

DEVELOPMENT OF A YOUTH ENTREPRENEURSHIP MODEL FOR SUSTAINABLE BUSINESS GROWTH

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The challenges brought by the COVID-19 pandemic and the changes in the globalized market significantly affect the way business is conducted. The modern business environment is characterized by the fourth industrial revolution - Industry 4.0. The role of technology is increasing, and the pandemic accelerated the application of information-communication technologies and the need for sustainable development and sustainable business. These changes and the global economic challenges point towards entrepreneurship as an important driver of technology development, innovation, and overall economic growth. Entrepreneurship and youth entrepreneurship can positively affect economic development. It reduces unemployment rates, increases the standard of living, and supports economic growth. In this paper, a youth entrepreneurship model for sustainable business growth is developed. The goal was to identify influencing factors on youth entrepreneurship development and sustainable business. The research approach included a thorough analysis of available data and analysis of the existing body of literature in the domain of entrepreneurship, youth entrepreneurship, sustainable development, Industry, and Industry 5.0. The findings indicate that youth entrepreneurship is influenced by a wide array of factors, most notably age, close social environment, attitudes, and awareness of incentive means. Furthermore, the developed model provides a significant insight into what major factors and sub-factors can affect youth entrepreneurship and sustainable business. It can be concluded that entrepreneurial education, a stimulating environment, and an entrepreneurial economy can significantly influence youth entrepreneurship and sustainable business growth. These findings are important for government policies and strategies when it comes to youth entrepreneurship and sustainable business growth.

Keywords: Entrepreneurship; Entrepreneurial behavior; Entrepreneur; Business; Sustainability.

INTRODUCTION

The global COVID-9 pandemic has significantly affected the schooling and business environment in the past two years. The pandemic has slowed down efforts aimed at reducing poverty. It has reduced revenues, caused a global decline in GDP, and disrupted economic and technological develop-

ment. The global economy has shown fragility in the face of border closures, declining trade volumes, and almost complete cessation of some business sectors such as global tourism and transport (Derevyankina & Yankovskaya, 2020; Priya et al., 2021).

World leaders who took part in the Davos panel (WEF, 2022a) stressed the need to focus further efforts on a strong economic recovery. On the other hand, the risk of recovery is uneven, and this was evident already in 2021. The COVID-19 pandemic has accelerated the process of digital transformation (Gabryelczyk, 2020). It also increased the achievements of the fourth industrial revolution - Industry 4.0 in various industries. It is expected that this trend will continue in the coming years (Acioli et al., 2021). The role of technology is more important today than ever before, and there is some moderate optimism about the potential of technology in solving current and expected problems in the global economy. Technology, more precisely, innovation strategy has been found to be a significant and positive predictor of the performance of small and medium-sized enterprises (SMEs) in the manufacturing sector (Terziowski, 2010). As SMEs are a key driving factor of economic growth, their role in the post-COVID-19 pandemic is important (Gherghina et al., 2020).

According to Klaus Schwab, founder of Davos (WEF, 2022a), see increasing challenges from supply chain disruptions, through tectonic changes in the market, to inflation figures, which are equally worrying for both policymakers and individuals. The year ahead is an opportunity for working together, restoring trust, and shaping a better and more inclusive future for all.

Businesses will face various challenges at the global level in the coming years. Stronger efforts in the field of business innovation, connectivity, social responsibility, and sustainability can contribute to the development of business at the global level. The development of entrepreneurial activity and behavior in all spheres of business should play a very important role in this. According to Mahajan (2010), so-called economic miracles are the product of enlightened politics and entrepreneurial energy that unleashes the nation's potential. The greatest chance for economic development is the development of entrepreneurship. Further, the development of Industry 4.0 technologies has been noted as an influential factor in entrepreneurship development (Klobukowski, & Pasieczny, 2020). Entrepreneurship has been shown to be complementary to the development and implementation of Industry 4.0 technologies, as they both include technical and social innovation

(Ferreira, & Lisboa, 2019). The technologies that characterize Industry 4.0 bring value to products and services across industries, and through entrepreneurship, this value gains a platform for opportunity seeking and distribution (Geldhof et al., 2014; Kruger & Steyn, 2021). Therefore, as Industry 4.0 technologies are molding the modern business environment, it is important to address them in the context of entrepreneurship.

The results and achievements of Industry 4.0 point to the fact that entrepreneurial activity is crucial in the field of technology and product development, especially in the information and communication technologies and clean technologies sectors. Entrepreneurship, entrepreneurial behavior, and the development of entrepreneurial culture are conditioned by increasing competition and globalization of markets. Schumpeter (2012) insists that economic development is related to entrepreneurship.

The existing body of literature thoroughly addresses entrepreneurship, entrepreneurship intentions, attitudes, youth entrepreneurship, and other entrepreneurship constructs. Similarly, numerous studies address sustainable development, sustainable business, and sustainable development goals. However, there is a lack of studies that discuss and aim at developing a model that includes youth entrepreneurship as an important factor of economic growth and its effect and potential synergy with sustainable business. This knowledge gap should be addressed as it integrates two key constructs that affect the modern business environment: youth entrepreneurship and sustainable business.

To address this knowledge gap, in this paper, factors that affect youth entrepreneurship and sustainable business are investigated and discussed. In this case, young people are defined as between the age of 15 and 29. Youth entrepreneurship and sustainable business derive from entrepreneurship and sustainable development. Hence, the paper addresses these two main domains and strives to develop a circular model that encapsulates the complexity of relations between the noted and other additional factors. The model is based on conducted studies in the domain of entrepreneurship, youth entrepreneurship, sustainable development, Industry 4.0, Industry 5.0, etc. The model contributes to the existing body of literature as there is no similar model in the

domain of youth entrepreneurship and sustainable business. The following research questions are noted as research guidelines:

R1: What factors influence youth entrepreneurship and sustainable business?

R2: Why is entrepreneurship a key driver in the establishment of a sustainable business?

The paper consists of five main sections (excluding the Introduction and Conclusion sections). The first section addresses entrepreneurship trends and business practices in the modern business environment. The second section analyzes youth involvement and importance in entrepreneurship development. The third section analyzed the domestic market and entrepreneurship. Next, youth entrepreneurship and its challenges and opportunities are highlighted. In addition, in this section, the previously noted model is presented as well as other significant data in this domain. Finally, suggestions and guidelines for improving youth entrepreneurship potential and sustainable business in Serbia are discussed.

CONTEMPORARY TRENDS IN ENTREPRENEURSHIP AND BUSINESS PRACTICE

Economic progress is based on the process of globalization, the economy of sustainable development, the economy based on the fourth industrial revolution, the development of productivity and competitiveness, as well as on the fiscal policy committed to achieving the goals of sustainable development and inclusive growth. Further, sustainability is becoming a priority when it comes to global development (Medeiros, 2021; Talan et al., 2020).

In 2020, the World Economic Forum published the Davos Manifesto, which is a set of ethical principles for managing enterprises in the age of the fourth technological revolution. The main settings of the mentioned document are:

- the purpose of an enterprise is to engage all forces in creating sustainable value,
- an enterprise is more than an economic organization that aims to continuously increase profits and
- an enterprise operating in the global market and itself becoming a stakeholder (WEF, 2019a).

In creating value, enterprises must focus on meeting the requirements of all stakeholders in the

business environment - employees, consumers, suppliers, business partners, the local community, etc. Enterprises need to constantly innovate and invest in sustainability. The modern economy is an entrepreneurship economy. Entrepreneurship is one of the central phenomena of the economy, along with the market economy and free competition. Everything that was created because of human society, especially in the last two centuries, was created because of the actions of entrepreneurs and their initiative to create something new (a new product and service, or new value for users). All major product and process improvements have resulted from the actions of entrepreneurs driven by the need for creativity. Young adults that are involved in entrepreneurship are straightforward thinkers, and risk-takers, and are driven by creativity, (Anjum, et al., 2020; Minola et al., 2014).

Entrepreneurial behavior is ubiquitous today in all forms of business and social life. Entrepreneurial behavior is a way of thinking, determined by a creative and innovative approach to business. In the economy of entrepreneurship, all individuals should behave entrepreneurially. Entrepreneurial individuals are key drivers of economic and social development. Entrepreneurial organizations are sources of innovation, productivity growth, and employment. According to some understandings (Bešić & Đorđević 2021), the main role of entrepreneurship in the modern economy is reflected in innovative activities that create conditions for technological development, the creation of flexible organizations, and new jobs. Enterprises must consciously organize and apply the entrepreneurial concept and behave entrepreneurially, even if they consciously embark on the process of innovation. An enterprise has to establish such a system of connections and relationships that will allow focus on entrepreneurial behavior, (Hughes & Mustafa, 2017).

Modern business requires a change in the way of thinking concerning the organization of business functions in the enterprise. According to some understandings (Bešić & Bešić, 2018), from the traditional understanding, determined by linear thinking, enterprises must turn to proactive thinking, which involves understanding and creating change.

Modern society is moving towards a new phase of development - Society 5.0, which is based on science and technology, as key factors of development. This society puts man at the center and tries to balance economic benefits with solving social problems. In addition to technology, this society implies a high degree of creativity for each individual, primarily those who are employed or who are entrepreneurs. From the aspect of economics, this implies achieving profitability and economies of scale with the development of sustainable business models. The key aspects of modern entrepreneurship development are financing entrepreneurship, social entrepreneurship, corporate entrepreneurship, entrepreneurial environment, and education for entrepreneurship (WEF, 2022b). The way entrepreneurship is financed is extremely important for any national or regional economy. The financial system, the banking market, and institutional and private investors must be directed and stimulated towards financing and supporting entrepreneurship. It is also important that public finances and the social protection system are also involved in this domain. Countries or regions that have adequately implemented this system have the greatest achievements in the development of entrepreneurship, (Sunny & Shu, 2019).

Social entrepreneurship is a part of the social economy, and it is characterized by solving social problems through entrepreneurial practice. Social entrepreneurship is a way to solve economic, educational, health, or environmental problems related to the newly defined social community, based on the use of sustainable business models. A social enterprise has the following dimensions:

- entrepreneurial dimension - it is a private enterprise,
- social dimension - it needs to solve a social problem
- management dimension - there is a direct management mechanism.

These organizations must be aimed at achieving a certain economic activity, then they must have an explicit social goal, a limit must be placed on the distribution of profits (to achieve the goal) and the organization must have inclusive management (participation of employees in managing the organization). Social entrepreneurship is linked to economic development, sustainable development, technological progress, and digital communication. Here, the role of leadership is important, (Bansal et

al., 2019; Muralidharan & Pathak, 2018; Sengupta et al., 2018).

Today, a model of corporate entrepreneurship has been established, which emphasizes teamwork, whose members are motivated to work on achieving success and accepting risks. In the economy of entrepreneurship, all individuals should behave entrepreneurially. Additionally, all organizations, regardless of the nature of their activities, should also behave entrepreneurially and continuously apply the basic postulates of entrepreneurship. What is especially important is the fact that in the modern economy, an entrepreneur no longer has to be an individual who owns a business. An entrepreneur can also be an individual who is employed by an employer. Corporate entrepreneurship is associated with the process of managing professional organization, leadership, workforce, and teamwork. The role of young people who enter the world of business and encounter the process of corporate entrepreneurship is also important, (Egorov et al., 2019).

Drucker (2005) believes that every large enterprise must be able to do three important things at the same time - to improve, expand, and innovate. Drucker emphasizes that he still doesn't know such an enterprise, but that there are a large number of enterprises that are working on it. Size alone is not an obstacle to entrepreneurship. Conventional business logic is wrong in only one fact, and that is that entrepreneurial behavior and innovation are something spontaneous, natural, and imperatively creative. Entrepreneurship in modern business conditions is not an "innate characteristic". Highly educated managers and knowledge workers who apply knowledge and take care of the continuous improvement of business productivity, which is based on the continuous improvement of knowledge productivity, rule today's business world. The enterprise must establish such a system of connections and relationships in the enterprise that will allow focus on entrepreneurial behavior, (Kazanjan et al., 2017).

Furthermore, entrepreneurship education encourages the development of the entrepreneurial activity. Due to the rapid development of technology and the changes brought by Industry 4.0, but also due to changing circumstances in the global market caused by the global pandemic, there was a need for a new generation of entrepreneurs.

Governments, private corporations, universities, and research institutes are looking for a new generation of entrepreneurs. This does not only mean the entry of young, highly educated students into the world of entrepreneurship, but also the transformation of existing entrepreneurs into entrepreneurs who use the achievements of high technology and the digital economy in creating new entrepreneurial ventures, (Mosey et al., 2017; Swaramarinda, 2018).

The three primary aspects of entrepreneurship education (WEF, 2022c) can be identified as follows:

- individual-oriented entrepreneurship education
- entrepreneurial skills programs aimed at developing entrepreneurial skills
- business-oriented programs

Entrepreneurship education programs should focus on developing an individual mindset. An entrepreneurial mindset has been noted to have specific traits including creativity, persistence, and autonomous behavior (Daspit et al., 2021). Developing an entrepreneurial mindset refers to the adaptability and flexibility of thinking regarding decision-making, risk-taking, skills, and entrepreneurial knowledge. The entrepreneurial mindset can be outlined in three different aspects (Kuratko et al., 2020):

- the cognitive aspect (knowledge for assessments, decisions, opportunity evaluation, and venture creation)
- the behavioral aspect (ability to perceive opportunities, sense, and act upon motivational and cognitive mechanisms supported by one's knowledge)
- the emotional aspect (includes a wide array of psychological traits including a confrontation with risk, financial risk, dealing with stress, and entrepreneurial ego)

An entrepreneurial mindset consists of readiness to take action and respond in a particular manner. This readiness is based on a willingness to take independent actions, rapidly respond to opportunities, willingness to take risky innovations, being a first mover on the market, and take chances to accomplish goals (Pidduck et al., 2021).

Furthermore, entrepreneurship programs should emphasize the importance of developing appropriate skills and best practices that can

provide entrepreneurs with an experience that simulates an entrepreneurial path. Finally, entrepreneurship programs should emphasize the importance of introducing future entrepreneurs to local communities of investors, mentors, corporations, and professionals. According to the results of a survey conducted by the WEF in collaboration with Stanford University and Ernst and Young (WEF, 2014), which included over 1,000 entrepreneurs from around the world and aimed at a better understanding of a successful entrepreneurial organization in accessing new markets, the following findings were noted:

1. There are significant differences in the business environment from region to region.
2. The availability of markets, human capital, and finances are of key importance in designing the business environment.
3. In most regions, only a small number of successful enterprises contribute to a healthy, growing early-stage enterprise sector.
4. Large enterprises have the potential to provide support for enterprises at an early stage of their growth and development.
5. Entrepreneurs themselves can play important roles in building an entrepreneurial environment.
6. Entrepreneurs see entrepreneurial policies as potential accelerators and potential growth inhibitors.

The development of a business environment conducive to entrepreneurship is crucial for the development of entrepreneurship itself. Legislation, education, the process of urbanization, and digital transformation affect the entrepreneurial environment.

THE ROLE OF YOUTH IN THE DEVELOPMENT OF ENTREPRENEURSHIP

In the modern economy, young people are the bearers of new tendencies and the development of knowledge. Experiences in the development of entrepreneurship in the world indicate the growing role of young entrepreneurs in achieving sustainable growth and common prosperity in their countries, and more broadly. Young entrepreneurs influence the development of competitiveness at a national level. They adapt faster to technological achievements and the principles of global business. Involving young people in the world of entrepreneurship is one of the possible solutions to reduce unemployment rates. Young people are a

source of innovative solutions that are needed equally by corporations and economies, and which relate to solving current and future business and development challenges (Ogamba, 2018; Vladimirovich et al., 2019). Young people as entrepreneurs continue to face challenges in starting a business, and they often lack access to sources of funding, education and training, infrastructure for entrepreneurial activity, and the possibility of networking. Young social entrepreneurs are becoming pillars of recovery from the global pandemic. The most important thing is to create a favorable business environment for new entrepreneurial ventures, especially in the field of social entrepreneurship. The six pillars for empowering young entrepreneurs can be identified as follows (WEF, 2021): 1) Connecting with people, 2) Choice of purpose, 3) Insisting on defining the plan, 4) Adoption of priorities, 5) Focusing on evidence, and 6) Profit design.

Modern business conditions require people who must represent a successful synthesis of knowledge, skills, and attitudes (Đorđević et al., 2016). This three-dimensional approach is conditioned primarily by modern business factors. An individual in the organization, and especially a manager, must satisfy a wider range of characteristics to be able to successfully respond to the changes in the modern business environment.

ENTREPRENEURSHIP AND THE DOMESTIC MARKET

Entrepreneurial activity is present in the domestic market, but the development of entrepreneurship is not at a satisfactory level. The domestic business environment is not entrepreneurship-oriented, and awareness of incentive means is not adequate (Djordjevic et al., 2021a; Petković & Đukić, 2018). Foreign direct investments are labor intensive and thus provide little to no entrepreneurial value. This is especially true if the example of the countries of Southeast Europe that have completed the transition process is taken into consideration. The period from 1989 to 1991 was noted as the golden age of post-war Serbian entrepreneurial ambition and freedom (Brkić, 2017). That period is the real beginning of the transition when the modern Serbian business elite is starting to be created. The liberalized business environment, without much state interference, has affected the creation of hundreds of small independent trade

shops, independent catering shops, artisan service shops, and small and medium production plants.

During that period, it seemed that a new economic environment was being created that would enable the fast and comprehensive development of entrepreneurship and entrepreneurial initiatives. The establishment of international economic sanctions against Yugoslavia in 1992 by the international community had the effect of stopping this momentum, and cash flows were limited and strictly controlled by the state. In the 1990s, the formation of parastatal enterprises was noticeable. These formations were under the direct control of the state through political structures or various forms of business in the gray zone (capital of unknown origin). Although significant business systems developed during this period, their importance was relatively limited in the given circumstances and consisted mainly of influencing employment and foreign trade and far less of real investment and the formation of industrial complexes. After the political changes in 2000 and the beginning of economic reforms in 2001, the process of economic transition has begun again. Unfortunately, the intensive development of the private initiative in Serbia, especially the one related to the investment of domestic, autochthonous capital, was halted with the beginning of the world economic crisis that hit the world in 2008, and soon came to the domestic market, (Brkić, 2017).

In the period from 2009, there is a re-examination of the role of entrepreneurship in the domestic market, in terms of whether it is necessary to enrich individuals and create large domestic private capital. What has always been dominant in the domestic economy (at least since the early 1990s until today) is the phenomenon that entrepreneurship is tied to real private capital, which is invested in the SME sector. Entrepreneurship has not been comprehensively treated as an opportunity for an entrepreneurial initiative of an individual to enable the emergence of large corporations, which will eventually become market leaders. In the domestic market, entrepreneurship was positively viewed only in the context of the development of SMEs and the ability of these enterprises to be shock absorbers for the transition recession - primarily viewed from the aspect of creating new jobs and employment. The essence of serious observation of entrepreneurship is that private property is

inviolable and that an individual who accepts risk and creates innovations can become a large corporation owner and market leader in a short period. Numerous restrictions in the development of entrepreneurial behavior resulted in an unsatisfactory level of entrepreneurial practice for domestic entrepreneurs as the state interfered from time to time in the affairs of domestic entrepreneurs. It has also influenced the fact that the domestic economy could not make significant progress in global competitiveness, (Brkić, 2017).

Domestic entrepreneurs are burdened with challenges and are not able to easily get credit lines. They are conditioned by the behavior of large enterprises (for example large retail chains pay for goods after 180 days, to their suppliers, whereas the mass of these enterprises is small and medium enterprises). Most of the capital is still in the hands of the state and the state is still the largest employer in Serbia, and labor productivity in public enterprises is significantly lower than productivity in the private sector. It is obvious that Serbian public enterprises are not entrepreneurially oriented, nor are their managements, and that they are quite far from the concept of corporate entrepreneurship. According to the Global Competitiveness Report for 2019 (WEF, 2019b), the biggest problems of the Serbian economy regarding the developed competitiveness indicators were customer sophistication, the ability to rely on professional management, the efficiency of port services, the distortive effect of competition taxes and entrepreneurship. The main advantage of Serbia in the region, but also to wider newly industrialized countries and other countries in transition, is low labor costs. Instead of developing entrepreneurial behavior and strengthening domestic private initiative, Serbia is forcing foreign direct investment based on incentives to foreign investors (the state of Serbia co-finances the opening of every new job when a foreign investor arrives) and significantly lower labor costs (low wages). In the long run, this model of development is not sustainable, because labor costs will always be cheaper somewhere, (Brkić, 2017).

Enterprises must consciously and in an organized fashion apply entrepreneurial concepts and behave entrepreneurially, even if they consciously embark on the process of innovation. The enterprise must establish such a system of connections and relationships in the enterprise that will allow focus on entrepreneurial behavior. Every small business

or self-employment does not necessarily have to be an entrepreneurial activity, just as not every employer is an entrepreneur. For example, domestic public enterprises, although large employers are not business organizations that are significantly entrepreneurially oriented. The essence of entrepreneurial behavior is in accepting risks and changes based on innovative action, which creates conditions for the development of business entities and the economy as a whole. The most important directions of activity in the function of the development of the entrepreneurial economy should be:

- limiting the operation of the bureaucratic apparatus
- creating equal business conditions for all
- establishing an entrepreneurial climate at the level of the economy
- faster response of state institutions to the problems of entrepreneurs, especially groups of small and medium enterprises, (in terms of taking an active role in the development of entrepreneurship on the domestic market)

Domestic enterprises must be transformed following the needs of the modern economy. When it comes to state-owned enterprises, they are first followed by ownership transformation, then by the market, and finally by organizational and technological transformation. When it comes to domestic enterprises with autochthonous capital, it is necessary to overcome primarily organizational and technological transformation, (Savić et al., 2019).

YOUTH AND ENTREPRENEURSHIP IN SERBIA - CHALLENGES, AND OPPORTUNITIES

The role of young people in the field of entrepreneurial activity in the domestic market is not adequate. This is because young people cannot easily access the funds needed to start their own business or to develop a new business understanding. The domestic economy has had a problem with a chronic shortage of capital for three decades. The problem of lack of financial resources culminated with the negative effects of the global economic crisis after 2008. From 2001 until today, domestic SMEs have been mostly financed by banks, while development funds have been focused mainly on undeveloped areas of the country. The bad economic situation, which is also determined by the effects of the transitional

recession, is further worsened by the effects of the global pandemic.

A significant study was conducted by Djordjevic and colleagues (2021a, 2021b), where a robust dataset regarding youth entrepreneurship was collected over a period of ten years. The sample size of 5670 respondents (university students and high school students) provided significant insight into the relations between influencing factors in the domain of youth entrepreneurship. The research was conducted from 2009 to 2018. As this timeframe could create bias and possible statistical differences, a z-test was conducted between consecutive years. The results are presented in Table 1.

The results of the z-test indicate that there are no statistically significant differences between datasets. Further, the research included a linear regression. The results are presented in Table 2.

Table 1: Results of the z-test

Year pair	Z-test (z Stat; z Critical two-tail)
2009-2010	-1.290; 1.960
2010-2011	-0.888; 1.960
2011-2012	-0.621; 1.960
2012-2013	1.806; 1.960
2013-2014	0.716; 1.960
2014-2015	0.452; 1.960
2015-2016	-0.811; 1.960
2016-2017	0.513; 1.960
2017-2018	-0.907; 1.960

Source: (Djordjevic et al., 2021a)

The linear regression analysis addressed close social environment, attitudes, environment assessment, and awareness of incentive means as independent variables. Entrepreneurial intentions were viewed as a dependent variable. Next, in Table 3, the results of the logistic regression analysis are presented.

Table 2: Results of the linear regression analysis

Independent variables (viewed as predictor groups)	Dependent variable (viewed as a predictor group)	Standardized coefficients	p
Close social environment	Entrepreneurial intentions	0.118	.855
Attitudes		-0.329	0.000
Environment assessment		-0.095	0.771
Awareness of incentives means		0.110	0.701

Source: (Djordjevic et al., 2021a)

Table 3: Results of the binary logistic regression analysis

Predictor item	β	p	95% CI
Age	1.04	.001	1.01
A private enterprise is more successful compared to other types of business	1.38	0.000	1.29
In Serbia, people don't know the real opportunities in the domain of private enterprises	1.20	0.000	1.12
A private enterprise is not profitable, and it is uncertain	0.69	0.000	0.64
The working conditions in a private enterprise are better than in other types of business	1.10	0.000	1.04
Do you have a member of your family who owns a private enterprise?	0.83	0.009	0.72
Do you think that start-up loans from business banks are affordable for young entrepreneurs?	0.81	0.003	0.70
Are you familiar with the existence of incentive means for starting a business?	0.39	0.000	0.34
Do you think that there is a good entrepreneurial environment in Serbia to start a business?	0.84	0.072	0.69
Do you think that the government should have a key role in stimulating the youth to start their enterprise?	0.86	0.168	0.70

Source: (Djordjevic et al., 2021a)

The results indicated the following:

- Attitudes are a significant predictor of entrepreneurial intentions. Interestingly,

attitudes are negatively correlated, indicating that positive attitudes will more likely result in negative entrepreneurial intentions.

- Older participants were more ready to start their own business compared to younger respondents.
- Respondents who think that private businesses are more successful compared to other forms of business are more likely to start their own business.
- Respondents who think that private business is risky and there is no adequate profit, are less likely to start their own business.
- Respondents who think that the working conditions in private enterprises are better compared to public enterprises are more likely to start their businesses.
- Respondents who have a family member who owns a business, are less likely to start their own business.
- Respondents who think that start-up loans from business banks are adequate and affordable are less likely to start their enterprise.
- Similarly, respondents who know about incentive means for starting their own business are less likely to start their own business.

Next, the results of the research that dealt with the issue of the development of entrepreneurship among young people, indicate the following:

- As a reason for not starting their own business, the surveyed students state that they do not have the right idea (78,42), which indicates that as part of promoting the development of entrepreneurship at colleges and universities it is necessary to insist on developing entrepreneurial skills;
- The majority of students (82.91%) believe that an appropriate environment needs to be developed in the Republic of Serbia that encourages young people to start their own businesses. As a reason for this attitude, students cited the following limitations that hinder them and they are repeated in new research: lack of financial resources - 30.08% (2012), 31.59% (2011), 32.26 (2010); unstable political and economic situation - 29.75% (2012), 28.91 (2011), 29.75% (2010); excessive taxes - 20.30% (2012), 23.77% (2011), 20, 30% (2010);
- Of the total number of students in the survey conducted in 2012, as many as 84.64%, believe that the state should play a key role in stimulating young people to start their own businesses. Respondents single out: key loans,

education, and laws/regulations related to young people as entrepreneurs as key ways of state support.

According to the results of the research on the role of entrepreneurial behavior in the domestic market, the largest number of respondents (72%) believe that the domestic economy cannot be characterized as an entrepreneurial economy. This group also noticed certain problems that have burdened the domestic economy for many years, especially since the beginning of the transition after 2001. These problems were:

1. the unwillingness of the state to actively help entrepreneurs - 28.5%,
2. general lack of free financial resources in the economy - 28.5%,
3. slowness of state institutions - 14.33%,
4. the difficult economic situation that hinders entrepreneurs and businessmen - 14.33% and
5. the dominant influence of the state on the economy - 14.33%.

The ARIMA (Auto-regressive Integrated Moving Average) is a statistical analysis model used to better understand time series data and for forecasting (Newbold, 1983). In the noted studies (Djordjevic et al., 2021a, 2021b), an ARIMA regression analysis was conducted. The results are presented in Table 4.

Table 4: Results of the ARIMA regression analysis

Predictor	Coef.	Std. Err.	p-value
Age	1.444	2.45	0.014
Gender	-0.849	0.105	0.417
Close social environment	1.950	1.112	0.049
Attitudes	-0.443	0.279	0.012
Awareness of incentive means	0.855	2.170	0.030
Environment assessment	-0.085	0.104	0.382

Source: (Djordjevic et al., 2021a)

The ARIMA regression indicates that environmental assessment and gender don't affect entrepreneurial intentions. From here, two ARIMA graphs are developed. In Figure 1. the ARIMA graph that includes all predictor groups is presented.

Next, an ARIMA graph that doesn't include the gender and environmental assessment predictors is presented (Figure 2).

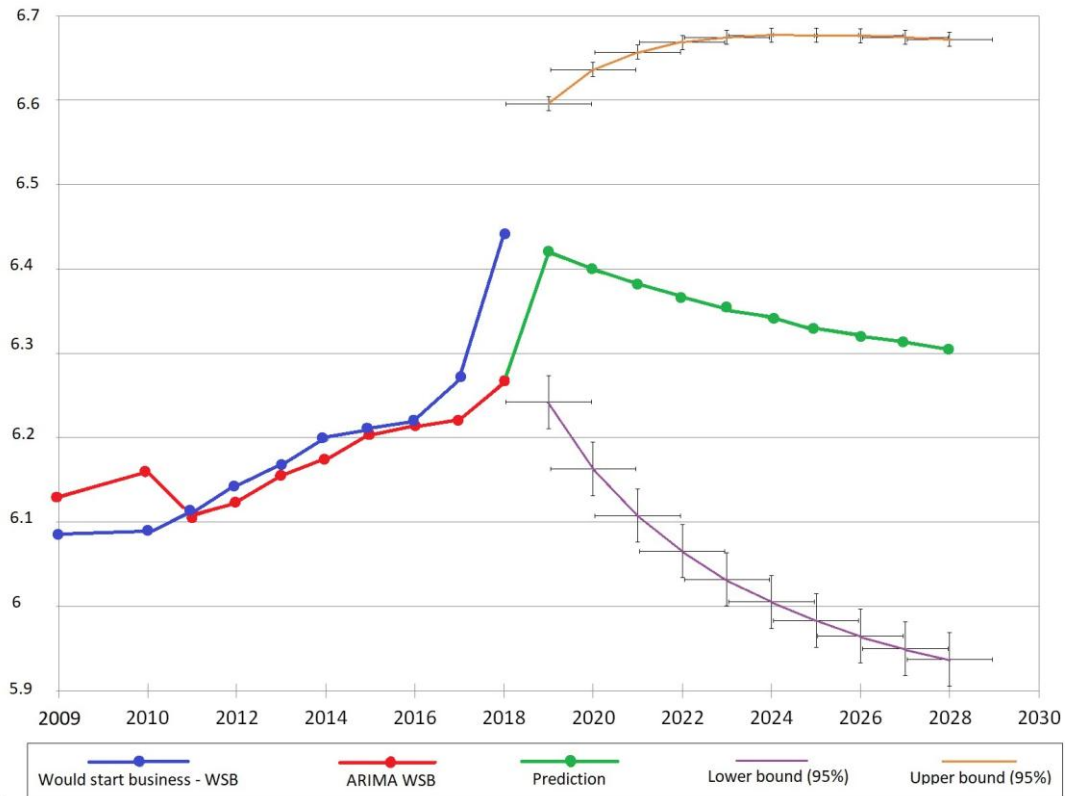


Figure 1: ARIMA graph (forecasting with all predictors)
Source: (Djordjevic et al., 2021a)

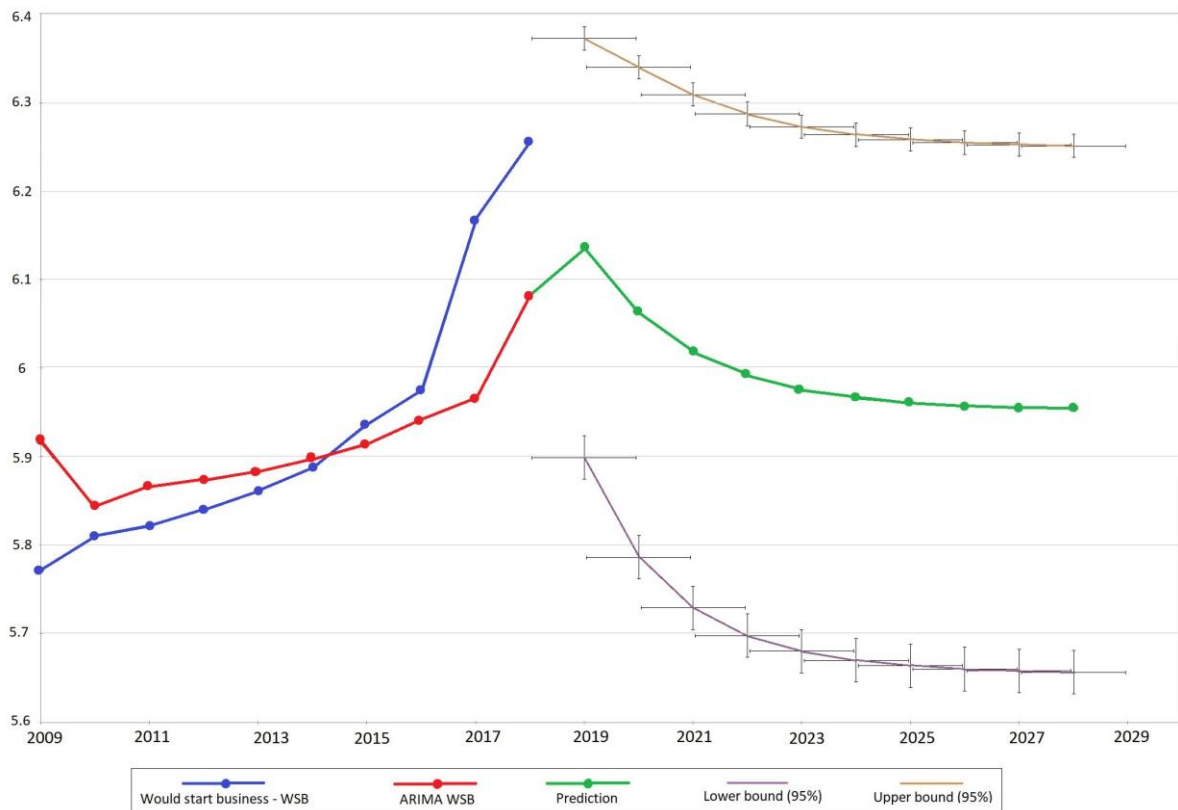


Figure 2: ARIMA graph (forecasting without non-significant predictors).
Source: (Djordjevic et al., 2021a)

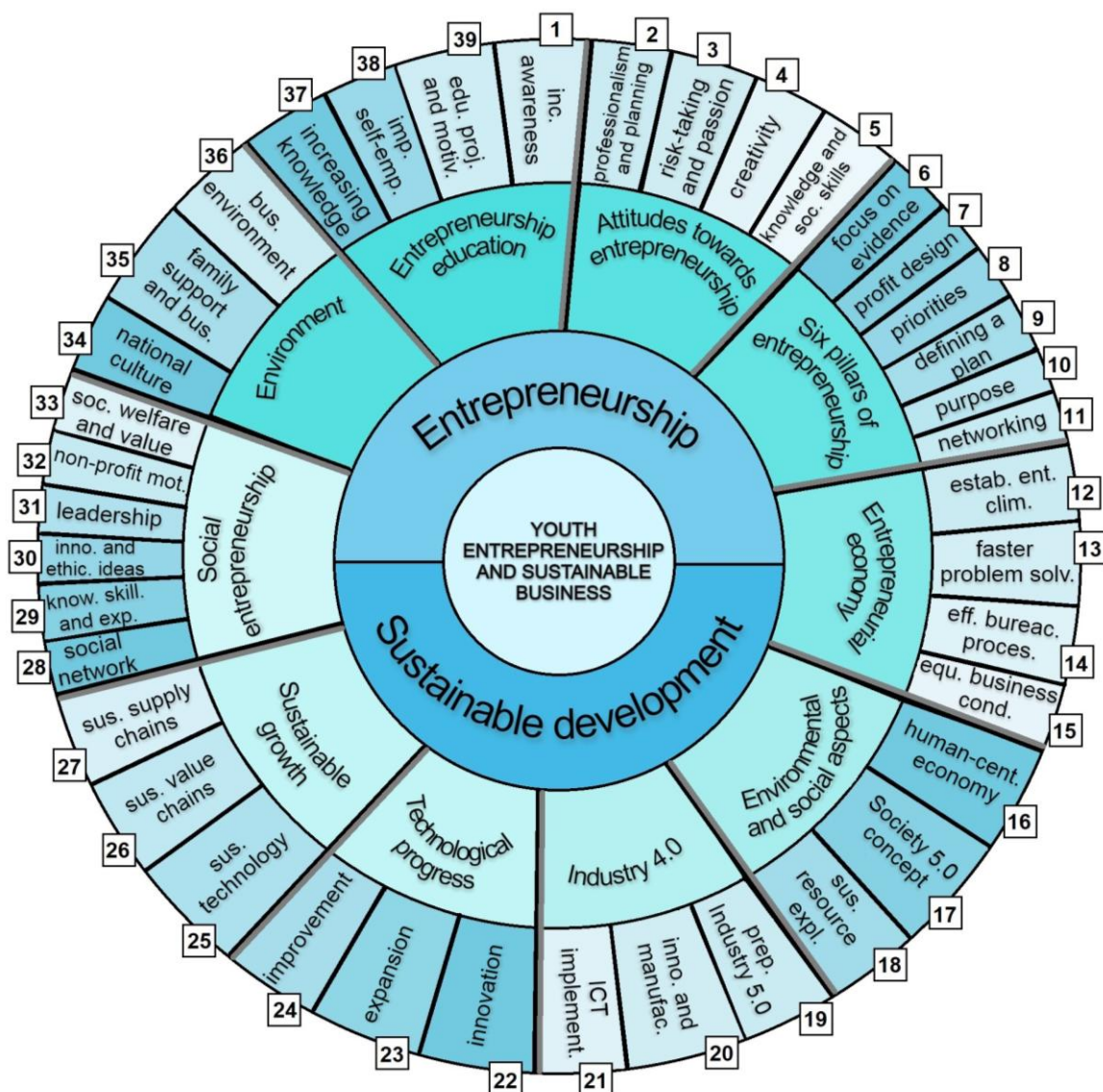


Figure 3: Modelling youth entrepreneurship and sustainable business
 Source of idea for the model: (WEF, 2022d)

Table 5: Numbered factors from the youth entrepreneurship and sustainable business model

#	Factor	#	Factor
1	increased awareness	21	ICT implementation in enterprises
2	professionalism and planning	22	innovation of technological processes
3	risk-taking and passion	23	expansion of technological solutions
4	creativity	24	improvement of technological processes
5	knowledge and social skills	25	sustainable technology application
6	focus on evidence	26	sustainable value chains
7	profit design	27	sustainable supply chains
8	priorities	28	social networks
9	defining a plan	29	knowledge, skills, and experience
10	finding and creating purpose	30	innovation and ethical ideas
11	networking and partnerships	31	strong leadership
12	establishing an entrepreneurial climate	32	non-profit motivation
13	faster problem solving for entrepreneurs	33	focus on social welfare and social value
14	efficient bureaucratic processes	34	national culture
15	equal business conditions for all	35	family support and business in the family
16	human-centric economy	36	business environment
17	Society 5.0 concept	37	increasing knowledge
18	sustainable resource exploitation	38	improving self-employment skills
19	preparedness for Industry 5.0	39	educational projects and motivation
20	innovation and manufacturing		

The ARIMA graph (Figure 2.) that forecasts without non-significant predictors shows more curvature (is more precise) compared to the graph that includes all the predictors (Figure 1.). Additionally, the forecasts indicate a lack of entrepreneurial intentions over time. Therefore, it is necessary to further address the factors that influence youth entrepreneurship.

Based on the above presented results in the domain of youth entrepreneurship, and following other studies in the domain of:

- entrepreneurship (Llanos-Contreras et al., 2020; Shepherd et al., 2021)
- entrepreneurship education (Djordjevic et al., 2021b; Ratten & Usmanij, 2021)
- youth entrepreneurship (Ćočkalo et al., 2020; Kim et al., 2020a)
- social entrepreneurship (Gupta et al., 2020)
- attitudes and pillars of entrepreneurship (Liguori et al., 2020)
- entrepreneurial economy (Youseff et al., 2021)
- sustainable development (Cervelló-Royo et al., 2020)
- sustainable business (Djalic et al., 2021)
- sustainable growth (Kim et al., 2020b)
- technological progress (Bakator et al., 2019)
- Industry 4.0 (Bakator et al., 2018)
- Industry 5.0 (Javaid & Haleem, 2020; Maddikunta et al., 2021)
- the concept of Society 5.0 (Konno & Schillaci, 2021; Narvaez Rojas et al., 2021)

A circular model is developed. The model addresses factors that influence youth entrepreneurship and sustainable business. The model is presented in Figure 3.

The model consists of a central circle followed by three additional layers. The circles in each layer are "sliced" up following the existing relation between the noted factors. The central circle is the main subject of interest: Youth entrepreneurship and sustainable business. The following circle is divided into two main slices: Entrepreneurship and Sustainable development. These are further divided into segments/slices in the third layer. Social entrepreneurship and Entrepreneurial economy are included both within Entrepreneurship and Sustainable development, as these factors are present in both concepts. The slices in the last layer are numbered for increased readability. The numbered factors are presented in Table 5.

The model presented in Figure 3 encapsulates the main driving and influencing factors of youth entrepreneurship and sustainable business. Entrepreneurship is a very broad and complex concept and involves:

- the concept of social entrepreneurship (creating social value, giving back to the community, and improving the lives of others)
- environment (internal - family relationships and support, and external - national culture and business environment challenges and opportunities)
- entrepreneurship education (a driving force of self-employment through knowledge, skills, and motivation)
- attitudes towards entrepreneurship (risk-taking, creativity, passion, know-how)
- pillars of entrepreneurship (the core of the entrepreneurial concept)
- entrepreneurial economy (entrepreneurial climate and efficient bureaucratic procedures).

On the other side, there is Sustainable development that includes:

- social entrepreneurship (ethical and non-profit motivations that are sustainable in the long-term),
- sustainable growth (reliable and sustainable supply chains, sustainable value distribution, sustainable technology application)
- technological progress (the improvement, expansion, and continuous innovation of technologies and their application in enterprises is an imperative for sustainability)
- Industry 4. (refers to the implementation of ICTs in enterprises, innovation in manufacturing, and preparedness and readiness for the fifth industrial revolution - Industry 5.0)
- environmental and social aspects (a human-centric economy, exploitation of resources is sustainable, and business is conducted in accordance with the Society 5.0 concept)
- entrepreneurial economy (equal business conditions that ensures sustainable competitive relations and annuls potential monopolies)

It is evident that to improve youth entrepreneurship and sustainable business, numerous factors have to be addressed in some capacity. Broad concepts such as entrepreneurship and sustainable development further include a wide array of factors that may affect the potential of youth entrepreneurship development and sustainability

when it comes to conducting business in the domestic business environment.

SUGGESTIONS AND GUIDELINES

Based on the developed model and following findings in the domain of youth entrepreneurship and sustainable business the following suggestions and guidelines for improving youth entrepreneurship potential and sustainable business:

- improving entrepreneurship education on a national level is imperative for long-term success and increases students' awareness regarding entrepreneurial behavior
- attitudes among students' that are relevant for entrepreneurship such as creativity, risk-taking, passion and drive, experience and knowledge, and planning, should be nurtured and expanded within entrepreneurship education
- government-supported and planned strategies should be in place for creating an entrepreneurial economy that will reduce bureaucratic processes, establish an entrepreneurial climate, and create mechanisms for faster problem-solving in the domain of entrepreneurship
- reducing tax rates and creating incentive programs for entrepreneurs
- spreading awareness on the importance of ICT implementation in SMEs
- developing courses and focusing on entrepreneurial projects as soon as possible in high schools and faculties
- national supply chains should be focused on sustainability and value rather than maximum efficiency
- bureaucratic procedures should be shortened and less time-consuming
- ICT implementation in SMEs should be discussed on a national level
- new and existing businesses should focus and turn to sustainable models or semi-sustainable models that include sustainable value chains, sustainable supply chains, and sustainable resources and means of production.
- advanced technologies that characterize Industry 4.0 should be evaluated and considered for implementation in SMEs as well as to be the cornerstone of new businesses

Youth entrepreneurship has to be molded in a way that corresponds to the modern business environment. However, due to the globalization of

markets, constant changes, and challenges, the core of youth entrepreneurship remains (innovation, value, and sustainability), but other aspects such as education, technology, and market dynamics have to be flexible from the entrepreneur's perspective. Sustainable business involves sustainable exploitation of resources, sustainable supply chains, and sustainability-driven technologies. If the domestic market is viewed through the lenses of the fourth industrial revolution - Industry 4.0, then it is clear that there is still much work to be done on a national level. Thus, future potential strategies on a national level should focus on increasing awareness of the importance of sustainable business from an economic, social, and environmental aspect. New businesses should be encouraged to aim for sustainability. Youth entrepreneurship and entrepreneurship overall, should be the driver of sustainability and not only a sub-part of it.

CONCLUSION

The main role of entrepreneurship in the modern economy is reflected in innovative activities that create conditions for technological development, the creation of flexible organizations, and new employment. The national economy, which supports the entrepreneurial spirit, creates conditions for increasing productivity by investing in the individual ability of an individual, as well as any organization, regardless of the form and the type of ownership.

Entrepreneurship, new technology, and a government that creates a stimulating entrepreneurial environment are key to new and sustainable growth. Modern business conditions, challenged by constant changes and the economic and social consequences, require the establishment of the next generation of entrepreneurs, who will be able to respond to the challenges of the future. Experiences regarding entrepreneurship from the most developed countries in the world indicate the growing role of young entrepreneurs in achieving sustainable growth and common prosperity in their countries. After developing the model and analyzing the existing data, the research questions are addressed:

R1: What factors influence youth entrepreneurship and sustainable business?

The findings indicate that close social environment (family member owning a business), age (older

participants are more likely to start their own business), attitudes towards entrepreneurship (includes psychological traits and opinions on private business), and awareness of incentive means (government support via financing for starting own business). Additionally, entrepreneurial education, entrepreneurial mindset (which includes attitudes as previously noted), an entrepreneurial economy, and the digitalization of business can positively influence youth entrepreneurship and sustainable business growth.

R2: Why is entrepreneurship a key driver in the establishment of a sustainable business?

Entrepreneurship has been established as a driver of economic growth and economic development. The existing body of literature notes that youth entrepreneurship positively affects sustainable development. Self-employment positively affects the socio-economic aspects of conducting business and the sustainability of government pension funds. Youth entrepreneurship can have a significantly higher intensity of value creation and distribution of value compared to large, status-quo oriented enterprises, and compared to public enterprises. The Internet and the digitalization of society further contribute to the entrepreneurial mindset. Here, the youth is especially affected and often more prone to "out of the box" thinking. Sustainable business growth takes into consideration the social, economic, and environmental aspects of conducting business in a modern, digitalized business environment. Through social media, the youth is exposed to the rapid development of ICTs, the concept of self-made entrepreneurs, and the rising awareness of climate change. This contributes to the development of a unique mindset that is in sync with the concept of youth entrepreneurship and sustainable business growth.

The main limitation of this paper is the lack of comparative empirical research in the domain of youth entrepreneurship and sustainable business. There is also a lack of data obtained from enterprises when it comes to sustainable business strategies and their results on business performance. Additionally, multiple factors can affect sustainable business and sustainability overall. Hence, addressing entrepreneurship can cause bias if other main factors are not included (government strategies aimed at sustainable development, poverty rates, education, etc.). In contrast to the noted limitations, the advantage of

this current study is the developed model where additional potential influential factors, which derive from entrepreneurship and sustainable business, are noted. Further, data from other studies in this domain is addressed. Suggestions and guidelines for youth entrepreneurship potential development and sustainable business development are discussed. Overall, this study managed to concisely analyze a large body of literature and develop a circular, multi-layer model that provides a significant overview of the factors and relations that affect youth entrepreneurship and sustainable business.

Based on the noted limitations, for future research, it is recommended to address other potential influencing factors that would provide additional insight into this complex domain. Comparative research where multiple data sources are addressed could be conducted. Enterprises could be included in future studies where sustainable business strategies and business performance are investigated. In addition, the entrepreneurial mindset of the youth could be further analyzed as ICTs transform into more complex systems (meta-verse, virtual environments, etc.), and as anti-global warming campaigns, and business success stories are shared on social media, (Belotti et al., 2022; Boulinanne et al., 2020).

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USPOSTAVLJANJE MODELA PREDUZETNIŠTVA MLADIH ZA RAST ODRŽIVOG POSLOVANJA

Izazovi koje donosi pandemija COVID-19 i promene na globalizovanom tržištu značajno utiču na način poslovanja. Savremeno poslovno okruženje karakteriše četvrta industrijska revolucija – Industrija 4.0. Uloga tehnologije je sve veća, a pandemija je ubrzala primenu informaciono-komunikacionih tehnologija i potrebu za održivim razvojem i održivim poslovanjem. Ove promene i globalni ekonomski izazovi ukazuju na preduzetništvo kao važan pokretač razvoja tehnologije, inovacija i ukupnog ekonomskog rasta. Preduzetništvo i preduzetništvo mladih mogu pozitivno uticati na ekonomski razvoj. Doprinosu smanjenju stope nezaposlenosti, povećanju životnog standarda i ekonomskog rasta. U ovom radu je razvijen model preduzetništva mladih zarast održivog poslovanja. Cilj je bio da se identifikuju uticajni faktori na razvoj preduzetništva mladih i održivo poslovanje. Istraživački pristup je uključivao detaljnu analizu dostupnih podataka i analizu postojeće literature iz oblasti preduzetništva, preduzetništva mladih, održivog razvoja, Industrije 4.0 i Industrije 5.0. Rezultati ukazuju da na preduzetništvo mladih utiče veliki broj faktora, a pre svega uzrast, blisko društveno okruženje, stavovi i svest o podsticajnim sredstvima. Razvijeni model pruža značajan uvid u to koji glavni faktori i podfaktori mogu uticati na preduzetništvo mladih i održivo poslovanje. Može se zaključiti da preduzetničko obrazovanje, stimulatívno okruženje i preduzetnička ekonomija mogu značajno uticati na preduzetništvo mladih i održivi rast poslovanja. Ovi nalazi su važni za vladine strategije kada je u pitanju preduzetništvo mladih i održivi poslovni rast.

Ključne reči: Preduzetništvo; Preduzetničko ponašanje; Preduzetnik; Poslovanje; Održivost.