

Informacione tehnologije kao alat za razvoj digitalnog preduzetništva i ostvarivanje konkurentne prednosti

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Apstrakt: Informacione tehnologije i dalje predstavljaju industriju koja je u razvoju. Zahvaljujući invencijama u razvoju softvera, hardvera, kao i informacionih i komunikacionih tehnologija, javile su se brojne prednosti koje se ogledaju u poslovnoj integraciji, preduzetničkim poduhvatima, kao i mikro, malim i srednim i velikim preduzećima, gde se uštede i profit ostvaruju upravo zahvaljujući informacionim tehnologijama. Definisanje poslovne strategije, u skladu sa uticajima informacionih tehnologija, odnosi se na definisanje proizvoda i usluga, načina poslovanja i predviđanja. Upravo zahvaljujući razvoju informacionih tehnologija, tradicionalni preduzetnički poduhvati postaju digitalni preduzetnički poduhvati, koji postaju daleko konkurentniji. Ovaj rad ima za cilj da kroz pregled literature definiše digitalno preduzetništvo, da uoči osnovne prednosti digitalnog preduzetništva u odnosu na tradicionalno i da prikaže značaj korišćenja informacionih tehnologija i digitalnih platformi za razvoj konkurentnih digitalnih preduzetničkih poduhvata.

Ključne reči: tradicionalno preduzetništvo, digitalno preduzetništvo, digitalne tehnologije, digitalizacija preduzetničkog poduhvata

Information Technologies as a Tool for the Development of Digital Entrepreneurship and Achieving a Competitive Advantage

Abstract: Information technology continues to be a growing industry. Thanks to the inventions in the development of software, hardware, as well as information and communication technologies, there have been numerous advantages that are reflected in business integration, entrepreneurial ventures, as well as micro, small and medium and large enterprises, where savings and profits are realized thanks to information technologies. Defining the business strategy, in accordance with the influences of information technology, refers to the definition of products and services, ways of doing business and forecasting. Thanks to the development of information technologies, traditional entrepreneurial ventures are becoming digital entrepreneurial ventures, which are becoming far more competitive. This paper aims to define digital entrepreneurship through a literature review, to see the basic advantages of digital entrepreneurship compared to traditional ones and to show the importance of using information technologies and digital platforms for the development of competitive digital entrepreneurial ventures.

Keywords: traditional entrepreneurship, digital entrepreneurship, digital technologies, digitization of entrepreneurial enterprise

1. Introduction

Information technologists have a fundamental influence in modern society. Today, the means of transmitting and exchanging and sharing large amounts of information are greater than ever before in history. Business improvement is the main goal of using information technologies that provide innovative solutions, which are reflected in the reduction of costs and the increase of company profits. Through an innovative way of doing business, digital entrepreneurs have a great influence on the entire world, especially in the last decade. Business giants such as Google, Facebook, Apple and Microsoft have not only influenced changes in the business world, they have also influenced the shaping of the way of communicating with other people in the environment. Storing and processing information is not

only becoming easier, but also more flexible and economical, as cloud services continue to develop and the Internet turns into the so-called IoT (Internet of Things) (Kraus et al., 2018). As the phenomenon of digitization causes various implications through rapid changes, it is of utmost importance for entrepreneurial research and entrepreneurs must be aware of new results, they must know how to connect new results and know how to identify new opportunities for their business ventures. Digital entrepreneurship is a phenomenon that occurs through certain technological means, such as the Internet and information and communication technologies (Le Dinh et al., 2018). Any entrepreneurial activity that transfers property, service or a certain part of business digitally can be characterized as digital entrepreneurship. Digital entrepreneurs face many differences compared to traditional entrepreneurs. Products, marketing activities and the workplace can be argued to be the main criteria of differentiation between digital and non-digital entrepreneurs (Hull et al., 2007). In order to implement sustainable innovation, entrepreneurs must be aware of the opportunities that digital technologies provide them. In the following, it will be shown the way in which modern literature views digital entrepreneurship, as well as the differences between traditional and digital entrepreneurship that entrepreneurs should use in order to follow modern business conditions and create a competitive advantage that will positively affect their business.

2. Digital entrepreneurship as a modern form of business for gaining competitive advantage in turbulent market conditions

Digital entrepreneurship can be said to be one of the categories of entrepreneurship. Digital entrepreneurship is realized through innovative products and services, on different digital platforms, which are the result of progressive advances in technology where entrepreneurs have the opportunity to take advantage of the development. Newly developed software, applications, social networks, as well as easier access to information technologies, have provided numerous new opportunities for entrepreneurs. Precisely thanks to the progress of high technologies, digital entrepreneurship is becoming a new form of entrepreneurship in entrepreneurship. As previously stated, digital entrepreneurship can be defined as the realization of entrepreneurship on digital platforms (Balli, 2020). Digital platforms have provided flexibility, speed, lower costs, quality, the ability to respond to different demands and needs, as well as innovations that create the phenomenon that there are new demands and needs among consumers.

Digital entrepreneurship is an entrepreneurial activity that is carried out by developing, marketing and selling products and services that individuals can obtain via the Internet. The best examples of digital entrepreneurship today are seen through mobile software, social platforms, websites developed for information exchange and entertainment, computer software, as well as education and counseling (Vural and Cavus, 2017). In introducing innovative business practices in today's turbulent market, digital entrepreneurship has a significant role to play. Digital entrepreneurship can be defined as the digitization of one or more predefined business models, in terms of products, distribution and workplace, by entrepreneurs (Hair et al., 2012). From the above definition, it can be concluded that digital entrepreneurship consists of the sale of digital products or services, through certain digital platforms or electronic networks, and as it is a subcategory of entrepreneurship, there are certain segments in the traditional entrepreneurial venture that need to be physically digitized.

In today's consumer society, the transmission of information is accelerating thanks to the development of information and communication technologies. Geographical distances are no longer an obstacle. Digital entrepreneurship emerged as a result of current development and as such, represents a new economic order. It is precisely this that allows entrepreneurs to achieve a competitive strategy that helps them overcome the difficulties that are the answer to today's unstable environment.

Sussan and Acs (2017) expanded the view on digital entrepreneurship. They consider the user dimension. Digital entrepreneurs are viewed as Kirzner entrepreneurs who function within the constraints of existing platforms. In other words, they perform activities that require digital engagement, where they cite the example of the Uber driver - the agent needs the use of digital technologies, he searches for and acts on those opportunities within the market (Sussan & Acs, 2017). Digital technology provides the user with the effect of increasing efficiency by moving the economy closer to the technological frontier.

Digital entrepreneurship has developed as a concept that appears as a result of the development and spread of information and communication technologies. It can be said that digital entrepreneurship is

an attempt of the current entrepreneurial environment to adapt to the needs of the digital age in the context of developing and changing conditions (Le Dinh et al., 2018). Digital entrepreneurship encompasses all new and existing businesses that strive to create economic and social value through digital technologies.

As previously stated, in digital entrepreneurship, some or all of the traditional entrepreneurial activities take place digitally. According to Hull (2007), in this context, there are three forms of digital entrepreneurship - digital entrepreneurship that is viewed and implemented as a complementary element (light entrepreneurship), digital entrepreneurship in which companies digitally allocate more resources to products, distribution and some components in terms of creating additional values (medium digital entrepreneurship) and digital entrepreneurship that requires monitoring of all processes, starting from the supply chain, all the way to the end user (extreme digital entrepreneurship).

With this classification, Hull laid a certain basis for the subsequent interpretations of the components within the ecosystem of digital entrepreneurship, which have a large part in shaping digital entrepreneurship, and therefore the characteristic in which digital entrepreneurship occurs. A digital entrepreneurship ecosystem encourages entrepreneurs to generate ideas, identify and allocate resources, use digital market opportunities, as well as gather information and create legitimacy for innovation (Davidson and Vaast, 2010). The ecosystem of digital entrepreneurship can be said to be an area of interaction where entrepreneurs have the opportunity to achieve planned desired results.

The main areas that support the development of digital entrepreneurship, which is based on high technology, are based on the increase of human and financial capital, on the process of entrepreneurship that includes the search for opportunities (regardless of the limitation of resources), on the increased speed of business, on a strategic global perspective, as and on the motivation and goals that lead to closeness for cooperation (Engel et al., 2015).

Thanks to the fast and easy transfer of information flow with the developing technologies of new generations, digital entrepreneurship is taking an increasing role in the development of the economy of every country. The transition from traditional forms of entrepreneurship to digital components is necessary to gain a competitive advantage.

3. Advantages of digital entrepreneurship compared to traditional entrepreneurship

There are still not many studies in the field of digital entrepreneurship in the literature. Case studies differ, where a smaller percentage of research is within a specific sample, while on the other hand, a higher percentage of theoretical research. Hull (2007) tried to be among the first researchers to express the differences between the typology of traditional entrepreneurship and digital entrepreneurship, in typological studies of digital entrepreneurship. Then, Liao (2013) in his study reaches significant conclusions about how the digital business industry can be managed, as well as process and product innovation.

Castro (2016) concludes that digital music, digital games and social networks are something that shows a greater potential to develop new products and he proved this in his study on the potential new opportunities arising from the combination of digital music and game industries with network innovations. Nambisan (2017) explains how entrepreneurs can deal with uncertainties in the market, thanks to digital approaches in his study where he investigates the encounter of digital entrepreneurs with digital technologies. The following table shows the most significant differences between traditional and digital entrepreneurship.

Table 1: Differences between traditional and digital entrepreneurship

	Traditional entrepreneurship	Digital entrepreneurship
Entering the market	Difficult	Eased
Production and storage	Difficult	Eased
Distribution	Slower	Faster
Workplace	Physically garthert	The digital workplace
Organizational commitment	Made easy	Made hard
Communication form	Face to face	With computer and digital technologies
Organizational structure	Hierarchical	Flexible and corporate

Source: (Hull et al., 2007: 296-298; Hafezieh et al., 2011: 269-270; Ozdemir, 2016:6)

Through the implementation of modern information technologies, which include new information architectures, databases and data warehouses, data protection, data management, as well as computer communication and modern statistical software, the improvement of micro-competitiveness is facilitated, which is the way to a profitable business (Domazet & Neogradi, 2018). As the advantages of digital entrepreneurship compared to traditional ones are mostly reflected in electronic business, it is important to emphasize that electronic business is a concept that, with its appearance, has revolutionarily changed the way the modern world functions. The impact of information technology on creating a competitive advantage has never been stronger than it is today. This was particularly influenced by the development of the fourth industrial revolution, which put pressure on companies to review their current business strategies and explore new business opportunities, looking for space to digitize their traditional forms of business. Start-up companies must permanently transform their strategic intentions and capabilities, in order to continue to focus on the needs of a new type of active customers - members of the network and millennial generation, the new generation of connected and inclusive customers (Petković, 2021). Information technologies and digitization inevitably affect existing business models in such a way that companies that want to strengthen their competitive advantage and position must change their business models in accordance with digital trends. The digital business model itself becomes a source of innovation and a tool for gaining competitive advantage in digital entrepreneurship.

4. Conclusion

The progress of information technologies has created a huge space for the development of digital entrepreneurship. Early technology adopters under Everett Rogers' diffusion of innovation theory (Orr, 2003) use the opportunities provided by new technologies to create new opportunities and start new entrepreneurial ventures. According to Internet World Stats (2020), over 4.5 billion people use the Internet, which is only an indication of the potential opportunity for all persons who possess entrepreneurial potential and relevant entrepreneurial skills and competencies (Simović & Radović, 2018). Digital entrepreneurship is a subcategory of entrepreneurship that emphasizes the need to realize entrepreneurial opportunities based on digital media and communication and information technologies. Business opportunities in the field of digital entrepreneurship are considered efforts to generate financial gain, while knowledge opportunities are directed towards information search and other knowledge-related opportunities (Hosu & Lancu, 2017). Institutional opportunities refer to the activities of creating new institutions, as well as the transformation of existing ones. Soltanifar et al. (2020) presented in their monograph a whole set of practical tools that can be directly applied in the field of digital entrepreneurship. In this way, they motivate entrepreneurs, as well as students who have a highly developed potential of digital entrepreneurial competences, to turn to starting their own entrepreneurial venture. Entrepreneurship is undeniably a very important segment for the development of the economy and economy of any country. Digital entrepreneurship, as a consequence of the development of information and communication technologies, especially after the pandemic of the COVID-19 virus, is becoming more and more important for every developing country. Understanding how technologies can be applied in digital entrepreneurship provides a sustainable competitive advantage.

5. Literature

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