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**Needs for Remodeling the Entrepreneurship Education  
for the Post-COVID-19 Era**

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**Abstract**

*Achievement of financial stability, good sales results and generating return on investment are discussed as being among the main goals of entrepreneurship in general. With the new technological wave, the requirements for successful entrepreneurs are constantly considering the specific features of digitalization, the new type and the speed of communication, the role of social media, etc. Following only these few examples, it can be argued that the development of entrepreneurship has followed the line of the latest economic and technical processes on regional, national and international scale. In addition, the entrepreneurs of the new 21st century can be identified as global entrepreneurs creating a global entrepreneurial ecosystem. The adaptability of entrepreneurs is also expressed in their ability to reflect changes in terms of technology application and digitalization on the one hand, and social changes, on the other hand. That is why both technopreneurship as well as e-entrepreneurship are emerging.*

*This research raises the question of the needs for entrepreneurship education for the Post-COVID-19 era. The authors' aim is to reveal the views and preferences of the students regarding four courses of a bachelor's and master's degree in one Bulgarian university. Circumstances surrounding the COVID-19 pandemic inevitably reflect on each area of social life, including education, and for this reason we want to find out to what extent students feel the need to reconsider traditional models: a new look towards knowledge acquisitions, education and training, and a reconstruction of their expectations towards training are attested. For this reason, a remodeling of the tertiary entrepreneurial education as regards the Post-COVID-19 era is proposed.*

**Keywords:** entrepreneurship, tertiary education, remodeling, pandemics.

**JEL Classification:** I20, L26.

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## **1. Introduction**

The global COVID-19 pandemic has forced the humanity to change every aspect of social and economic life, and to adapt to a new digital space. In their everyday lives, students, teachers, employees, and industrialists started working remotely online. The evident need to establish sustainable business models for education is undeniable. Much in this vein, a general statement on the socio-economic development of entrepreneurship relates its key attributes to the new kind of international business environment.

Entrepreneurial activity is an integral part of the economy of any country and is an overarching type of activity, which extends across sales tools, financial planning, legal bases of joint ventures, technologies for digital business management and many others. Entrepreneurship can prioritize one of these activities, show combinations between them to gain a competitive advantage, or optimize them by converging them (Grubicka & Matuska, 2015; Choi & Kim, 2017). In addition, entrepreneurship is a means of internationalizing business (Autio, 2017; Etamad, 2018). As a pro-active agent, the entrepreneur is a kind of accelerator of public life, of intersectoral cooperation, and at the same time of partnership between the countries, giving a major share in one of the highest priority areas for employment and reduction of social crises. Technological entrepreneurship, together with an innovative entrepreneurship, as well anti-crisis entrepreneurship in favour of resolving conflicts of various natures, are still perceived as knowledge-intensive areas (Koch & Strotmann, 2006; Acs, Audretsch & Lehmann, 2013). In this regard, it is worth paying more attention to entrepreneurship education, which should increasingly shift the education of bachelor and master students to evolutionary economics, as this can become an important step in the development of global entrepreneurship. A key place in this process must be given to the integration of innovation, technology and digitalization.

In the current research, two approaches are taken: descriptive and analytical. The descriptive approach examines the problems facing entrepreneurship from the point of view of its multifunctional nature and identifies the main advantages for development of business. This section discusses aspects of entrepreneurship selected by the authors. Basic techniques for the success of traditional entrepreneurship are outlined. Additionally, an authors' model of the entrepreneurship chain is proposed, which according to the authors provides guidelines for the future development of entrepreneurship and may be relevant to current processes in modern society, especially with regard to the new profile of entrepreneurship in crisis. Furthermore, the article discusses entrepreneurship education in the context of higher education. In its classic form, entrepreneurship education offers its bachelor and master students up-to-date knowledge and preparation for the dynamic processes in the economic life of each country. Unfortunately, this is the situation in most cases, and shortcomings in specialized business training still exist.

In order to check the topicality in connection with the expected professional competencies of the profile "Entrepreneurship", a broader survey was conducted, in

which the students' wishes for acquiring skills in relation to the following domains of knowledge, were put forward:

- study of business processes of entrepreneurial activity of economic entities at both micro and macro level;
- understanding the behaviour of business operators at the meso level;
- implementation of intersectoral links;
- information and analytical activity in strategic, current and operational forecasts, plans, budgets in the field of entrepreneurial activity and related activities outside entrepreneurship;
- analysis and evaluation of market data in the era of disturbances needed to address the challenges of the new business environment;
- using the advantages of digitalization;
- making motivated and justified decisions in the field of entrepreneurial activity;
- development of strategies in the field of new technologies and innovative entrepreneurship.

In order to outline the main directions of entrepreneurship education for the Post-COVID-19 Era, the theoretical aspects of the characteristics of the phenomenon of 'entrepreneurship' should be considered. A review of literature sources reveals the existence of many definitions that describe entrepreneurship in view of organizing capital and risks, working with institutions, approaching different social and ethnic groups, inclusion of culture, etc.

In the popular definitions of entrepreneurship, often entrepreneurs are described as *marketing specialists* acting predominately in the field of trade (Filion, 1990; Kao, 1993; Hills, 1994). One of the main capabilities of the entrepreneur is to operate between a known profit and an unknown selling price, and thus to take risks on different levels (Venkataraman & Lee, 2001; Whalley, 2009; Kyurova & Koyundzhyska-Davidkova; Arnold, 2020).

Definitions from economic dictionaries also focus attention on entrepreneurship as an independent, active and risky activity (Shaw, 1993; Mariotti and Glackin, 2013). The personal and psychological determinants of the entrepreneur at this stage are not explicitly defined. They are considered a prerequisite.

The entrepreneurs act proactively, independently, on their own behalf, at their own risk, under their own responsibility. The activities of entrepreneurs (in the person of individuals) and legal entities and market policies (Dimitrova, 2019) are aimed at systematic generation of income, profit from the use of property, sale of goods. The classical definitions emphasizing the initiative activity move towards the role of intuition and creativity in entrepreneurship (Barksdale, 2010) and reach the scope of provision of services (Mirchova & Dimitrov, 2015), the techno-entrepreneurship, innovation (Yarkova et al., 2019; Zacharoula, 2020) and development (Thérin et al., 2019).

According to the classical definition, entrepreneurship arises when favorable opportunities for starting a business are sought, but from a practical point of view, entrepreneurship can be expressed through the effectiveness of the activities carried out in the ecosystem. This is the focus for the understanding of entrepreneurship

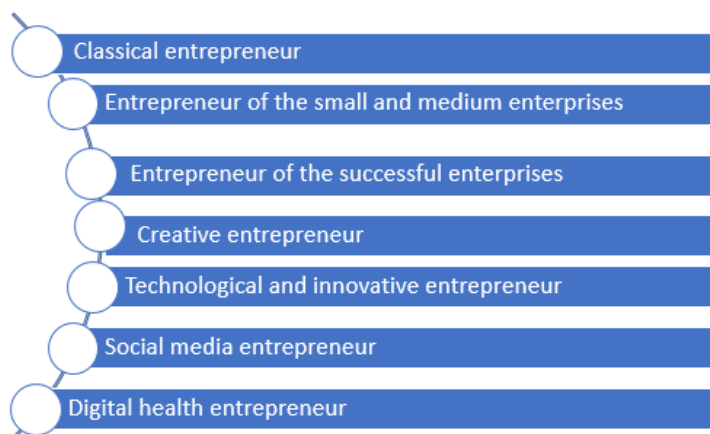
from the point of view of the methodology of the Global Monitor of Entrepreneurship (GEM), where in particular entrepreneurship means any attempt to create a new enterprise or new business (self-employment, creation of a new entrepreneurial structure or expansion of an existing business through persons, a group of persons or an already functioning business structure).

In search of the optimal balance for both earning income and willingness to lose, but also looking to the future, the authors focus on the main areas of entrepreneurs' qualities chain and suggest a short overview of new emerging directions in entrepreneurship education. Inasmuch doing so, they strive to make a contribution to the main understanding of the new perspectives and value creation in the context of entrepreneurial education on the whole (Fayolle and Gailly, 2008; Lackéus, M., 2016). The results also include a survey on the preferences of young professionals who assess the coming Post-COVID-19 situation as a paramount need to be integrated in their training in entrepreneurship.

## 2. Research Goals

Based on the given lines of research, one can conclude that entrepreneurship is an important phenomenon in the modern market economy and its study and effective application are a prerequisite for growth, prosperity and crisis management. Therefore, in addition to the considered 'classical' aspects in the definition of entrepreneurship, the authors believe that one specific feature needs to be considered, in view of the current situation. The authors claim that the creation of a model of entrepreneurship education for the Post-COVID-19 Era should have already started.

According to the authors, the model of the entrepreneur's chain, which specifies the types of entrepreneurs, would consist of the following components:



**Figure 1. Entrepreneurs' chain**

*Source:* Authored model.

The phenomenon of entrepreneurship acts as an integral feature of the market economy. In view of the evolutionary economy, however, entrepreneurship becomes

a mirror, not only of the economy, but also of society as a whole. The fact is, the more developed the market economy in a country, the larger the number of business units and enterprises. Wealth creates fertile ground and contributes to the development of creativity and abilities and talents. Business is growing beyond the convention, which is evidenced by the increased share of entrepreneurs in the creative industries. Creativity largely depends on the development of technological skills, operational capabilities and the application of high-tech capabilities. On the other hand, entrepreneurship is one of the forms of manifestation of social needs in society, which intensifies in times of crisis.

Based on the above, and in view of the presented matrix model, we can conclude that the leading place, from today's point of view, belongs to the complex personality of an entrepreneur. The entrepreneur of the modern times needs to cope with tasks in the following areas: the ability to combine intelligence and erudition for start-up companies in the field of small and medium enterprises; analyse the market and its future needs for a successful enterprise; ability to develop several types of entrepreneurship, including technological and innovative entrepreneurship, creative entrepreneurship. The concept conceived in this way also includes two different types of activities of the entrepreneur, such as activities related to social media and others, not so specific as, for example, digital health. The last two types of activities in the niche of the entrepreneurial chain are indicative and provide guidance on combinability with public health issues and their closer connection with the global health crisis, the possibilities for overcoming it and entering the Post-COVID-19 era. The model is not conclusive, but rather aims to predict market trends and focuses on the trends in high technology business.

In this sense, last but not least, the entrepreneur is obliged to take a proactive attitude to the pressing problems in society and to actively participate with the resources that the specific features of their activity can help to overcome them. Such a tendency is confirmed by the need to develop classical entrepreneurship, but in the direction of creative, technological and innovative entrepreneurship, digital health entrepreneurship, whose areas are confirmed in the current survey as knowledge-intensive areas.

### **3. Problem Statement**

The research goal of this study is to find out what the preferences of young and future professionals are and to what extent they assess the coming Post-COVID-19 situation as an objective needed to be integrated in the training of entrepreneurship subjects such as Public Health and Crisis Entrepreneurship, but also to what extent future professionals assess the need for the inclusion of such subjects as Digital Entrepreneurship, Social media Entrepreneurship and Technopreneurship in the curriculum.

Aiming to take into account the opinion of current students of entrepreneurship, the authors consider the aforementioned areas of knowledge and subject them to assessment by students. The respondents are students who have studied Entrepreneurship at the Bulgarian South-West University "Neofit Rilski",

Blagoevgrad. Students not only participate in a survey and give a critical opinion of the subjects studied, but also seek an answer to the question of the place and role of entrepreneurship during the COVID-19 crisis (Vasenska, 2021). Given the multifaceted nature and complexity of the global pandemic, the fact that our society now is not prepared to deal with such large-scale health crises, many of the issues will remain the subject of future research. Another part of the questions raised concern views and recommendations, thus giving preference to both theory and the praxis of entrepreneurship including creativity, culture and social media. One third part of the problems is expected to have a great relevance for the domain of innovation, technology and sustainable business models.

#### **4. Research Methods**

The proposed study provides a quantitative analysis of a survey among students in entrepreneurship from first to fourth year at the SWU University in Bulgaria.

Some of the discussed topics concern the digitalization process of education during the COVID-19 Era, other regard the access to information and the role of communication technologies, the need of new knowledge, the application of innovations in training. The third part of the questions is directed to need of possible changes in the entrepreneurship education in the Post-COVID-19 era.

The methods of grouping, comparison, graphical index and survey methods are used for the analysis. In order to estimate the research question, in October 2020 this survey was conducted among 90 Bulgarian students. The general sample frame of the population consists of students in two professional fields, Marketing and Business Administration, in the bachelor's and master's degree programmes from the first to the fourth year of study (full-time and part-time) at the South-West University "Neofit Rilski", Blagoevgrad, Bulgaria. The list of the population includes 270 items, excerpted from existing mailing lists of the courses (bachelor and master database of the Faculty of Economics at the SWU "Neofit Rilski", Blagoevgrad). The selection of the sample was made in order to achieve representativeness of the study and it makes one third of the general sample frame. The characteristic features of the population are included in its structure. The study uses a simple random sampling (SRS).

Based on the analysis of the respondents' opinion, the authors were able to assess the advantages and disadvantages of E-learning in the field of entrepreneurship, its opportunities and the need for reorganization, and as they proposed, the existing need of curriculum remodelling. The obtained results provide a vision for inclusion of some new guidelines for the educational material and its expected improvement.

The questionnaire contains four blocks of questions related to: the respondents' profile; the specific features, necessity and importance of E-learning in modern conditions; the need to update the curricula and subjects studied in the era of COVID-19. The evaluation of the indicators is carried out on a 5-point Likert-type scale, whereby the attitudes towards entrepreneurship education in a pandemic situation are determined. Attitudes assessment are distributed as follows: strongly disagree (1); disagree (2); neutral (3); agree (4); strongly agree (5).

## **5. Findings**

The results of the survey show that the sample is dominated by young people who continued their education at the university immediately after graduating from high school. The majority of the respondents (56.7%) are aged between 18 and 25 years. The distribution in the other age groups is as follows: 26-35 years - 26.7%; 36-45 years - 13.3%; 46-55 years - 3.3%. No students over the age of 55 are presented in the survey. The distribution of respondents by gender reveals a predominance of women (73.3%) over men - 26.7%.

The data show that 73.3% of the respondents study in a bachelor's degree programme and 26.7% in a master's degree programme. At the time of enrolment in higher education, full-time education is preferred by 46.7%, part-time - by 53.3%. At the same time, it was found that 6.9% of the respondents are first-year students; 20.7% are second-year, 10.3% are third-year students and 62.1% are fourth-year students.

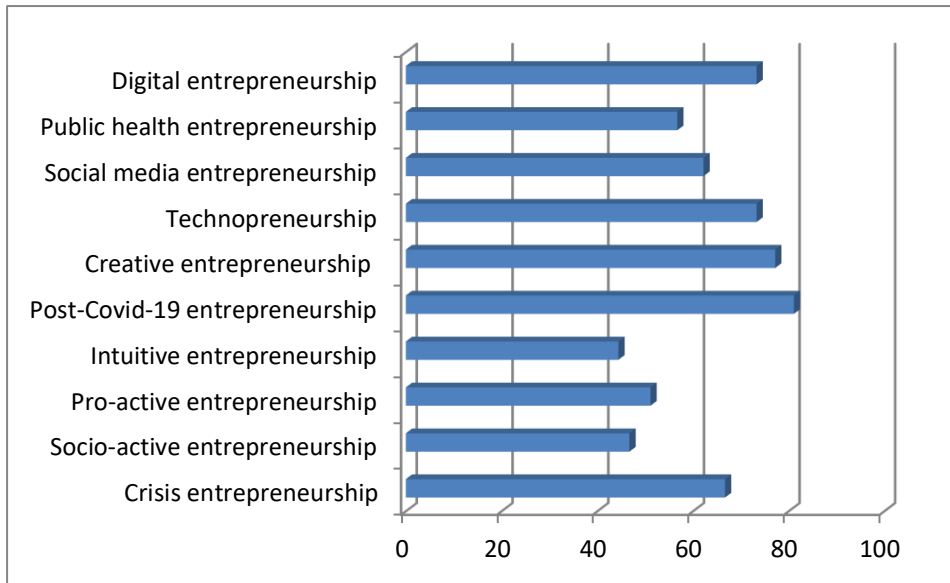
Interest in the study issue is a matter concerning the employment of the students during their training. The results of the survey show that almost all students (96.6%), including full-time students, work during their studies.

An important point is the consideration of the issue from the point of view of the preferred form of education. According to the survey, the predominant part of the respondents (53.4%), express their strong desire to study in the form of distance learning. Around 23.3% of students prefer the on-ground full-time study form and the same share (23.3%) find the hybrid form to be the most effective form of learning. About 36.7% of students strongly agree and 20.0% agree with the notion that the development of information technology increases their learning opportunities. The share of skeptics is relatively low (16.7%).

A detailed study of the issue shows a positive attitude towards the need to introduce online entrepreneurship education (56.7%). The main reason is the desire for development in the field of Digital entrepreneurship (63.4%). In addition, the respondents believe that this will increase their knowledge and competencies (63.4%), professional realization (60.0%) and career development (53.3%).

Regarding the adequacy of the curriculum, the studied subjects and their content in relation to the current situation of training in a pandemic environment, the results of the survey show fluctuation in a large part of the respondents - 40%. 30% of them strongly agree and 26.7% agree with the statement.

An important question on the researched issues is the students' opinion regarding the subjects they would like to study in the Post-COVID-19 era. The data obtained is presented in Figure 2:



**Figure 2. Subjects that respondents would like to study**

Source: Own calculations based on the authors' survey.

\* Note: The sum of percentages is more than 100 because the respondents gave more than one answer.

It should not be overlooked that 6.7% of respondents argue that the study of such subjects would be useful only if they were taught by teachers with practical experience in the relevant fields of technopreneurship, socio-active entrepreneurship and crisis entrepreneurship. The most important areas of entrepreneurial education are the domains of Post-COVID-19 entrepreneurship (81,1%), digital entrepreneurship and technopreneurship (73,3) and creative entrepreneurship (77,2%). Intuitive and socio-active entrepreneurship are the least attractive for the respondents.

Examining the results of the study in the context of Entrepreneurs' chain (see Figure 1), it is clear that students have attitudes not only to study the classical subjects of entrepreneurship, but also those subject to modern times and related to the construction of knowledge, skills and competencies in the field of digitalization, high technology and crisis management.

## 6. Conclusions

Modern conditions and the business environment provide opportunities for development in the field of entrepreneurship, innovation and technology that the young people would like to take advantage of. In this regard, a change in the professional field of education is needed. The expectations to adapt the curricula of higher education to the current situation are in line with the students' demands and market requirements.



The article identifies the following areas as needed for the knowledge development of entrepreneur education for the Post-COVID-19 era:

- Area of digital and technological entrepreneurship;
- Area of creative entrepreneurship;
- Area of Public health entrepreneur;
- Socio-active entrepreneur.

The entrepreneurial environment can still be described as an environment open to innovation and technology, but at the same time, this environment is open to the effects of global economic threats. Thus, there is more and more discussion about the efficiency of the educational curricula provided for the entrepreneurship. The optimality of the social media is part of the debates held in this direction. Information technologies become part of every human product, and they are an inevitable part of the entrepreneurship activity as well. It is also more than obvious that they are a new trend in the future development of socio-economic life, and entrepreneurship cannot stay away from the various aspects of public life and will remain so especially in times of global pandemic crisis.

Based on this study, the need for reorganization of the traditional thinking and the introduction of a new model of entrepreneurship education is discussed. The proposed remodelling chain is estimated as valuable for potential inclusion in subsequent frameworks. Additional methodologies using Hypothesis Testing approach can also significantly contribute to the scope of the examined research questions. The considered issues will be developed in further scientific works of the authors determining the future research directions of the problem.

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