THE IMPORTANCE OF KNOWLEDGE BREADTH IN THE DIGITALIZATION PROCESS OF SOCIAL ENTREPRENEURSHIP

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Abstract. One of the ways to solve economic and social problems is social entrepreneurship. In today's turbulent environment, the question of survival is posed to all economic entities, including those who operate as entities of social entrepreneurship. Digitization of business is a necessary process in innovating business models. In this research, we observed the impact of the knowledge breadth on the process of digitalization of the business of social entrepreneurship entities. In order to measure the knowledge breadth, we used the plans according to which the education in the field of digitization is carried out, the number of certified and expert lecturers, the number of sources of knowledge, patents and creativity. The main goal of the research is to determine whether the knowledge breadth can contribute to accelerating the process of digitization of social entrepreneurship and thereby contribute to its development. 97 social entrepreneurship entities from Bosnia and Herzegovina (B&H) participated in the research. Data were collected using questionnaires and analyzed using correlation and regression methods. We investigated the importance of the knowledge breadth in the process of digitization of social entrepreneurship. According to the results of the research, the knowledge breadth significantly affects the application of digitization in social entrepreneurship entities.

Key words: social entrepreneurship, knowledge breadth, digitalization, economic and social development

JEL Classification: O10, O33, O35

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1. INTRODUCTION

Freedom of competition contributes to the development of the entrepreneur as an individual, and thus the economy, because according to Schumpeter's theory, the growth of the number of entrepreneurs leads to economic growth (Bazhal, 2016). If everything worked as in theory, there would be no poverty, and we are aware of the fact that this is a big problem today. We are also aware of the fact that people who have some physical disability or other health problem cannot live normally due to lack of understanding of the environment and poor employment opportunities. All over the world, numerous governmental and non-governmental organizations and associations are struggling with these problems, in order to provide this part of the community with a decent life and open employment opportunities. One of the possibilities that perhaps offers the best and highest quality solution is the development of social entrepreneurship. The measures adopted by the states are mostly short-term and insufficient to have a long-term effect on suppressing the negative consequences of these problems. Therefore, it is very important to find some alternative ways to influence the reduction of social inequality and increase the inclusion of marginalized groups of society in all economic and social flows of the community. Social entrepreneurship is a great way to solve these problems. This research is focused on the analysis of the connection and relationship between the digitization process and the development of social entrepreneurship. The development of technology requires the development of innovative business models in all areas of business, including social entrepreneurship. Dees (1998) observes social entrepreneurship as a phenomenon that shows potential for solving accumulated social problems, for addressing unmet needs and innovative ways of connecting and using existing resources. The development of ideas, expansion of knowledge and innovation are something business entities cannot survive without in the current turbulent business environment. The crisis caused by the pandemic of the COVID-19 virus is the best indicator of the importance of digitization, ideas, innovations and knowledge. Business entities that were ready to respond to this challenge survived even in these difficult times. Therefore, advanced digital technology, that is, "artificial intelligence (AI), Internet of things, Big Data, social networks, Cloud, computing, robotics, 3D printers, autonomous vehicles, virtual reality, machine learning, are no longer in the domain of mega trends of the future, but have become a reality in the XXI century" (Petković, 2021, p. 56).

Like all business entities, social entrepreneurs also face increasing competition on the market, and that is why innovations are very important in this area as well. Innovating business models of social entrepreneurship is the only way to survive in this environment. This fact is supported by empirical research and authors who dealt with this issue (Seelos & Mair, 2005; Müller, 2012; Wulleman & Hudson, 2015). Ludbrook et al. (2019) and Barbieri & Santos (2020) talk about the importance of business models and their constant innovation. Social entrepreneurship reduces unemployment, includes marginalized social groups in economic activities, helps solve health, educational and other social problems, fights against climate change and pollution of nature. In order to speed up the digitization process, it is necessary to provide adequate training for employees that will enable IT literacy. It is necessary to ensure the expansion of the knowledge of both employees and managers. State institutions must necessarily be involved in encouraging this process. It is necessary to organize seminars, workshops, to develop programs that will bring the digitization process and its significance closer to the business and social community. Digitization is not a "spook", but a necessity in order for anyone to function and survive.
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Today. Thanks to digitalization and advanced technologies, the whole world is now "at your fingertips", so no one should run away from this process, but adapt in the best possible way.

The connection between digitization and social entrepreneurship appears as a way to overcome numerous economic and social problems. In this paper, we will observe the influence of the knowledge breadth on the process of digitization of social entrepreneurship. We will declare other factors as constants (ceteris paribus). Based on this, we defined the research problem with the following question: How can the knowledge breadth contribute to improving the digitalization of social entrepreneurship?

Based on the problem we have defined, we can also determine the subject of our research. The subject of the research is a theoretical-empirical analysis of the knowledge breadth and its influence on the process of digitization of social entrepreneurship with special reference to B&H. We will locate the research subject in the field of entrepreneurial and theoretical economics. We will declare the influence of other variables as constants in this research. The geographical area of research in this paper is the territory of B&H.

The theoretical part of the analysis refers to the review of relevant literature in the field of digitalization and social entrepreneurship, as well as the impact of the digitalization process on the development and innovation of social entrepreneurship. The empirical analysis is based on the examination of social entrepreneurship entities. The research was conducted in the form of a survey with a structured questionnaire.

We believe that this research will be useful to institutions that should support the development and implementation of digitization in all business sectors, as well as to institutions that should support the development of social entrepreneurship. This research will be useful to the SME sector and entrepreneurship in order to introduce advanced technologies in their business and complete the digitization process in the fastest and easiest way. Also, this research should awaken the awareness of existing small and medium-sized enterprises and entrepreneurs to the importance of solving some social problems and that in this way both economic and social goals can be achieved. We believe that the public is not sufficiently familiar with both the digitalization process and the concept and significance of social entrepreneurship, and that this research will raise awareness and encourage anyone who has an idea and thinking about starting a business to focus on this way of business.

This paper consists of seven parts: an introduction, literature research, developed hypothesis, methods, research results, discussion and conclusion.

2. LITERATURE REVIEW

Social entrepreneurship. According to the classic definition, entrepreneurship represents a set of human activities to combine resources in order to achieve a certain business venture (Vukmirović, 2006). In recent years, there are more and more economic opinions according to which entrepreneurship is considered the fourth factor of production, next to labor, capital and technologies (Wadhwni et al., 2020). When we add the achievement of some social goal to these definitions, we arrive at the concept of social entrepreneurship. The first social enterprises in Europe were formed in Italy and were called social cooperatives. Based on this example, social entrepreneurship is starting to develop in other European countries as well. This has the consequence that today there are around 40 million employees and 200 million volunteers working in the social entrepreneurship sector in the world (Banjac & Dojčinović,
In the 19th century, cooperatives played a leading role in the social economy sector, and were one of the oldest and most widespread forms of social enterprises (Volkmann et al., 2012, p. 10). "The importance of social entrepreneurship in a certain society is inversely proportional to the level of development. That is, if society is less developed, the importance of social entrepreneurship is greater" (Petković, 2021, p. 106). Social entrepreneurship represents "business ventures that, in addition to generating profit for the owners, also have some (higher) social or ecological purpose" (Martin & Osberg, 2007, p. 34). "Social enterprises are enterprises that operate on the market for social and ecological reasons. Although they primarily strive to achieve social and ecological goals, social enterprises should behave like companies from the private profit sector and should achieve both financial and commercial goals" (Ridley-Duff & Bull, 2011, p. 114). According to Guerrero et al. (2020), the ecosystem of social entrepreneurship includes non-linear dynamics, focusing on creativity, vision, dedication and the ability of individual entrepreneurs to recombine resources to create new products and initiate market processes that are far from equilibrium and create a market order.

**Digitalization.** According to Brennen & Kreiss (2016), digitization in the broadest sense represents the translation of an analog signal into digital form. It changes companies by influencing changes in their organizational structures, management strategies and relationships with customers and other companies (De Groen et al., 2017). Successful companies systematically prepare for digital transformation instead of reacting to it situationally (Burilović, 2020). Digitization has a particularly strong impact on small businesses that, due to financial and other reasons, are slow to adapt to new market conditions (Bollweg et al., 2018). Each enterprise should identify its capabilities and the ways in which the digital transformation will be carried out (Hagel et al., 2015). Digitization in business refers to enabling, improving and transforming business operations, functions, models, processes and activities using digital technologies and digitized data (Legner et al., 2017). Even after the digitization process is completed, it is necessary to continue to live with changes and constantly find new business solutions (Schallmo & Daniel, 2018).

**Knowledge breadth.** Knowledge is information and skills that human beings acquire through their mental abilities (Chazette et al., 2021, p. 197). Knowledge is acquired through the ability of human beings to recognize, observe and analyze the facts and information that surround them. Based on knowledge, skills and abilities are developed (Kazemi & Allahyari, 2010, p. 873). According to Alavi & Leidner (2001, p. 115), knowledge is confirmed information. "Most scientists consider that the accumulation of individual information, skills, abilities, experiences and understanding in coded and decoded forms is the simplest description of knowledge" (Saleh et al., 2018, p. 388). In order to create ideas and develop innovations, it is necessary to continuously expand knowledge. Innovation requires broad knowledge and it is characterized by great ingenuity and creativity. Ferreras-Méndez et al. (2015, p. 87) define knowledge breadth "as the number of knowledge sources or search channels that firms rely on to improve their knowledge base". According to Jin et al. (2019, p. 733), "for example, companies can acquire technological knowledge, market knowledge and/or knowledge in other fields. This can be characterized as knowledge breadth ". According to Hwang et al. (2014, p. 4) knowledge breadth "refers to how much knowledge individuals have about different domains". Knowledge breadth represents the diversity of knowledge, knowledge and experiences of an individual, that is, the number of different domains within his or her knowledge. Individuals with broad knowledge have greater exposure to diverse perspectives that increase their ability to recombine knowledge (Mannucci & Yong, 2018, p. 1744). According to Damanpour & Aravind (2012), knowledge
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is a much more important resource than the financial power of organizations. Nagano (2019) observes knowledge as an organizational resource and that it has completely different characteristics compared to other resources. It can be used countless times without being used up and it will not be reduced by exchange, on the contrary, it will be increased.

3. HYPOTHESIS DEVELOPMENT

In order to measure knowledge breadth, we will use the plans according to which the education in the field of digitization is carried out, the number of certified and expert lecturers, the number of sources of knowledge, the number of patents and individual creativity. Del-Corte-Lora et al. (2016) used regression analysis to determine the impact of knowledge breadth on innovation. They used different sources of knowledge as measures. Farazi et al. (2019) used discovered technological advantage (patents, licenses, innovations) to measure knowledge breadth in their research. Lodh & Battaggion (2015) used patents and creativity as measures of knowledge breadth in their research. Moorthy & Polley (2010) also used patents as a measure of knowledge breadth in their research. Modern and high-quality educational plans of companies and cooperation with educational institutions are emerging as key factors in the successful implementation of digital transformation in numerous sectors (Day et al., 2019). Altunay & Altunay (2018) proved that the development of technology and digitization develop skills and provide a chance for women social entrepreneurs who create projects to encourage social responsibility for knowledge exchange, research and learning. According to Xu (2015, p. 610), "the knowledge breadth has a direct impact on innovation". Symeonidou et al. (2022) identified knowledge breadth as an important factor affecting income growth, as well as a factor in the development of functional entrepreneurial abilities. Leiponen (2005, p. 305) explores knowledge as one of the key factors in improving market performance and believes that "companies that initially possess high skills can feel that investments in research and development are more productive, which enables superior results". Certain authors have proven in their research that the knowledge breadth is very important for innovation and technological progress of both organizations and entrepreneurs (Leiponen & Helfat, 2010; Zhang, 2016; Radicic, 2020). Ratten (2018) showed that digitization has a positive impact on the development of social entrepreneurship. The development of the Internet and social networks has enabled easier and faster communication and exchange of information. Digitization can be used to modernize individual business operations of entrepreneurs or corporations (Van Welsum, 2016). The great advantages of digitalization are easier and faster communication and understanding of customer needs and wishes, as well as simpler monitoring of the success of marketing moves (Kergroach, 2020). Digitization enables faster feedback from customers and therefore faster transformation of products according to the customer (Thrassou et al., 2020). Digitization of business makes it easier to direct activities to the target group of customers (Garzoni et al., 2020). Many micro and small enterprises have become multinational giants with the help of digital innovations, such as Microsoft, Google, Apple, Samsung and other entrepreneurial growing companies (Petković, 2021, pp. 345-348).

Based on this, we will define the research hypothesis (H): Expanding the knowledge of employees in the field of application of digitization will contribute to the development of social entrepreneurship.
4. Methods

For the purpose of testing the hypothesis, we used a combined empirical research - theoretical and quantitative research. To be able to determine the significance of the knowledge breadth in the digitization process that will contribute to the development of social entrepreneurship, we collected, processed, analyzed and interpreted secondary and primary data. As part of the theoretical research, we used domestic and foreign literature. This part of the research gave us an insight into the current state of the research problem and enabled us to analyze the results of recent research in this area and to discuss and compare them with the results of empirical research conducted for the purposes of testing the research hypothesis and seeking answers to the research problem.

The methods we used in this research for data processing and analysis enabled us to determine the impact of knowledge breadth on digitalization of social entrepreneurship. We will observe knowledge breadth as an independent variable, and the digital transformation of social entrepreneurship as a dependent one. The influence of other variables in this research will be declared as constants (ceteris paribus). For the purposes of this research, we used questionnaires. The questionnaire contains two parts. The first part of questionnaire refers to the general information about social entrepreneurship. Second part of the questionnaire refers to the knowledge breadth of respondents. The questionnaire was designed based on the 2016 ZEW (Leibniz Center For European Economic Research) research on digitalization of social entrepreneurship. The part of the questionnaire related to breadth of knowledge contains questions that include measures of breadth of knowledge as an independent variable (the plans according to which the education in the field of digitization is carried out, the number of certified and expert lecturers, the number of sources of knowledge, the number of patents and individual creativity). The answers to these questions were used as data that gave us a clear picture about the level of the respondent's breadth of knowledge in the field of digitization and whether it can influence the development of social entrepreneurship.

In order to be able to compare the results of the analysis, we used the methods of comparison and classification, then the methods of analysis and synthesis.

For data processing, we used automatic data processing using the Google Drive application, which displays the data from the completed questionnaire tabularly and graphically in MS Excel.

We used quantitative methods to analyze and test hypotheses:

- Binomial distribution - probability distribution model (Sylla, 2014),

\[
P(x) = \binom{n}{x} p^x q^{n-x}
\]

\[x = 0, 1, 2, ..., n\]

\[P(x) = 0 \text{ for all other } x\]  \hspace{1cm} (1)

- Chi square test ($\chi^2$) - testing the significance between the frequency of distribution and the mutual connection of different characteristics (Lovrić et al., 2006),

\[
\chi^2 = \sum_{i=1}^{r} \frac{(f_i - f_i^*)^2}{f_i^*}
\]

(2)
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- Duncan test of variance analysis – analysis of the impact of one phenomenon to another (Duncan, 1955; Ćobanović et al., 2003),
  \[ R_{(p,v,a)} = \sigma_m \cdot \tau_{(p,v,a)} \]  

- Signum test – since the collected results had non-parametric characteristics that deviate from the expected binomial distributions, the Signum test was also used, which is also used for hypothesis testing (Stević et al., 2021; Stević et al., 2019).

The population in this paper consists of business entities and non-profit organizations on the territory of Bosnia and Herzegovina that are engaged in social entrepreneurship, that are solving a certain social problem by investing part of their profits. Selection of the sample was one of the biggest problems during the research. Namely, in B&H there is no official record of social entrepreneurship subjects from which we could get contacts. We managed in various ways. We got 122 email addresses from different sources (from associations dealing with the gathering of social entrepreneurs, from the CDP Globus-center which gathers social entrepreneurs in B&H, from various social entrepreneurship conferences from B&H) and sent them the questionnaire electronically. We formed the sample of 97 participants. This sample refers to those respondents who returned the completed questionnaire to us. We sent the questionnaires to the addresses of the managers of social entrepreneurship entities or to the official email addresses of the entities with a note that the questionnaires should be filled out by their managers. We believe that managers of social entrepreneurship entities have the best data on the breadth of knowledge in their organizations, as well as on the development of social entrepreneurship. Therefore, we believe that the managers of the social entrepreneurship entities have filled out the questionnaires. Based on the application of these methods and the obtained results, in this research we proved that the knowledge breadth has a significant impact on accelerating the process of digitization of social entrepreneurship entities. The presented results can contribute to improving the development of social entrepreneurship as a factor in the economy and society development. At the end, we compared the obtained results with the results of similar research and looked at the possibilities of their application in B&H and other small open economies in development.

5. Research Results and Testing of Hypothesis

Our research covered the whole of Bosnia and Herzegovina. The distribution of the years of establishment of social entrepreneurship entities is not even due to three companies from the 60s of the last century, the median year of establishment is 2006.68. Therefore, we see that the median year of establishment is not far away and that these are relatively “young” social entrepreneurship entities (Figure 1).

Most of the social enterprise entities that participated in the research were registered as citizens’ associations (28.9%), followed by limited liability companies (23.7%), followed by independent entrepreneurs (18.6%). 12.4% of organizations are registered as non-governmental organizations, 8.2% of organizations are registered as cooperatives and 4.1% of organizations are registered as foundations.
The results of the research show that the social entrepreneurship entities in the B&H are engaged in various activities. 25.8% of respondents are engaged in agriculture, which is the most represented activity in the sample. In second place is the store with a 22.7% share in the total sample. In third place is the provision of psychological and health services with 9.3% participation. This is followed by tourism, education and the food industry with a 7.2% share each. There are also: ecology with 5.2%, hospitality with 3.1% and finance with 2.1% participation.

The number of employees per organization is approximately exponentially distributed and it is determined by great inequality. The largest, dominant group consists of companies with up to 10 employees (81), and the average number of employees is 10,092. Therefore, the survey mostly covered micro-enterprises (Figure 2).

When we talk about the level of education of employees by organization, 54 organizations declared that they have from 1 to 4 employees with a university degree, 15 organizations declared that they have from 5 to 9 employees with a university degree, while 8 organizations declared that have 10 or more employees with a university degree. Most organizations (55) declared that they have from 1 to 4 employees with a high school education. 11 organizations declared that they employ up to 5 workers with higher vocational education, while 3 organizations declared that they employ from 5 to 10 workers with higher vocational education. 13 organizations declared that they have from 5 to 9 employees with high school education.
education, then 3 organizations declared that they have from 10 to 19 employees with high school education, while 6 organizations declared that they have 20 or more employees with high school education. 9 organizations employ up to 10 qualified workers. 13 organizations employ up to 4 unskilled workers, while one organization declared that it employs up to 30 unskilled workers seasonally.

The average lifespan of workers is normally distributed, with a mean age of 40.104 years, with a standard deviation of 6.49 years ($\chi^2=11.36219$, df=7, p=0.12358). This distribution is shown in Figure 3.

![Fig. 3 Histogram of the distribution of the lifespan of workers](image)

**Source:** The creator of the figure is the author (prim. aut.)

Table 1 shows the answers to the question "Which social problems does your organization deal with?". It was possible to give several answers at the same time. From the analyzed answers, we can conclude that the most frequent problem, which organizations deal with, is the inclusion of marginalized groups of society in economic flows. Next, there is the education of marginalized groups of society through various educations, seminars and trainings, as well as health care and other problems that the respondents try to solve through their activities.

<table>
<thead>
<tr>
<th>No.</th>
<th>Solving social problems</th>
<th>Number of answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inclusion of marginalized groups of society in economic flows</td>
<td>83</td>
</tr>
<tr>
<td>2.</td>
<td>Education of marginalized group sof society</td>
<td>36</td>
</tr>
<tr>
<td>3.</td>
<td>Health Care</td>
<td>23</td>
</tr>
<tr>
<td>4.</td>
<td>Ecological problems</td>
<td>11</td>
</tr>
<tr>
<td>5.</td>
<td>Others</td>
<td>5</td>
</tr>
</tbody>
</table>

**Source:** The creator of the table is the author (prim. aut.)

The distribution of the answers to the question "In the last three years (from 2018 to 2021) my organization has placed a new product or service on the market" is a binomial distribution with exclusive answers ((0) No and (1) Yes), with parameter of mean value of $p=0.6185$, analogue to the prevalence of positive responses (61.85%) (Figure 4). In the figure, we can see that 60 respondents have placed a new product or service on the market in the period of the previous three years.
Distribution of answers to the question "In the last three years (from 2018 to 2021), my organization has introduced some innovation in the way of producing products or providing services" with the following answers ((0) completely disagree, (1) disagree, (2) agree, (3) completely agree) was verified ($p=0.1789>0.05$) by binomial distribution with parameter $p=0.7345$ ($\chi^2=1.80632$, df=1) (Figure 5). The mathematical expectation of responses of 1.9381 and standard deviation of 0.9980 with mode 2 (group of 40 respondents) was realized. This distribution of responses highlights two homogeneous groups in which the primary commitment (positive or negative) is clear, but the gradation of these commitments is not complete. The answers are moderately eccentric:

- Answers of respondents 13 and 12 respectively, a total of $25/97=0.2578$, which somewhat correspond to the negative answer from the question "In the last three years (from 2018 to 2021), my organization has placed a new product or service on the market" ($37/97=0.3814$).

- Answers of respondents, respectively 40 and 32, a total of $72/97=0.7422$, which somewhat correspond to the positive answer from the question "In the last three years (from 2018 to 2021), my organization has placed a new product or service on the market" ($60/97=0.6185$).
Here is the question about the difference between "new product" and "innovation" from the previous two questions. If we set the new product as an independent factor, the influence of this factor on innovation as a dependent variable, we confirm the agreement of the response (p=0.00011) by analysis of variance, i.e. all respondents, who answered positively or negatively to the first question related to "new product", significantly transferred the answer to "innovation", i.e. organizations that introduced a "new product" also introduced an "innovation".

To the question "We are satisfied with the level of development of social entrepreneurship in our economic environment" (with answers: (0) completely disagree, (1) disagree, (2) agree, (3) completely agree), a crushing response is obtained, which is reflected in general dissatisfaction. As many as 95 out of 97 respondents (95/97=0.9793) of absolutely insignificant binomial distribution (eccentrically negative) gave answers from the negative domain, and only 2 respondents from the positive domain, where not a single respondent had absolute agreement with the question. The mathematical expectation of 0.4532 and the standard deviation of 0.5404 with mode (group of 56 respondents) were realized (Figure 6).

**Fig. 6** Histogram of the significant binomial distribution of satisfaction of the level of social entrepreneurship development

*Source: The creator of the figure is the author (prim. aut.)*

According to the answers to this question, we see that the respondents are dissatisfied with the level of development of social entrepreneurship.

Digitalization. The distribution of answers to the descriptive question "We most often use computers for (with the possibility of choosing several answers at the same time)", is marked by the dominance of answers: processing text, issuing invoices and interacting with clients via social networks and websites.

The distribution of answers to the question "In business we use smartphones every day" (with the following answers: (0) completely disagree, (1) disagree, (2) agree, (3) completely agree) was verified by a highly significant (p=1) binomial distribution with parameter p=0.9037. The mathematical expectation of 2.7113 and the standard deviation of 0.5943 with mode 3 (group of 74 respondents) were realized (Figure 7).
The distribution of answers to the question "We currently use advanced software, computer programs in our business" gave devastating results, with only 2 out of 97 respondents stating the use of advanced software!

The distribution of answers to the question "The current structure of employees is a big problem in the process of digitalization of business" (with the following answers: (0) completely disagree, (1) disagree, (2) agree, (3) completely agree) was verified by significant ($\chi^2=1.21230$, df=2, $p=0.5454$) binomial distribution with parameter $p=0.5773$. The mathematical expectation of 1.7319 and the standard deviation of 0.8840 with mode 2 (group of 36 respondents) were realized. A total of 57 answers are in the positive domain. This binomial distribution is centered with a slight slope to the positive response domain (Figure 8).

The distribution of answers to the question "Use of intranet platforms for information exchange (Wikis, blogs, podcasts...)" with the following answers ((0) do not use at all, (1) sometimes use, (2) often use, (3) always use) is not verified by significant ($\chi^2=17.01323$, df=1, $p=0.0001$) binomial distribution with parameter $p=0.3642$. The answers to this question realized the mathematical expectation of 1.0927 and the standard deviation of 1.0905 with mode 0 (group of 39 respondents) (Figure 9).
Fig. 9 Histogram of the non-significant binomial distribution of the use of intranet platforms for information exchange  
Source: The creator of the figure is the author (prim. aut.)

The distribution of answers to the question: "E-commerce" with the following answers ((0) do not use at all, (1) sometimes use, (2) often use, (3) always use) was not verified by significance (p=0.0000) by binomial distribution with parameter p=0.1097. The answers to this question realized a mathematical expectation of 0.3298 and a standard deviation of 0.8000 with a mode of 0 (group of 79 respondents) (Figure 10).

Fig. 10 Histogram of non-significant binomial distribution of E-commerce usage  
Source: The creator of the figure is the author (prim. aut.)

The distribution of answers to the question: "Do you use an interface for exchanging information with business partners?" with the following answers ((0) do not use at all, (1) sometimes use, (2) often use, (3) always use) was not verified by significant ($\chi^2=31.97603$, df=1, p=0.0000) binomial distribution with parameter p=0.1615. The answers to this question realized a mathematical expectation of 0.4845 and a standard deviation of 0.8910 with a mode of 0 (group of 71 respondents) (Figure 11).
The distribution of answers to the question: "Usage of cloud applications" with the following answers ((0) do not use at all, (1) sometimes use, (2) often use, (3) always use) was not verified by significant ($\chi^2 = 26.42078$, df=1, $p=0.0000$) binomial distribution with parameter $p=0.2749$. The responses realized the mathematical expectation of 0.8247 and the standard deviation of 0.0409 with mode 0 (group of 53 respondents) (Figure 12).

The distribution of answers to the question: "Data analysis using Big data" with the following answers ((0) do not use at all, (1) sometimes use, (2) often use, (3) always use) by binomial distribution with parameter $p=0.1443$. The answers realized the mathematical expectation of 0.4329 and the standard deviation of 0.8768 with mode 0 (group of 74 respondents) (Figure 13).
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Fig. 13 Histogram of non-significant binomial distribution of the use of Big data
*Source:* The creator of the figure is the author (prim. aut.)

The Signum test additionally confirmed a significant difference (p<0.0001) between the unverified binomial distributions of the answers to the questions "Usage of cloud applications" and "Data analysis using Big data", i.e. we can point out that, although modest, the use of cloud applications is significantly more common than "Big data" analysis.

_Digital skills of employees._ The questions: "Number of workers who have a license or certificate as proof that they have digital skills (at least basic)" and "Number of workers (without license or certificate) who have practical skills and competences to master digital skills" were expanded by the complement: "Number of workers (without a license or certificate) who do NOT have practical skills and competences to master digital skills" and are calculated as a percentage (%) in relation to the number of workers. The following was established:

In 58 organizations, up to 10% of workers have a license or certificate as proof that they have digital skills (at least basic), or 5 organizations have 90% to 100% of employees who have a license (Figure 14).

Fig. 14 Histogram of the number of workers with a license or certificate as proof that they have digital skills (at least basic)
*Source:* The creator of the figure is the author (prim. aut.)
In 29 organizations, 30% to 40% of workers without a license or certificate have practical skills and competencies to master digital skills, or 6 organizations have 90% to 100% of employees who possess (master) digital skills without a license (Figure 15).

![Fig. 15 Histogram of the number of workers (without a license or certificate) who have practical skills and competencies to master digital skills](image)

**Source:** The creator of the figure is the author (prim. aut.)

In 22 organizations, 60% to 70% of workers do not have digital skills (Figure 16).

![Fig. 16 Histogram of the number of workers (without a license or certificate) who do not have practical skills and competencies to master digital skills](image)

**Source:** The creator of the figure is the author (prim. aut.)

In order to measure the knowledge breadth, we will use the plans according to which the education in the field of digitalization is carried out, the number of certified and expert lecturers, the number of sources of knowledge, patents and creativity (Farazi et al., 2019; Lodh & Battaggion, 2015; Moorthy & Polley, 2010).

The distribution of answers to the question: "Current digital skills of employees" with the following answers ((0) none, (1) weak, (2) good, (3) very good) was not verified by significant ($\chi^2=9.58069$, df=2, $p=0.0031$) binomial distribution with parameter $p=0.4398$. The answers realized the mathematical expectation of 0.1.3196 and the standard deviation of 0.7295 with mode 1 (group of 54 respondents) (Figure 17).
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The distribution of answers to the question: "Do you have developed education plan for employees?" with the following answers ((0) NO, (1) YES) was verified by the elementary binomial distribution with the parameter \( p = 0.2577 \). The answers realized the mathematical expectation of 0.2577 and the standard deviation of 0.4396 with mode 0 (group of 72 respondents) (Figure 18).

The distribution of answers to the question: "How do you ensure the acquisition of digital knowledge and skills of employees (you can choose several answers at the same time)?" is as follows:

None.........................................................3
On-the-job training ..............................76
Training outside the organization......39
Seminars .............................................51
Practice in other institutions..........3
Trainings .............................................26

Distribution of answers to the question: "How easily do you find experts in the field of application of digital technologies who can transfer adequate knowledge to training
Participants?" with the following answers ((0) very difficult, (1) difficult, (2) easy, (3) very easy), was not verified by significant ($\chi^2=11.63623$, df=2, p=0.0029) binomial distribution with parameter $p=0.4192$. The answers realized the mathematical expectation of 1.2577 and the standard deviation of 0.6658 with mode 1 (group of 51 respondents) (Figure 19).

![Fig. 19 Histogram of non-significant binomial distribution of access to experts](image19)

Source: The creator of the figure is the author (prim. aut.)

The distribution of answers to the question: "How satisfied are you with the competences and expertise of the lecturer?" with the following answers ((0) completely dissatisfied, (1) dissatisfied, (2) satisfied, (3) completely satisfied) was not verified by significant ($\chi^2=38.54537$, df=2, p=0.0000) binomial distribution with parameter $p=0.6151$. The answers realized the mathematical expectation of 1.8454 and the standard deviation of 0.5465 with mode 2 (group of 72 respondents) (Figure 20).

![Fig. 20 Histogram of significant binomial distribution of satisfaction with lecturers' competences and expertise](image20)

Source: The creator of the figure is the author (prim. aut.)

Distribution of answers to the question: "Workers are motivated to acquire skills and knowledge necessary for the application of digital technologies" with the following answers ((0) completely disagree, (1) do not agree, (2) agree, (3) completely agree) was not verified by significant ($\chi^2=17.94343$, df=2, p=0.0001) binomial distribution with parameter $p=0.6118$. 
The answers realized the mathematical expectation of 1.8351 and the standard deviation of 0.6069 with mode 2 (group of 59 respondents) (Figure 21).

![Histogram of non-significant binomial distribution motivated to acquire skills and knowledge necessary for the application of digital technologies](image)

**Fig. 21** Histogram of non-significant binomial distribution motivated to acquire skills and knowledge necessary for the application of digital technologies  
*Source:* The creator of the figure is the author (prim. aut.)

The distribution of answers to the question: "Workers acquired satisfactory digital skills after the training" with the following answers ((0) completely disagree, (1) do not agree, (2) agree, (3) completely agree) was not verified by significant ($\chi^2 = 30.12363$, df=2, $p=0.0000$) binomial distribution with parameter $p=0.6185$. The answers realized the mathematical expectation of 1.8557 and the standard deviation of 0.5588 with mode 2 (group of 68 respondents) (Figure 22).

![Histogram of the non-significant binomial distribution of the acquisition of satisfactory digital skills](image)

**Fig. 22** Histogram of the non-significant binomial distribution of the acquisition of satisfactory digital skills  
*Source:* The creator of the figure is the author (prim. aut.)

The distribution of answers to the question: "Does your organization own a patent?" with the following answers ((0) NO, (1) YES) was verified by elementary binomial distribution with parameter $p=0.0103$. The answers realized the mathematical expectation of 0.0103 and the standard deviation of 0.1015 with the mode 0 (group of 96 respondents) (Figure 23).
The distribution of answers to the question: "Creativity of workers" with the following answers ((0) no creativity, (1) low level of creativity, (2) high level of creativity, (3) very high level of creativity) was verified by significant ($\chi^2=0.29000$, df=1, $p=0.5902$) binomial distribution with parameter $p=0.6701$. The answers realized the mathematical expectation of 2.0103 and the standard deviation of 0.7568 with mode 2 (group of 42 respondents) (Figure 24).

Analyzing the variance by Duncan's test, we came to the observed results. The distribution of answers to the question "Current digital skills of employees" was not verified by a significant binomial distribution ($p=0.0031$) and had the following answers respectively:

- (0) none.................................9
- (1) weak.................................54
- (2) good.................................28
- (3) very good...........................6

The mathematical expectation of 1.3196 with mode 1 (group of 54 respondents) is consistent with the response of weak digital skills of employees.
If the question of the current digital skills of employees is considered as a factor - grouping variable, and the question "Average life expectancy of employees" as a dependent variable, the following results of Duncan's variance analysis test are obtained (Table 2):

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>41.11</td>
<td>42.85</td>
<td>38.03</td>
<td>36.83</td>
</tr>
<tr>
<td>(0) none</td>
<td></td>
<td>0.64</td>
<td>0.41</td>
<td>0.28</td>
</tr>
<tr>
<td>(1) weak</td>
<td>0.64</td>
<td>0.22</td>
<td>0.14</td>
<td>0.75</td>
</tr>
<tr>
<td>(2) good</td>
<td>0.42</td>
<td>0.22</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>(3) very good</td>
<td>0.28</td>
<td>0.14</td>
<td>0.75</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Source:  The creator of the table is the author (prim. aut.).

The distribution of answers to the question "Current digital skills of employees" was not verified by binomial distribution, so we conclude that part of the answer was subjective. The analysis of variance did not highlight significant results, but it is important to note that "none" and "weak" digital skills were established for average ages above 40, and "good" and "very good" for average ages below 40.

If we set "Current digital skills of employees" as a factor, and the question: "Do you have developed education plan for employees?" as a dependent variable, which is an elementary binomial distribution with a mean value of 0.4396 (72 answers NO and 25 answers YES) we get the following results of Duncan's analysis of variance test (Table 3):

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average:</td>
<td>0.22</td>
<td>0.11</td>
<td>0.39</td>
<td>1.00</td>
</tr>
<tr>
<td>(0) none</td>
<td></td>
<td>0.48</td>
<td>0.28</td>
<td>0.00</td>
</tr>
<tr>
<td>(1) weak</td>
<td>0.48</td>
<td>0.09</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(2) good</td>
<td>0.28</td>
<td>0.09</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>(3) very good</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source:  The creator of the table is the author (prim. aut.).

According to Table 3, we can conclude that very good digital skills of employees are achieved exclusively and extremely significantly in organizations that have a developed education plan. The distribution of answers to the question "How easily do you find experts in the field of digital technology application who can transfer adequate knowledge to training participants" was not verified by a significant binomial distribution (p=0.0029) and had the following answers respectively:

(0) very difficult.................11
(1) difficult.........................51
(2) easy.................................34
(3) very easy...........................1

The mathematical expectation of 1.2577 with mode 1 (group of 51 respondents) agrees with the answer of the difficulty of finding experts in the field of application of digital technologies who can impart adequate knowledge to the participants of the training.
We set the answer to the question "How easily do you find experts in the field of application of digital technologies who can transfer adequate knowledge to training participants?" as a factor, and the question "Current digital skills of employees" as a dependent variable, and we get the following results of Duncan's analysis of variance test (Table 4).

**Table 4** Current digital skills of employees in relation to the ease of reaching experts in the field of application of digital technologies who can impart adequate knowledge to training participants

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average:</td>
<td>0.9090</td>
<td>1.1765</td>
<td>1.6471</td>
<td>2.0000</td>
</tr>
<tr>
<td>(0) very difficult</td>
<td>0.6083</td>
<td>0.6083</td>
<td>0.1846</td>
<td>0.0469</td>
</tr>
<tr>
<td>(1) difficult</td>
<td>0.6083</td>
<td>0.3678</td>
<td>0.1383</td>
<td></td>
</tr>
<tr>
<td>(2) easy</td>
<td>0.1846</td>
<td>0.3678</td>
<td>0.4990</td>
<td></td>
</tr>
<tr>
<td>(3) very easy</td>
<td>0.0469</td>
<td>0.1383</td>
<td>0.4990</td>
<td></td>
</tr>
</tbody>
</table>

*Source: The creator of the table is the author (prim. aut.)*

Analysis:

The distribution of answers to the question "How easily do you find experts in the field of application of digital technologies who can transfer adequate knowledge to training participants?" and "Current digital skills of employees" was not verified by binomial distributions, so we conclude that the part of the answer was subjective.

First, let us remind that the mean value of digital skills of employees was 1.3196. Organizations that:
- "very difficult" find an expert have a rate of 0.9090 of employees' digital skills (below average),
- "difficult" find an expert have a rate of 1.1765 of employees' digital skills (below average),
- "easy" find an expert have a rate of 1.6471 of employees' digital skills (above average),
- "very easy" find an expert have a rate of 2.000 of employees' digital skills (above average).

Although subjective answers were given to both cross-questions, the analysis of variance highlights one significant difference between the extreme answers. These are "very difficult" finding experts which results in "no" digital skills of employees and "very easy" finding experts which results in "very good" digital skills of employees.

The distribution of answers to the question: "Workers are motivated to acquire skills and knowledge necessary for the application of digital technologies" was not verified by a significant binomial distribution (p=0.0001) and had the following answers respectively:

- (0) completely disagree..................0
- (1) disagree ............................27
- (2) agree ..................................59
- (3) completely agree ......................11

The mathematical expectation of 1.8351 with mode 2 (group of 59 respondents) is in agreement with the answer "I agree" in relation to the motivation of workers to acquire
skills and knowledge necessary for the application of digital technologies. We set the answer to the question "Workers are motivated to acquire skills and knowledge necessary for the application of digital technologies" as a factor, and the question: "Current digital skills of employees" as a dependent variable, and we get the following results of Duncan's analysis of variance test (Table 5):

**Table 5** Motivation of workers in relation to current digital skills

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average:</td>
<td>0.7407</td>
<td>1.3898</td>
<td>2.3636</td>
<td></td>
</tr>
<tr>
<td>(0) completely disagree</td>
<td>/</td>
<td>/</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>(1) disagree</td>
<td>0.0005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) agree</td>
<td>0.0001</td>
<td>0.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) completely agree</td>
<td>0.0005</td>
<td>0.0001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source*: The creator of the table is the author (prim. aut.)

Analysis:

The distribution of answers to the question "Workers are motivated to acquire skills and knowledge necessary for the application of digital technologies" was not verified by binomial distributions, so we conclude that part of the answer was subjective.

Let us remind that the mean value of digital skills of employees was 1.3196. Regardless of the subjectivity of the answer, we unreservedly conclude that the perceived motivation of employees is a key factor in the current digital skills of employees. All the values in the table (there were no answers "completely agree") highlight significant differences.

If the question "The current structure of employees is a big problem in the process of digitalization of business" is considered as a factor - grouping variable, and the question "Workers are motivated to acquire the skills and knowledge necessary for the application of digital technologies" as a dependent variable, the following results of Duncan's analysis of variances are obtained (Table 6):

**Table 6** The influence of the current structure of employees on the motivation of workers to acquire skills and knowledge necessary for the application of digital technologies

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average:</td>
<td>2.5714</td>
<td>2.2121</td>
<td>1.5278</td>
<td>1.5223</td>
</tr>
<tr>
<td>(0) none</td>
<td></td>
<td>0.0365</td>
<td>0.0001</td>
<td>0.0000</td>
</tr>
<tr>
<td>(1) weak</td>
<td>0.0365</td>
<td></td>
<td>0.0002</td>
<td>0.0002</td>
</tr>
<tr>
<td>(2) good</td>
<td></td>
<td>0.0001</td>
<td>0.0002</td>
<td>0.9814</td>
</tr>
<tr>
<td>(3) very good</td>
<td>0.0000</td>
<td>0.0002</td>
<td>0.9814</td>
<td></td>
</tr>
</tbody>
</table>

*Source*: The creator of the table is the author (prim. aut.)

The distribution of answers to the question "Workers are motivated to acquire skills and knowledge necessary for the application of digital technologies" was not verified by binomial distribution, so we conclude that part of the answer was subjective. Nevertheless, we conclude that the structure of employees has a significant impact on the motivation of workers to acquire the skills and knowledge necessary for the application of digital technologies.

When we talk about the number of sources of knowledge, our respondents use 5 sources: training at the workplace (76 respondents), seminars (51), training outside the organization
(39), trainings (26) and practice in other institutions (3). Three respondents answered that they do not use any sources, mainly because of financial resources. Our respondents combined several sources, as can be concluded from the answers, with the fact that on-the-job training is used the most.

To the question: "Does your organization own a patent?" as many as 96 out of 97 respondents answered that they do not own a patent, while one respondent answered positively.

The distribution of answers to the question "Creativity of workers" was verified by a significant binomial distribution (p=0.1490) and had the following answers respectively:

- (0) no creativity.................................0
- (1) low level of creativity......................27
- (2) high level of creativity.....................42
- (3) very high level of creativity.............28

The mathematical expectation of 2.0103 with mode 2 (group of 42 subjects) is in agreement with the response of a high level of creativity.

If the question "Creativity of workers" is considered as a factor-grouping variable, and the question "Average life expectancy of employees" as a dependent variable, the following results of Duncan's analysis of variance are obtained (Table 7):

| Table 7 Creativity of workers in relation to the age of employees |
|-----------------|---------|---------|---------|
|                 | (0)     | (1)     | (2)     | (3)     |
| Average:        | /       | 44.385  | 40.667  | 38.036  |
| (0) no creativity| /       | /       | /       | /       |
| (1) low level of creativity | / | 0.1096  | 0.0096  | 0.2558  |
| (2) high level of creativity | / | 0.1096  | /       | 0.2558  |
| (3) very high level of creativity | / | 0.0096  | 0.2558  |

Source: The creator of the table is the author (prim. aut.).

Analysis:
- There was no answer "no creativity".
- The answer "low level of creativity" was given in 27 organizations where the average age is 44.385 years.
- The answer "high level of creativity" was given in 42 organizations where the average age is 40.667 years.
- The answer "very high level of creativity" was given in 42 organizations where the average age is 38.036 years.

The group with a "very high level of creativity" has the lowest average age (38.036), which is significantly different (p=0.0096) from the highest average age (44.385) found in the group with a "low level of creativity".

In conclusion, the average age has an impact on creativity, younger workers (under 40) have a significantly higher level of creativity than older (over 40).

If the question "The current structure of employees is a big problem in the process of digitalization of business" is considered as a factor-grouping variable, and the question "Creativity of workers" as a dependent variable, the following results of Duncan's analysis of variance are obtained (Table 8):
The Importance of Knowledge Breadth in the Digitalization Process of Social Entrepreneurship

Table 8 The influence of the current structure of employees on the creativity of workers

<table>
<thead>
<tr>
<th></th>
<th>(0)</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average:</td>
<td>2.5714</td>
<td>2.4242</td>
<td>1.9444</td>
<td>1.2857</td>
</tr>
<tr>
<td>(0) none</td>
<td>0.5037</td>
<td>0.0312</td>
<td>0.0072</td>
<td>0.0000</td>
</tr>
<tr>
<td>(1) weak</td>
<td>0.0072</td>
<td>0.0312</td>
<td>0.0035</td>
<td></td>
</tr>
<tr>
<td>(2) good</td>
<td>0.0000</td>
<td>0.0001</td>
<td>0.0035</td>
<td></td>
</tr>
<tr>
<td>(3) very good</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The creator of the table is the author (prim. aut.).

The distribution of answers to the question "Creativity of workers" was verified by binomial distribution, so we conclude that the answers are objective. We conclude that the structure of employees has a significant influence on the creativity of workers.

Researching of the knowledge breadth, we based entire questionnaire on the already mentioned measures: the plans according to which the education in the field of digitization is carried out, the number of certified and expert lecturers, the number of sources of knowledge, patents and creativity, and the previous results established that the social entrepreneurship entities do not have a knowledge breadth at a satisfactory level that would lead to the acceleration of the digitization process.

The motivation of workers, which is necessary to accept digitalization, can be achieved with the help of adequate education, in which workers gain new knowledge and thereby strengthen their self-confidence (Jha et al., 2017). Modern and high-quality educational plans of companies and cooperation with educational institutions are emerging as key factors in the successful implementation of digital transformation in numerous sectors (Day et al., 2019).

"The digital transformation of business has slowly covered all aspects of society and an increasing number of companies are joining the trend of paperless business" (Riedl et al., 2017, p. 477).

Based on the results of our research and their analysis, we see that the knowledge breadth is a significant factor in encouraging the digitization of business. The research showed that the breadth of knowledge in the field of digitization among social entrepreneurship entities is not at an enviable level. Innovations arise from ideas, through creativity and knowledge. "Commercialization of innovations refers to activities that are necessary for the introduction of innovations on the market" (Nambisan & Sawhney, 2007; Nerkar & Shane, 2007, cited in Petković, 2021, p. 278). According to Xu (2015), the knowledge breadth has a direct impact on innovation. According to the research of previous literature, we have seen that digitization and innovations in modern business are a key factor not only for success but also for survival on the market. Modern business cannot be imagined without digital technology. It is necessary to expand the knowledge of all employees in the field of digitization in order to provide the conditions for placing innovations on the market. Therefore, one of the ways to improve the development of social entrepreneurship is to accelerate its digitization. The distribution of responses that measure the breadth of knowledge in the field of digitization based on the collected data from the research (Table 2 - Table 8) shows that it can significantly influence the development of social entrepreneurship by accelerating the process of business digitization. The research results show that the development of social entrepreneurship is at a low level, and that digitalization can help its development. Expanding knowledge in the field of digitization will contribute to its acceleration and thus improve the development of social entrepreneurship. We have seen from research that employee education plans, expert lecturers and trainers, motivation
and creativity can help expand knowledge in the field of digitization. Therefore, we confirm the hypothesis and conclude that expanding the knowledge of employees in the field of application of digitization will contribute to the development of social entrepreneurship.

Based on the results of the research and the facts collected through the review of the literature, we see that the social entrepreneurship entities should pay much more attention to expanding the knowledge of both managers and other employees. In this way, the digitization of business would be brought to a satisfactory level. Social entrepreneurship is important for the development of the economy and society, and it is necessary to continuously work on its development in order to solve certain economic and social problems. Digitization of the operations of social entrepreneurship entities is necessary for development in today's digital era.

6. DISCUSSION

Like us, del-Corte-Lora et al. (2016) used regression analysis to determine the impact of knowledge breadth on innovation. They used different sources of knowledge as measures. In their research, they also proved that the knowledge breadth is a significant factor that affects the technological advantages and innovations of organizations. Farazi et al. (2019) used discovered technological advantage (patents, licenses, innovations) to measure knowledge breadth in their research. These authors, like us, have proven that knowledge breadth is a significant resource of technological developments. Lodh & Battaggion (2015), like us, use patents and creativity as measures of knowledge breadth in their research. The knowledge breadth, according to them, is a significant factor influencing the achievement of technological and competitive advantage on the market. Jegede (2017) investigated the impact of knowledge on innovation and concluded that knowledge is a significant factor in achieving the results of both technological and non-technological factors. Our research, as mentioned above, showed that the knowledge breadth significantly affects the digitalization of business and that it is necessary that employees in social entrepreneurship entities expand their knowledge in order to accelerate the digitalization process.

In our work, we have proven that digitalization is important for the development of social entrepreneurship. There are other researches who proved this too. According to Rachinger et al. (2019) digitalization of business contributes to success, simplifies the use of many systems, changes the daily routine of business and creates opportunities for business innovation. Kergroach (2020), Thrassou et al. (2020) and Garzoni et al. (2020) in their research state numerous advantages of digitization in small businesses. One of these advantages is easier and better communication with customers, where digitalization enables companies to better understand the needs of their customers and monitor the success of their marketing moves. It is easier to direct activities to the target group of customers. The next advantage is the faster transformation of the product according to the customer's requirements. Digitization enables daily insight into changes in customer expectations and, accordingly, faster product transformation. Another advantage is the relief of employees from daily repetitive operations, so they can devote themselves to more important business activities.

How important social entrepreneurship is, and what is its role in society and the economy, is shown by the data that social enterprises were less vulnerable during the global economic crisis - for example, in the economic sector of Italy, the number of employees
decreased drastically during the crisis, but in social cooperatives, that number increased by 2.7% in 2009 (Petričević, 2012, p. 12). Kraus et al. (2017) state that the influence of social entrepreneurship is increasing, and it is reflected in the adoption of more and more neoliberal government policies, which coincide with the reduction of public spending on social inequalities and ecological challenges, then through the increase of interest and activity in social enterprises on a global level.

7. CONCLUSION

In this research, 97 subjects of social entrepreneurship from all over B&H participated. The research showed that knowledge about digitalization is at a low level and that it needs to be expanded in order to speed up digitalization and lead to the improvement of social entrepreneurship development. This can be seen from the reviewed literature, as well as from the results of empirical research. We have come to the conclusion that the knowledge breadth is very important for accelerating the digitization process in social entrepreneurship entities. It has a significant positive effect on the digitization process and thus enables the acceleration of that process. We concluded that digitization is a condition for the survival of business entities on the market and that must be accelerated so that business entities can adapt to today’s economic conditions. Digitization of business in social entrepreneurship entities in B&H refers to text processing and the use of smart phones and the Internet for communication, while advanced software are almost never used. As a result, these entities do not use all advantages that digitization offers. Accelerating and improving the digitization process can lead to the growth and development of social entrepreneurship. Improved development of social entrepreneurship would lead to a reduction in unemployment, a reduction in social aid, a reduction in ecological problems, better health care, that is, to the society and economy development. So, the main conclusion of this research is that it is necessary to invest in expanding knowledge because it contributes to accelerating the digitalization of social entrepreneurship. In this way, the development of social entrepreneurship, which contributes to social and economic development, takes place.

The scientific and pragmatic contribution of the research. The scientific contribution is reflected in the analytical, theoretical and empirical significance of this research. The analytical significance of the research represents the possibility of determining the development direction of B&H. Knowledge is an important resource, and through research we have proven that it affects the process of digitization and thus can lead to the improvement of the development of social entrepreneurship. Social entrepreneurship with all its advantages can lead to economic development. This research contributes to the existing theories in this field of research. Researching the literature, we came to the conclusion that this is still an under-researched area in domestic and foreign literature. There is a small number of papers that deal with the connection between knowledge breadth and digitalization. Results of empirical research proved that knowledge breadth affects digitalization of the business and that social entrepreneurship contributes to the development of economy and society.

When we talk about a pragmatic contribution, this work enables the application of the obtained results in practice, and that will be useful for decision-makers in social entrepreneurship entities, because it shows the advantages of knowledge breadth and its influence on the digitalization process. This research will contribute to investors; getting
to know about the advantages of social entrepreneurship. We believe that the obtained results will also be useful to the academic community, which will be able to learn more about the role and significance of the knowledge breadth in making a decision about the digital transformation and about the development of social entrepreneurship. Considering that the research in this area is relatively recent, we expect that this paper will arouse greater interest in the academic community for research in this field. The research can be interesting to the general public because it shows the significance of the development of social entrepreneurship that should be the driving force for solving economic and social problems in developing countries.

**Limitation of the research.** The first limitation of the research modest financial possibilities, which are a big obstacle for more extensive research. There is a small number of available papers in this area of research. The biggest problem relates to the collection of data about the number of subjects of social entrepreneurship in B&H. It was impossible to find the exact number of subjects of social entrepreneurship on the territory of B&H. Not a single competent institution has information about it. We came to the respondents in various ways, through social entrepreneurship forums and associations and by respondents sharing the questionnaires among themselves. So the exact population of social entrepreneurship subjects in B&H remains unknown. What we do know is that it is not a large population and that it does not have enough influence on the development of society and the economy.

**Future research.** We leave open the questions about the number of subjects of social entrepreneurship to future researchers, questions about other influencing factors on the digitalization such as digital infrastructure, knowledge depth, motivation, etc. Except digitalization as an influencing factor to the development of social entrepreneurship, there are others, like sources of funding for initial business activities, legal regulations, etc. Future researchers can deal with obstacles to the development of social entrepreneurship in underdeveloped countries, as well as their elimination. Future researches could be focused on innovating business models and the importance of innovation in social entrepreneurship.

**REFERENCES**


The Importance of Knowledge Breadth in the Digitalization Process of Social Entrepreneurship


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**ZNAČAJ ŠIRINE ZNANJA U PROCESU DIGITALIZACIJE SOCIJALNOG PREDUZETNIŠTVA**


Ključne reči: socijalno preduzetništvo, širina znanja, digitalizacija, ekonomski i društveni razvoj