership to achieve some goals.

*4.2 **Monitoring and measuring the performance of the enterprise and the supply chain***

Traditional performance measures in a company are financial measures that are "read" from periodic reports and balance sheets. This data and information is standardly used by investors, banks, shareholders and regulators in relations with the enterprise, but also by the management, which in various ways, reliably or less reliably, knows the background of such results. In the functional system of an isolated enterprise whose organization is based on the sub optimality of functional parts, the key measure is the financial (business) success of the enterprise (company), which speaks little or insufficiently about the causes of such a result. If the company has developed management accounting to some level, the conclusions will be more reliable. These reports can also be the subject of forgery, which has already happened.[1] These reports and results actually say little about the quality of the business and cannot be an indicator of the quality of the supply chain, nor can the financial results of the enterprise be simply summed up to obtain the result of the supply chain.

In considering the issue of performance measurement today, the question of the relationship between the measures used in the company and the measures used in the supply chain (or for the supply chain) arises first. Today, with the acceptance of the concept and context of the supply chain, it is necessary to have two systems (or levels) of measures: a system of supply chain performance measures, and a system of measures of enterprises in the supply chain. The system of supply chain measures should only measure the harmonized level of activities necessary to achieve the target values of the value chain

[1] Example of false reports from Enron, from 2000-2004 years, where hundreds of millions of dollars in losses were concealed. (Wisner J. D., Tan K.-T., Leong K. G., 2012, p. 486.)

in the supply chain. The system of performance measures of the enterprises must measure everything, because the management of the enterprises is responsible to the owners of capital for all the effects of activities in the enterprises, for all the benefits, gains, damages and losses. In the context and system of the supply chain, however, what is not needed by the supply chain should not be needed by the enterprises (or SBU) either, because, conceptually, it does not bring positive effects, but negative ones. These are most often redundant activities, excess capacity and irrational use of other resources. The supply chain and its management can thus be an indicator of shortcomings and poor management in the enterprises, and the enterprises must solve these problems alone. On the contrary, if the enterprises in the supply chain reaches a higher level of efficiency than the agreed one (or the average in the branch), it will make extra profit and that will be the result of especially quality management decisions. The role of management accounting, which must be further developed, in determining these values is unavoidable.

In terms of these discussions, there is a conceptual dilemma whether a enterprise should first cover its system of key process measures and organization (Wisner, Tan, Leong, 2012, п. 456), or need to first develop inter organizational processes, performance and supply chain measures, and only then develop internal processes, in accordance with a harmonized performance system needed by the supply chain. Conceptually, it is necessary to first develop the performance and measures of the supply chain. In practice, enterprises will always have activities and resources that are not needed by the supply chain, which will have effects on the enterprise's business. Therefore, the enterprise must have measures that will affect business success and internal performance.

In identifying supply chain performance measures, and measures in the enterprise, we seem to have one paradoxical situation that can be described through two questions that require an answer:

1) Performance measures that are used in the same way in all organizations (enterprises) of the supply chain, on the basis of legal regulations (collected, or that can be collected), such as measures of business - financial success, are they therefore supply chain measures?
2) Measures of performance of the process and activities of the enterprises, which take place in the operating system of only one organization (enterprises), and which depend on the partner process, are therefore internal performance measures, since they depend on the activities and processes of the partner, accumulating value for consumers?

No, it's actually the opposite. Financial performance, cost, revenue and profit, and many quantitative performance, are measured in all organizations, and in the same way, based on laws and other regulations, and yet they are not supply chain performance measures, but undoubtedly internal measures. If all companies have the same level of efficiency and rationality, i.e. that they can achieve a harmonized level of supply chain efficiency, and that in all activities and branches (different production, wholesale, retail, logistics) the same business conditions, then financial measures (primarily business success and profit rate) could be used as supply chain measures. However, not all internal relationships in companies are under the control of the supply chain, especially if the company operates in multiple supply chains. In the practice of the enterprise, there are deviations due to internal reasons that in different ways affect all these measures and their connection with the harmonized performance in the supply chain. All irrationalities through an agreed level of efficiency fall on the company (therefore the enterprise must measure everything) - the value chain of the supply chain, in principle, does not recognize them. Therefore, financial and quantitative measures cannot be considered as integrated supply chain measures. Supply chain measures are primarily qualitative and harmonized, in accordance with all the necessary factors of the total flow of the value chain, in whatever enterprise they take place. Professor Lambert describes the process of executing orders as follows: “The process of executing orders involves more than executing an order. The process includes all the activities necessary to define customer needs, design the logistics network and enable the organization to meet customer requirements, while minimizing the total cost of delivery in the execution of the customer's order. It is not just a logistical function, but cross-functional coordination of key suppliers and customers needs to be applied instead.” (Neely, editor, Lambert, Knemeyer, 2007, p. 88). Therefore, a measure of the efficiency of order execution can be a measure of the supply chain.

It is traditionally considered, which is still manifested in practice today, that the shareholders, owners, are inviolable. "It is really clear that in many organizations, shareholders will be the most important actors. However, other important stakeholders should also be considered, such as customers, employees and suppliers.” (Neely, ed., Neely, Kennerley, Adams, 2007, p. 145.). From a value chain and supply chain perspective, the role of owners, who are only interested in the company and the financial result, is really not crucial. The only participant and stakeholder in the supply chain, who does not have to apologize to anyone and justice, is the customers, the owner of his will to buy or not to buy, to like or dislike. In such conditions, customers and consumers and their needs and requirements are the drivers of any business initiative. What can connect the financial interests of investors and the goals of the supply chain, which should be achieved by management, is the business model, which should be presented to investors and which contains the basis of competitiveness and assumptions of financial effects for the future. The supply chain as a framework for creating a enterprise strategy provides key assumptions for the business model: values are defined through customer relationships, and resources are provided through relationships with suppliers and other enterprises, and their integration affects the overall level and cost structure, which can to interest the waltzes.

By measuring performance and analyzing measurement results, both quantitative and qualitative performance, information is obtained that enables understanding of the existing situation and observation of differences in execution in relation to the plan, as well as potential opportunities for actions and changes in the future. A series of data from operational execution, data on previously observed trends, and data from the environment, as well as special research on demand, environment and organization, form the basis for strategic analysis, whose conclusions can be the basis for solving problems at all levels and eliminating numerous risks.

4.2.1 The approach of balancing the system of goals and measures of enterprise performance

In the middle of the last century, discussions began about changing the management model and measuring performance. In the traditional economy, until the 1980s, the dominant measures in companies were financial and other internal performance measures. Then their insufficiency and shortcomings were definitely noticed. Therefore, numerous models of management, control and measurement have been created. The Balanced scorecard (BSC) is especially characteristic. The main intention of the authors was to overcome the known problems of measuring only financial results in the company, i.e. to achieve a balance of financial and non-financial measures in business control, as well as the connection with strategy. The performance measurement system was supposed to provide managers with enough information to solve problems of finance, internal processes, innovation and improvement. (Kaplan and Norton, 1997,).

The BSC contains four categories of performance, or perspective (Kaplan, Norton, 2005, 172-180):

-financial perspective (What does the company return to its shareholders?),
-perspective of consumers and customers (How do customers see us?),
-perspective of internal processes (What makes a company stand out ?),
- perspective of learning and growth (Can a company continuously improve value creation?).

In their book The Balanced Scorecard, (1996) Robert S. Kaplan and David P. Norton through the balance sheet model indicate (insist) on the need for harmonization and balance of financial and non-financial measures in the company, but also how to connect the measures of operational processes with long-term and short-term business strategies and how to translate business visions and strategies into actions. The application of BSC in the company is focused on strategic analysis from the point of view of financial results. What is unclear at the beginning is only the "origin" of the strategy - whether it comes from internal values and aspirations, or from external goals.

The values given for each perspective in BSC are (Kaplan, Norton, 1996, p. 44):

1. financial perspective - return on investment and value added costs.

2. customer-consumer perspective - customer satisfaction, loyalty, and market share;

3. perspective of internal processes - quality, appropriate time, costs, innovations;

4. Perspective of learning and growth - employee satisfaction and availability of information system, management.

The results of this model have been discussed in practice since the very beginning (1992), and the conclusions range from admiration to complete skepticism. The authors themselves sought to address the perceived shortcomings by changing performance attributes (1996), introducing a strategic map and strategic management (2004). The strategic map, as an integral part of the balance sheet of results, and as a supplement, tries to visualize the connection and interactivity of these perspectives, cumulating the values created by the process (Norton, Kaplan, 2004, p. 2) from different perspectives (not from the flow). With the strategic map, the authors introduced strategic management, whose role they defined primarily in the sphere of communication with lower hierarchical levels and between perspectives. This is not a step outside the organization, but an internal, authoritarian (top-down) communication. In that sense, „although Kaplan and Norton wrote about the importance of suppliers, they did not include the perspective of suppliers in their Balanced Scorecard.“ (Bass, 2007, p. 11).

Undoubtedly, they are talking about the company, and not about the enterprise (or SBU) because they do not notice multiple programs related to the markets.

"Many, especially large American companies (Mobil Oil, Tenneco, Brown & Root, AT&T, Intel, Allstate, Ernst & Young and KPMG Peat Marwick) and some European ones, have applied the model and reported great benefits. However, there are indications that the use of this model can be problematic, expensive and even unsuccessful. A survey by U.S. consulting benchmarking company Hackett Group found that 82% of companies in their database used BSC, but only 27% set their systems 'mature'. John McMahan, senior advisor at Hackett Group, said: 'Most companies get very few results from the balance sheet because they have not followed the rules that make them effective. For example, in the United States, the average number of measures used is a confusing 132, and Kaplan and Norton suggest 20 to 30 measures. Further, information systems may need to be modified, sometimes at great cost, to provide information for the scorecard. Other weaknesses of the BSC include its inability to show what competitors are doing, the exclusion of employee, supplier and partner contributions, and its reliance on top-down measures.' Yet the BSC is still widely used in organizations to identify weaknesses." (Wisner, Tan, Leong, 2012, p. 496).

It can be seen from the quoted that there are too many weaknesses for the model that is considered so useful. The staticity of the BSC arises from the lack of strategic focus which, by the nature of things, drives the system, defines lower goals, target performance, priorities and dynamics. The balance card model solves everything internally, without establishing connections with the market and partners. Balance recommends parallel and not interactive definition and linking of financial and non-financial goals, neglecting cause-and-effect relationships in which financial effects are the result of product selection for the market and required activities. Setting financial goals and measuring their achievements must be justified by strategic settings (and not the other way around), performance at the tactical and operational level and operational solutions, defining priorities, and based on that, with more or less certainty, financial projections can be set. If financial goals are set in parallel with the goals of other perspectives (or even as a priority), then they can cancel each other out or interfere with each other. The strategic focus, which arises from the competitiveness strategy, must shed light on the key factors of competitiveness, provide the possibility of differentiation in the market and direct the organization and employees. Due to the lack of strategic focus and directive imposition of a large number of measures and their implementation by top-down methodology, the model cannot motivate employees and become a mental model. The graphical representation of the BSC model is a closed circle, and should be in the form of a spiral driven by the values (perspectives) of customers and markets with which employees are familiar. Modern speeds and dynamics of business require this especially, when "breakthrough strategies" are current, when priority goals are in focus. BSC is a fairy tale that only hints at a happy ending, without real bases. A balanced approach is associated with thinking too long "equally and simultaneously on all aspects". Balance is not a feature and property of a dynamic system: an initiator of initiatives is needed, and it cannot be on four points at the same time. That is why it is a search for new measures, because the goals are inconsistent and not related to key values.

The BSC model does not provide a process perspective that can be continuously extended and measured through the time dimension, as with the SCOR (Supply Chain Operations Reference) model (procurement, production, delivery, return). In the SCOR model, it is a continuous, interactive and repeatable flow that requires measurements and improvements in relation to demand performance: what is in one phase of delivery is at the same time another to the other procurer and the process can be renewed and adjusted indefinitely. Thus the structure becomes a process system. "The SCOR model points to complementary and conflicting elements in the supply chain and helps to build sustainable and controlled competitiveness." (Husby, Swartwood, 2009, p. 20). Not only in the supply chain, but also in the enterprise, the BSC model cannot simulate a process approach. In the perspective of customers, the question is "how do customers see us?", not "what do customers really want?", from which all organizational and business initiatives and process performance should actually be started.

In today's conditions (even the supply chain), a business organization is created for the sake of customers, for the sake of serving the market, that is, someone from outside, while the interests and goals of the members are realized. “An organization begins to die the day it begins to be run for the benefit of the insiders and not for the benefit of the outsiders”[2].

4.2.2 Dynamics and consistency of performance and supply chain measures - strategic focus

The point of the approach of choosing appropriate measures and measuring performance in the supply chain according to market characteristics is that it is not equally important for companies to monitor all dimensions of performance. Market characteristics determine the focus of the business model, the key dimensions of performance and the characteristics of the supply chain. It is a meeting of external and internal determinants and goals and a tactical and operational response to the (strategic) requirements of the market. Therefore, the mix of selected criteria and vital control indicators should be in the function of strategic focus and efficient achievement of priority goals in a particular market.

The key contribution and argumentation about the advantages of the dynamic business management model was given by the Value Chain Theory by M. Porter. At the very beginning, it questioned the value of traditional management models through budgets and financial performance, especially with the development of the supply chain concept, when the value chain theory itself gained its full significance. According to this theory, costs, as a key component of financial measures (profits), cannot be managed directly, by imperative cost reduction, but through activity management. Costs are managed through the management of activities whose selection and configuration are the result of management decisions to create value for customers and consumers. Disaggregation of the process into activities creates opportunities to better understand the inputs and outputs in the process through the flow of activities, to develop intuition in creating alternative possibilities. “Activities create a workflow and involve people, raw materials, technologies, methods, and space” (Rademakers, 2012, p. 3). Through the concept of the supply chain, value creation for customers and consumers has been extended to the entire course of value delivery. Thus, the enterprise's profit can be seen as an output of activities and processes and undertaking various management and guidance actions related to customer requirements, supplier capabilities, and other connections and flows in the overall supply chain, when synergistic effects can be expected. In the concept of (integrated) supply chain, internal and external customers are abstracted and observed in the same way in order to achieve the target performance of the value chain at every step. By measuring performance through the execution of operational activities and processes through the supply chain and through strategic analysis, and through value analysis in an integrated system, the need to change the structure of the supply chain or to restructure or set aside some processes, or to add new activities that they add more value.

In creating a supply chain management model based on the value chain, various tools and methods are used to simulate and check the effectiveness of desirable process attributes such as: possible capacity, bottlenecks, availability of production elements, process time. At the same time, it provides insights into the possibilities of changing and adapting the process. (Porter A., 2009, p. 26). However, what is crucial in creating a management process is the strategic focus that determines and directs management priorities and decisions at all levels, imposing integration, synchronization and the required level of coordination of activities and processes in the supply chain with many management tools, such as just-in-time supply system and pull organization (in which processes start only when demand arises).

In the dynamic environment of the supply chain and its management model, a special place was given to organizational culture. Organizational culture as a management tool is no longer an abstract category whose effects are immeasurable. On the contrary, the contribution of an integrated organizational culture is fully visible today. It is an important tool (management skill) and the basis for defining integrated communication that harmonizes the values and strategic focus of companies in the supply chain. „This skill acts in at least two directions: emphasizes the values that people should believe in and evokes feelings that encourages them to make changes and to be active“. (Gajić I., 2020, p. 77.).

The issue of employee motivation is closely related to the issue of company culture. "It can be said that motivation is an invisible but powerful force that drives people and keeps their behaviour well-directed." (Gavrić G., Čukanović K. M., Pešić D., 2020, p. 83). Apart from the fact that it is a significant part of the psychological issue and the issue of the employee reward system, it is also an issue of management skills. This primarily means clearly defining and proclaiming key values in the business organization by management, on which employees should focus. Focusing on key values allows employees to clearly see their role in achieving the strategy, which over time allows the creation of a mental model of behavior

[2] Peter Drucker, interview with Bob Buford of Leadership Network.

according to their tasks. This is an extremely useful simplification. Proclaiming multiple (balanced) goals at the same time is certainly not a good basis for understanding one's tasks and motivating employees.

The supply chain, with its essence and transparency, represents the best protection against risk for the company through the possibility of locating the potentially greatest risk. "Risk is the main factor in assessing value ... Risk is the dark side of critical success factors." In this sense, the greatest risk is with those enterprises or points (hubs) in the supply chain that also carry key success factors. (Savyer, 2015, 5.). Thus the supply chain provides another aspect and argument for the necessity of strategic focus.

It is understood that a focal enterprise that is the bearer of basic technology and expertise is the bearer of key factors of competitiveness, and thus risk, because the key factors of success can also be the key factors of failure. However, leaders can create a successful supply chain even though they do not own the technology: they include companies that own and use technological knowledge, and the focal enterprise (company) deals with marketing and organization. In this case, all the mechanisms of initiation and functioning are with them and they also carry the greatest risk. In this way, they actually control the business through their business model, through managing the performance of the strategic focus.

5 CONCLUSION

The management of business activities and supply chain processes takes place through the management of the performance of activities and processes that are determined by the common goals and strategies of the companies in the supply chain, and then the operational goals and priorities. The performance of activities and processes define their characteristics that will enable the quality of the output required by the next activity or process. Such an approach and operational monitoring enables directing towards satisfying the demand of end customers, which is measured by the final values of realized outputs, and then with loyalty and satisfaction of customers and consumers, i.e. towards achieving value chain performance.

The creation and establishment of the supply chain performance system starts from the determinants from the strategic and organizational-tactical level, so that at the operational level the performance system is concretized and controlled through a system of measures and controls. Monitoring and control, through a system of measures, starts from the operational level to the aggregate tactical and strategic level. The phases of the feedback process are: measurement in the operating system and execution, operational control and analysis, control of capabilities, control of the achievement of strategic values and goals, and improvements and advancements at various levels of the organization. By measuring the effects of activities and processes, and by additional analysis, it can be shown that some activities do not add value at all but create costs. Therefore, some activities (even entire processes) can be eliminated as unnecessary. This also changed the financial model, which is no longer limited to direct cost reduction but to the management of activities and processes.

The traditional performance measures in the company were predominantly financial and quantitative. Intangible, qualitative and operational performance and measures are essential for the supply chain.

There must be a connection and interactivity between the measures. It is expedient to talk about priority, interactivity and consistency of goals and measures, rather than about balance. Balance should be accepted very conditionally and possibly as a result of a subsequent analysis of the interdependence of results. The BSC model does not recognize the structure of the organization as a possible and desirable configuration necessary for competitiveness in a particular market, because it does not recognize the types of markets, but the internal perspective of existing customers.

Balance is a passive policy, and consistency and respect for interactivity is an offensive and proactive policy, which can be realized through priority aggregate and strategic supply chain performance, and through operational priorities and focus on what is important and what drives initiatives.

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