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# The potential of digital entrepreneurship in Serbia

### Потенцијал дигиталног предузетништва у Србији

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Abstract: The development of digital technologies has fundamentally changed all segments of the functioning of human societies and ways of doing business in all activities. Digital entrepreneurship has emerged as a consequence of the development of digital technologies and digitalization. The subject of research conducted in this paper is digital entrepreneurship as a new paradigm of business due to market globalization. The main research problem addressed in this paper is the analysis of the impact that digital entrepreneurship has on business. Within the work, empirical research was conducted, on a sample of 147 respondents, which aimed to point out the potentials that digital entrepreneurship has in the Republic of Serbia. The research conducted in this paper aimed to point out the importance of digital entrepreneurship, as a new business paradigm in global markets, and the potential of digital entrepreneurship in the Republic of Serbia. In addition to a comprehensive analysis of secondary data sources, the results of which are presented in the literature review, the paper also used primary data sources, i.e. the results of research on the potential of digital entrepreneurship in the Republic of Serbia, conducted by the author through an online survey.

**Keywords:** entrepreneurship, digital entrepreneurship, entrepreneurial education, entrepreneurial intentions, globalization, Industry 4.0, digitalization

JEL classification: L20, L26, M19

Сажетак: Развој дигиталних технологија је из основа променио све сегменте функционисања људских друштава и начине пословања у свим делатностима. Дигитално предузетништво је настало као последица развоја дигиталних технологија и дигитализације. Предмет истраживања које је обављено у раду је дигитално предузетништво као нова парадигма пословања услед глобализације тржишта. Главни истраживачки проблем који је обрађен у раду је анализа утицаја које је дигитално предузетништво имало на пословање. У оквиру рада је обављено и емпиријско истраживање, на узорку од 147 испитаника, које је имало за циљ да укаже на потенцијале које дигитално предузетништво има у Републици Србији. Циљ истраживања обављеног у раду се огледао у указивању на значај дигиталног предузетништва, као нове пословне парадигме на глобалним тржиштима, и на потенцијале дигиталног предузетништва у Републици Србији. Поред свеобухватне анализе секундарних извора података, чији су резултати приказани у поглављу преглед литературе, у раду су коришћени и примарни извори података, односно резултати истраживања потенцијала које дигитално предузетништво има у Републици Србији, које су спровели аутори рада путем онлајн анкете.

**Кључне речи:** предузетништво, дигитално предузетништво, предузетничко образовање, предузетничке намере, глобализација, Индустрија 4.0, дигитализација

**ЈЕЛ класификација:** L20, L26, M19

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### Introduction

Market globalization has, over the last thirty years, fundamentally changed the way we do business in all industries and in all parts of the world (Fox, 2001). Its basic characteristic is reflected in the creation of a single, global market, which, to a greater or lesser extent, affects the economic flows and activities that are realized in national markets. The history of market globalization dates back to the second half of the 20th century, when it reached its full momentum with the development of modern means of transport, information and communication technologies. This development has led to a situation in which national borders have become a factor limiting economic activity at all levels (World Economic Forum, 2019). Market globalization has an extremely large impact on the development of digital entrepreneurship in all parts of the world. The impacts of market globalization on digital entrepreneurship are mostly positive and are reflected in the creation of preconditions for its development and the emergence of numerous factors that enable development.

The changes brought by the globalization of the market and Industry 4.0 have created the need to use digital entrepreneurship as a new business paradigm, which should ensure the efficient use of opportunities that appear in the environment and reduce or completely eliminate threats. Digital entrepreneurship is not just a concept used when starting new business ventures. If existing companies want to adapt their business to the changes that are happening in the markets, they must implement elements of digital entrepreneurship in their business.

The Covid-19 virus pandemic, which began in early 2020, has had an extremely large impact on all segments of human society, with a particular impact on business activities (International Labour Organization, 2020). Digital entrepreneurship has proven to be a very effective response to the negative consequences of the Covid-19 pandemic, primarily through the creation of new and innovative business models that have enabled companies to adapt to market changes and new consumer demands.

The subject of the research conducted in the paper is digital entrepreneurship and its application in modern business conditions, which are characterized by globalization of the market and digital transformation that all segments of human societies go through, which is a consequence of digitalization that is very intense over the last two decades. The changes taking place in the markets require companies to implement comprehensive changes in business models, which must be adapted to the new business conditions. Digital entrepreneurship is becoming one of the basic and most important paradigms of business in the global market that is going through the process of digital transformation.

### 1. Literature review

### 1.1. Entrepreneurial education and entrepreneurial intentions

The term entrepreneurial education refers to the form of education that is, to the greatest extent, carried out during a person's childhood or adolescence (Lindh & Thorgren, 2016).

The effects achieved by entrepreneurial education are visible in all ages of a person, and they are especially emphasized during his/her entire career life. Based on the criterion of the goal to be achieved by its implementation, entrepreneurial education can be divided into (Dehghanpour Farashah, 2013):

- education that aims to create a person's understanding of entrepreneurship as an academic discipline,
- education aimed at ensuring that the person acts in an entrepreneurial manner, and
- education that aims to make a person an entrepreneur.

In modern conditions, entrepreneurship is one of the most important drivers of the development of national economies, but also of all other segments of society, which is why entrepreneurial education has gained additional importance. Some developed countries, such as Denmark, have fully understood the importance of entrepreneurship education, which has made it a segment of educational processes at all levels, from pre-school education to the highest levels of academic education (Pittaway & Cope, 2007). Special attention is paid to entrepreneurship education in developed countries, which is the last level of formal education that a person attends, in order to prepare him/her in the best possible way for the application of the entrepreneurial concept after being included in work processes.

The importance of entrepreneurship education is particularly emphasized in the segment of higher education, which should ensure the development of entrepreneurial intentions among students (Fayolle, 2005). Entrepreneurship education in an academic environment also aims to provide an entrepreneurial mindset among students, who should transfer it to the environment in which they will work and in which, as a rule, they will have positions at the levels of organizational structures that allow them to implement aspects of entrepreneurship in the organizations in which they are employed. (Bjekić & Strugar Jelača, 2019). Research conducted by Franke and Luthje (2004) indicates that the level of stimulation of the academic environment in the segment related to entrepreneurship is in direct correlation with the level of entrepreneurial potential of students and their entrepreneurial intentions.

The most important goals of entrepreneurship education are (Pittaway & Cope, 2007):

- creating an environment conducive to entrepreneurship, by enabling innovation and reducing resistance to change,
- promoting entrepreneurship, starting one's own business ventures and entrepreneurial ways of thinking,
- conducting various forms of training and coaching, which should develop entrepreneurial intentions in people and motivate them to start their own business ventures,

- providing support in creating a social environment that encourages and motivates entrepreneurship,
- creating an environment that facilitates the start-up of entrepreneurial ventures,
- providing various forms of professional assistance in all segments necessary for the launch and implementation of entrepreneurial ventures, and
- creating preconditions necessary for the development and practical implementation of new technologies.

Research suggests that individuals who have mastered entrepreneurial skills and who have developed entrepreneurial awareness and intentions have higher levels of awareness of their abilities and show a greater propensity to start entrepreneurial ventures or work in small companies (Zhang et al, 2015). Entrepreneurial education results in higher levels of efficiency and creativity of employees and their more pronounced contribution to the success of the company (Peterman & Kennedy, 2003). Students have the greatest inclination to entrepreneurship, while employees have not shown so much interest. (Rajković et al., 2020)

Despite the fact that most research indicates a positive correlation between education and people's propensity for entrepreneurship, there are also studies that indicate that in certain cases education can have negative effects on people's propensity for entrepreneurship. A study conducted by Nabi et al. (2010) concluded that people with higher education show lower levels of propensity for entrepreneurship compared to people with secondary or lower education. These results are interpreted as a consequence of the fact that large companies are willing to pay people who have high levels of knowledge and skills, which makes starting entrepreneurial ventures less attractive to them. Entrepreneurial education is a basic element that affects the entrepreneurial potential of individuals and the emergence of entrepreneurial intentions (Lindh & Thorgren, 2016). The results of the vast majority of research used as a basis for writing a paper indicate that there is a direct positive correlation between entrepreneurial education and a person's potential to become an entrepreneur (Marčetić et al., 2020).

Not enough attention is paid to entrepreneurship education in the Republic of Serbia, despite the fact that the state declaratively emphasizes the importance of entrepreneurship and advocates for the development of all its segments (Pavlović & Čelić, 2020). One of the basic problems, which is indicated by numerous researches, is reflected in the fact that persons who are engaged in entrepreneurship do not consider that they are appropriately recognized and acknowledged by the state (Bobić, 2017). Inadequate opportunities for access to finance, insufficient opportunities for acquiring formal knowledge and insufficient experience have been identified as the basic and most significant obstacles to the development of entrepreneurship among young people in Serbia (Bobić, 2017). Despite the positive steps being taken, the level of entrepreneurship education in Serbia is still low, which does not allow the realization of full entrepreneurial potential, especially among members of the younger population, who in the conditions of Industry 4.0 should be the main drivers of entrepreneurship.

Entrepreneurial intentions are the basic and most important element that drives an individual or a group of people to decide on the realization of an entrepreneurial venture

(De Clercq et al., 2013). The success of entrepreneurial ventures is greatly influenced by the intentions of the person who initiates it and his willingness to make maximum efforts to achieve the desired goals. The importance of entrepreneurship education is reflected in the fact that it is one of the basic and most important ways to initiate and support the entrepreneurial intentions of persons involved in the educational process.

Entrepreneurial intentions represent a person's intention to start an entrepreneurial venture in the near or distant future (Thompson, 2009). The term entrepreneurial intention also expresses the aspiration that a certain person expresses in relation to entrepreneurship, i.e. to starting an entrepreneurial venture (De Clercq et al., 2013). Entrepreneurial intent is a person's self-confirmation that he or she is convinced that he or she wants to start an entrepreneurial venture or that he or she plans to start it at some point in the future (Thompson, 2009). According to research, women in Serbia are much more unprepared to start their own business due to sociological factors (Marčetić et al., 2020). Amidžić (2019) stated that older men aged 55-64 have the greatest motivation for starting an entrepreneurial business in Serbia, mostly because they have less commitment (i.e. family and childcare obligations tend to be less intensive).

Entrepreneurial intentions of a person are influenced by a large number of elements, such as the environment in which they should start their entrepreneurial endeavour, levels of their formal education, entrepreneurial education, psychological factors, work environment, economic environment, gender, learning orientation, passion for work, etc. Entrepreneurial education is one of the basic and most important elements that affect the entrepreneurial intentions of individuals. Research conducted by Dinis et al. (2013) suggests that entrepreneurial education that individuals acquire during childhood and adolescence has a significant impact on the development of their entrepreneurial intentions in later life. The existence of a direct positive correlation between entrepreneurial education and entrepreneurial intentions has been confirmed in a large number of studies.

### 1.2. Modern business environment and entrepreneurship

The business environment is one of the factors that have the most significant impact on entrepreneurship and the success of entrepreneurial ventures (Peltier et al., 2012). It has a direct impact on the ease of starting and managing entrepreneurial ventures, which is why it is one of the most important factors influencing the entrepreneurial intentions and willingness of persons to engage in entrepreneurship (Miletić et al., 2018) The term business environment refers to a set of all forces, factors and institutions, which can internally or externally affect the company's business (Lohrke et al., 2015). The internal elements of the business environment are influenced by the company's management, as they are under its control. External elements of the business environment, which may consist of economic, social, political and technological factors, are not influenced by the company's management, which can only react to them (Petrović & Leković, 2019).

The success of any entrepreneurial venture directly depends on the success of its adaptation to the environment in which it operates (Peltier et al., 2012). Entrepreneurs must continuously monitor changes in the environment and adapt their business to the new conditions prevailing in the markets in which they operate. The ability to adapt to change is

especially important in modern business environments, which are characterized by extremely dynamic changes, which have a very large impact on business operations and which require very rapid adaptation to new business conditions (Heiner et al., 2013).

Modern business environments are characterized by a large number of elements that have an extremely significant impact on entrepreneurial ventures. Globalization and the development of modern digital technologies, which led to the emergence of Industry 4.0, have fundamentally changed the environment in which modern entrepreneurial ventures take place (Harash et al., 2014). The changes that have taken place over the last two decades have resulted in the development of business environments that are significantly more conducive to the realization of entrepreneurial ventures than was previously the case. Digitization has created a large number of new opportunities for the realization of entrepreneurial ventures, which has greatly improved the environment viewed from the perspective of entrepreneurship.

The changes that have taken place in business environments as a result of globalization and digitalization have greatly reduced the obstacles that entrepreneurs faced during the start-up of entrepreneurial ventures (Heiner et al., 2013). Modern business environments offer a much larger number of opportunities for the realization of entrepreneurial ventures. In addition to technical and technological factors that influence the creation of more favourable environments for entrepreneurship, modern business conditions are characterized by various requirements that greatly facilitate the work of entrepreneurs (Harash et al., 2014) According to the survey, 80% of women entrepreneurs do not have sufficiently developed innovative activities due to poor institutional support, finance and macroeconomic environment (Beraha & Duričin, 2020). Modern business environments require the use of flexible organizational structures, which are much more suitable for small, entrepreneurial ventures. Sustainable entrepreneurs differ from commercial entrepreneurs in that, in addition to economic goals, they also have environmental goals, which represents the future of entrepreneurship (Talić et al., 2020).

Large companies often face significant resistance and problems in implementing changes and introducing flexible organizational structures. In this way, they facilitate the operation of entrepreneurial ventures that can be adapted very quickly and efficiently to new market demands and the changes that are taking place. The changes that have taken place in modern business environments have largely had very significant positive impacts on entrepreneurship, which is why it can be concluded that these environments greatly contribute to creating a positive entrepreneurial climate (Lohrke et al., 2015).

### 1.3. Digital transformation and digital entrepreneurship

Digital transformation is a modification, i.e. adaptation, of business models, which arises as a consequence of dynamic technological development and innovations that drive changes in consumer behaviour and society as a whole (Linz et al., 2017). The interdisciplinary character and relatively short history of digital transformation result in the lack of its generally accepted definitions, ontologies and taxonomies in the literature. Certain authors

point out that digital transformation is not a completely new concept, but that it represents only a continuation of the trend from the period from 1995 to 2001, which began with the development of the Internet (Fichman et al., 2014). Linz and co-workers point out that such attitudes are largely due to the fact that there are numerous similarities between the period of origin and development of the Internet and digital transformation, of which the most important are:

- the emergence of several basic technologies that have begun to achieve a critical mass of practical use,
- extremely large and often unjustified investments in entrepreneurial ventures, even
  in situations where their feasibility or economic justification is completely
  debatable.
- extremely fast acceptance of various technological tools and new technologies by consumers and companies, and
- significant influence of technological factors on the growth of stock prices and expected profits, which is primarily present in digital entrepreneurial ventures.

A significant specificity of digital transformation in relation to the period of origin and rapid development of the Internet is reflected in the fact that digital transformation is based on much more stable foundations, primarily on years of development experience and better understanding of mistakes that occurred in the past (Fichman et al., 2014). Digitization is a process carried out by digital teams, which are much more capable of managing the changes that occur as a result of innovation in various fields. The advantage of digital transformation is reflected in the fact that it is subject to much greater control by states, compared to the period of development of the Internet, which was characterized by insufficient attention paid by the state, which resulted in numerous abuses.

Most countries apply significantly stricter supervision and control over digitalization, primarily in segments that aim to provide protection to investors and buyers (Bican & Brem, 2020). This segment of control has very significant positive effects on digital entrepreneurship, primarily due to the fact that it significantly reduces the possibility of fraud and abuse, which characterized the period of its development at the end of the XX and in the first decade of the XXI century. Among other things, digitalization has led to a significant increase in the importance of digital entrepreneurship, which has become one of the most important business paradigms in the global market.

Due to its characteristics and faster response to changes in the environment, digital entrepreneurship enables more efficient avoidance of threats and use of opportunities, which results in high growth rates of entrepreneurial business ventures and stable competitive positions in existing or new markets. This fact indicates the extremely great importance that digitalization and digital entrepreneurship, as one of the elements whose development it has led to, have in defining the approach to doing business in the modern global market. A large number of authors point out that it is very important to build an adequate understanding of the concept of digital transformation, in order to ensure its

adequate use in order to introduce changes in organizational strategies and behaviours (Giones & Brem, 2017).

The influences that digital transformation has on the business models of companies and on the creation of business paradigms is the topic of research in a large number of scientific papers. The changes that companies are implementing, which are a consequence of the digital transformation, can occur in two ways, as voluntary and reactive (Bican & Brem, 2020). Voluntary changes imply situations in which companies actively shape their future strategies by implementing various optimizations and investments. Reactive changes occur as a result of unplanned and unexpected events that affect the company's operations and require changes in its business strategies or their adjustment.

## 1.4. The impact of digital innovation on digital entrepreneurship

Digital innovation is one of the most significant elements influencing the role that digital entrepreneurship has as a new business paradigm in the global market. Implementing efficient digital innovations and adapting to new business conditions has also resulted in paying more attention to digital entrepreneurship (Nylen & Holmstrom, 2015). Digital entrepreneurship creates the preconditions that enable efficient digital transformations through the implementation of numerous digital innovations. One of the basic and most important characteristics of digital entrepreneurship is reflected in providing quick reactions to all changes that occur in the environment and to adapting the business to the opportunities and threats that appear in the market.

The fact that significant digital innovations occur much more frequently than was previously the case further indicates the importance that digital entrepreneurship has as a new paradigm of business in modern markets (Fichman et al., 2014). During the 1980s, new technological solutions in most areas appeared every ten years. Over the past few years, innovations have accelerated to an extremely significant extent, so that they appear in a large number of areas every few months (Nylen & Holmstrom, 2015).

The fast pace of digital innovations is primarily a consequence of the basic characteristic of digital technologies, which has a significant impact on digital entrepreneurship, the ease of reconfiguration of existing solutions. The processes that characterize digital innovations, which are implemented within Industry 4.0, differ greatly from the processes that were implemented during the industrial era. These differences are especially present when incorporating digital technologies into traditional products. One example is the inclusion of multimedia systems and navigation in cars, which are characterized by a number of challenges resulting from differences in the innovation processes associated with these two types of products (Bican & Brem, 2020).

Digital innovations enable the realization of a large number of different benefits, and they also represent extremely great challenges for implementation, primarily due to the complexity of understanding the process through which they are realized (Nylen & Holmstrom, 2015). All digital innovations that are implemented can be divided into three basic categories – digital process innovations, product innovations and business model innovations (Fichman et al., 2014). Digital business process innovations include all new forms of doing business within the company, which are enabled by various forms of digital

assets. Product innovation encompasses all those types of innovations that a company implements on the products and services it sells to its customers. Digital business model innovations include all those innovations that companies implement on the models with the help of which they perform their business activities.

The digital innovation process consists of four interrelated phases (Fichman et al., 2014). The first phase of the digital innovation process is the discovery phase, during which new ideas are identified and their potential for practical realization is determined. The development phase is the second phase of the digital innovation process, during which the idea is transformed into an innovation that is functional, i.e. that can be used. During the diffusion phase, the innovation spreads among its potential users. During the last, phase of influence, the full potential of digital innovation is realized, during which value is created, which is a consequence of turning innovation into improvement. Digital entrepreneurship enables the maximum possible use of innovative potential and efficient transformation of digital innovations into business ventures.

### 1.5. The concept of digital entrepreneurship

Digital entrepreneurship can be defined as the process of entrepreneurial creation of digital value using various socio-technical digital facilitators in order to support the efficient collection, processing, distribution and use of digital information (Autio et al., 2018). Digital providers can be used to support all processes of creating a new business venture, from generating ideas and recognizing business opportunities, to product production, sales, marketing and distribution. Steininger (2019) points out that a large number of new technological and technical solutions, such as social media, open-source software and hardware, group financing, online reputation assessment, big data analytics or three-dimensional printing have greatly encouraged future entrepreneurs to start their business ventures (Steininger, 2019). These solutions resulted in a significant reduction of the barriers that existed between the ideas and starting a new business venture, which motivated a large number of people to embark on entrepreneurship.

Le Dinh et al. (2018) point out that the use of digital tools and platforms encourages the emergence of new types of jobs, which can hardly be unambiguously classified into any of the traditional categories of employment (Le Dinh et al., 2018). These authors define digital entrepreneurship as "aligning traditional entrepreneurship with new ways of creating and doing business in the digital age" (Le Dinh et al., 2018). The concept of digital entrepreneurship is the creation of different types of compromises between traditional entrepreneurship and a large number of new elements that have emerged as a result of digitalization and the development of a large number of new technologies in different fields.

In addition to academic circles, the view of digital entrepreneurship as cyber entrepreneurship is widely accepted in other segments of society. The European Commission's definition of digital entrepreneurship is also based on the view that digital entrepreneurship is primarily based on the use of modern technologies. In its definition, the European Commission emphasizes that "digital entrepreneurship encompasses all business ventures and transformations of existing ventures, which drive the creation of economic

and/or social values, the creation and use of new digital technologies. Digital business ventures are characterized by a high level of new digital technologies. related to social networks, big data, mobile technologies and cloud computing) in order to improve the way of doing business, creating new business models, strengthening business intelligence and involving new customers and stakeholders. Digital entrepreneurship creates jobs and opportunities for future development." (European Commission, 2015).

Steininger (2019) points out that information and communication technologies have four main roles in business ventures in the field of digital entrepreneurship. Information and communication technologies have roles (Steininger, 2019):

- facilitators, by facilitating the operations of entrepreneurial ventures that have started operating,
- mediators for new entrepreneurial businesses,
- · results of entrepreneurial business, and
- a ubiquitous provider of new digital business models.

In some scientific papers dealing with the topic of digital entrepreneurship, this term is often mistakenly equated with activities aimed at ensuring the inclusion of information and communication technologies in traditional entrepreneurship (Autio et al., 2018). These views of the authors may result in a misconception of this concept, which may lead to the difference between traditional and digital entrepreneurship being limited exclusively to the level of use of modern technologies within the framework of entrepreneurial ventures. Digital entrepreneurship is much more than the introduction of digital technologies in business, it requires the creation of new conceptual models, without which it is not possible to provide efficient management of entrepreneurial ventures and take advantage of opportunities that appear in modern markets (Acs et al., 2017).

By analysing scientific papers and professional literature dealing with digital entrepreneurship, which were available to the author during the research, it is possible to identify four directions in which the largest number of research in this area:

- · contributions of digital business models to entrepreneurship,
- digitalization of entrepreneurship and the processes that take place within it,
- contributions of digital platforms to the strategy, and
- digital entrepreneurship ecosystem.

### 2. Methodology

The sample size is 147 (n=147) and it included students enrolled in management and business studies, and alumni who graduated in management and business studies in the Republic of Serbia. By including students and alumni, a broader reach of digital entrepreneurship was addressed. The survey included four main variables with items that were evaluated via a seven-point Likert-scale. The survey variables and items are presented in Table 1.

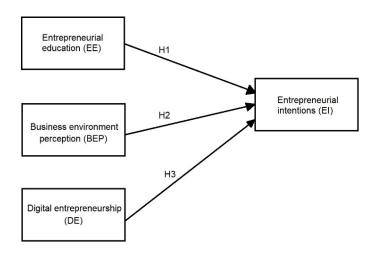
Table 1. Survey items

	Tuble 1. But vey ttems					
Dimension						
Entrepreneurship	I would start my own business.					
intentions	I am planning to start my own business.					
	I have a strong will to start my own business.					
	My main career goal is to start my own business.					
Entrepreneurship	Formal education gave me the necessary knowledge to start my own					
education	business.					
	I possess the necessary knowledge and skills to start my own					
	business.					
	I know what is necessary to start my own business.					
	I know which ICTs are used in entrepreneurship.					
	I possess knowledge in modern ICTs.					
<b>Business environment</b>	The economic situation in Serbia is adequate for starting own					
perception	business.					
	The political climate in Serbia is adequate for starting own business.					
	There is great chance for entrepreneurship success.					
	There is an adequate entrepreneurial climate in Serbia.					
	I think my own business would be successful long-term.					
Digital entrepreneurship	The digitalization of entrepreneurship creates new possibilities.					
	The Internet presents the global market and enables conducting					
	business globally and locally.					
	I think that digitalization is the future of business.					
	Digital technologies can significantly contribute to entrepreneurship.					
	Digital technologies are important for business success.					

Each question was evaluated from 1 to 7 (1 - totally disagree; 7 - totally agree). Besides the noted items, questions regarding gender, age, employment, and education were included.

The obtained data was analysed via descriptive statistics, multicolinearity test, correlation analysis, linear regression analysis, and logistic regression analysis. This way, significant results were obtained that presented and the relations between the measured variables. The research framework and observed relations are depicted in Figure 1.

Figure 1. Research framework



Source: Authors' research framework and observed relations

The results are presented in the next section.

### 3. Results

Results of the descriptive statistics are presented in Table 2.

Table 2. Results of the descriptive statistics

Dimension	Min.	Max.	Mean (µ)	(s)	Cronbach's	
					alpha	
Entrepreneurial	1	7	5.22	1.56	0.920	
intentions (EI)						
Entrepreneurial	1	7	4.70	1.33	0.841	
education (EE)						
Business environment	1	7	3.57	1.43	0.905	
perception (BEP)						
Digital entrepreneurship	3	7	6.23	0.87	0.901	
(DE)						

Source: Authors' research results

The mean values are in the range of 3.57 (BEP) and 6.23 (DE). Besides the mean values, the minimum and maximum values for each variable are noted, as well as the standard deviation. Additionally, the results of the reliability test are noted. The Cronbach's alpha values indicate that there is an adequate internal consistency between the items within the variables.

Next, the results of the Pearson's correlation analysis are presented in Table 2.

Table 3. Results of the correlation analysis

Correlation analysis					
	EI	EE	BEP	DE	
Entrepreneurial intentions (EI)	1.000*				
Entrepreneurial education (EE)	0.503	1.000*			
Business environment perception (BEP)	0.485	0.536	1.000*		
Digital entrepreneurship (DE)	0.082	0.144	0.016	1.000*	

<sup>\*</sup>significance is 95% Source: Authors' research results

The significance was set to 95%. The results indicate a strong and positive relationship between EE and EI (0.503); BEP and EI (0.485); BEP and EE (0.536). Further, there is weak positive correlation between DE and EE (0.144), while no statistically significant correlation was noted between DE and EI (0.082); and between DE and BEP (0.016).

Multicolinearity test Entrepreneurial Entrepreneurial Business Digital entrepreneurship intentions (EI) education (EE) environment perception (BEP) (DE)  $R^2$ 0.319 0.378 0.3540.027 0.973 Tolerance 0.681 0.6220.646 1.549 Variance 1.470 1.607 1.028 inflation factor (VIF)

Table 4. Multicolinearity test

Source: Authors' research results

Based on the Variance Inflation Factor (VIF) values, which are not above 2.500, there are is no multicolinearity present between the measured variables.

Further on, the results of a linear regression analysis are presented in Table 4.

Table 5. Results of the linear regression analysis

Regression analysis						
Y	X	β	p-value	R <sup>2</sup>	F	F Sig.
		2.182				
Entrepreneurial	Entrepreneurial education (EE)	0.392	<0.0001	0.319	22.356	< 0.0001
intentions (EI)	Business environment perception (BEP)	0.331	0.0003			
	Digital entrepreneurship (DE)	0.051	0.687			

Source: Authors' research results

The results of the regression analysis indicate a moderate influential relationship between the dependent variable (EI), and independent variables (EE, BEP, DE). However,

the  $\beta$  value and the p-value for the DE independent variable indicate that this relation is statistically significant. Therefore, the influence of DE on EI is negligible. Further, based on the linear regression results, the following equation is defined:

EI = 2.18197+0.392\*EE+0.331\*BEP+0.0501\*DE

Next, besides the linear regression analysis, a logistic regression analysis was conducted as it can be more suitable for ordinal data. The logistic regression analysis indicates that there is a positive relationships between EE and EI, and BEP and EI, while DE is doesn't have affect EI.

R<sup>2</sup> Cox and Snell R<sup>2</sup> McFadden R<sup>2</sup> Nagelkerke AIC Entrepreneurial education (EE) 0.061 0.244 0.247 665.49 0.042 0.176 0.178 678.15 Business environment perception (BEP) 0.0025 0.011 0.011 Digital entrepreneurship (DE) 704.69

Table 6. Logistic regression analysis

Source: Authors' research results

### 4. Discussion

The research conducted in this paper aimed to provide verification of three hypotheses that were set within it. The first hypothesis of the research was "Entrepreneurial education is in a positive relationship with entrepreneurial intentions". The results of the research indicate the existence of positive relations between the entrepreneurial education of the respondents and their entrepreneurial intentions. Based on these positive relations between the above variables, the first research hypothesis can be accepted as correct, i.e. it can be concluded that there is a positive relationship between entrepreneurial education and entrepreneurial intentions. The positive relationship between entrepreneurship education and entrepreneurial intentions was also the result of research presented in the literature review, based on which it can be concluded that the results are consistent with other research conducted in this area.

Another hypothesis tested by the research was "Positive perception of the business environment is in a positive relationship with entrepreneurial intentions." The results of the research indicate the existence of a positive correlation between the variables of entrepreneurial intention and a positive perception of the business environment. Based on this relation, it can be concluded that the respondents believe that the business environment influences the emergence and development of entrepreneurial intentions, which is why the second research hypothesis can also be accepted as correct. The results of the research that are processed in the theoretical part of the paper also indicate the existence of a positive relationship between the business environment and entrepreneurial intentions.

The last, third hypothesis of the research conducted was "Positive perception of digital entrepreneurship is in a positive relationship with entrepreneurial intentions." The results obtained by the research conducted in this paper do not indicate the existence of a positive relationship between the positive perception of digital entrepreneurship and entrepreneurial intentions, which is why the third hypothesis of the research must be rejected. Similar results were obtained in most of the studies processed in the theoretical

part of the paper. The results of a small number of studies indicate the existence of a very weak positive relationship between these two variables.

The sample on which the survey was conducted is represented by persons who are studying management and business studies or have already graduated from faculties in these fields. The fact that the sample on which the survey was conducted was represented exclusively by respondents who want to develop their careers in the field of management certainly had an impact on the fact that the number of respondents who expressed entrepreneurial intentions is higher than the participation of potential entrepreneurs in the total population. The research whose results are presented in the literature review was most often conducted in countries with developed market economies and a high level of entrepreneurship development, with the largest number of respondents representing entrepreneurs and company managers. The results obtained from the research conducted in this paper do not deviate significantly from the research results presented in the literature review and they indicate the existence of significant links between entrepreneurial intentions and the environment in which a person lives, as well as between entrepreneurial intentions and entrepreneurial education.

#### Conclusion

As a new business paradigm that has emerged precisely due to the impact of market globalization and digitalization, digital entrepreneurship enables very efficient use of opportunities that appear in modern markets and reducing the negative effects of threats to the lowest level. The development of Industry 4.0 has led to extremely significant changes in the way of life and business in all parts of the world and in all segments of societies and economic activities. The globalization of the market has, over the last thirty years, fundamentally changed the way we do business in all industries and in all parts of the world.

The globalization of the market, combined with Industry 4.0, enabled the creation of the preconditions that were necessary for digital entrepreneurship to become a new business paradigm. The digitalization and digital transformation that has resulted from it have led to significant changes in all business segments and in all parts of the global market. They have led to the emergence of a large number of new technologies, which are in most cases based on the Internet, which have had a very large impact on society as a whole. Digitization has led to the connection of the physical and digital world, which has resulted in the emergence and development of digital entrepreneurship. The changes brought about by digitalization have opened space for entrepreneurs, who have managed to adapt to them in a much faster and more efficient way than existing market participants, which has resulted in the emergence of digital entrepreneurship as a completely new area of entrepreneurship.

The digital transformation has led to very significant changes over the last two decades, which have been reflected in the emergence of numerous new forms of business, among which digital entrepreneurship stands out as one of the most significant. Digital innovation is one of the most significant elements influencing the role that digital entrepreneurship has as a new business paradigm in the global market. Digital

entrepreneurship creates the preconditions that enable efficient digital transformations through the implementation of numerous digital innovations.

Digital entrepreneurship is a process of entrepreneurial creation of digital value using various socio-technical digital providers in order to support the efficient collection, processing, distribution and use of digital information. It represents the creation of different types of compromises between traditional entrepreneurship and a large number of new elements that have emerged as a result of digitalization. In the conditions of business globalization, digital entrepreneurship is characterized by extremely high levels of complexity and the existence of a large number of factors that, in different ways, affect the success of entrepreneurial ventures. The changes that have taken place as a consequence of market globalization and digitalization have resulted in the development of digital entrepreneurship as a new business paradigm.

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