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BUSINESS MODEL OF THE SHARING ECONOMY PLATFORM: WHO ARE THE "WINNERS" AND WHO ARE THE "LOSERS" OF THE COVID-19 PANDEMIC?

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Review paper Abstract: The increasing digitalization of business activities in recent years has been a significant impetus to business model innovation. In this sense, we are witnessing the success of companies that base their businesses on the digital platform model. Therefore, the basic purpose of this paper is to stress out the very essence of platformization as a business model, which is based on the implementation of digital technologies, as well as to point out the characteristics - advantages and disadvantages of the so-called "sharing economy" model. Also, the purpose and goal of the paper is to point out how the characteristics of different types of platforms, especially of sharing economy platforms, affect their business success, i.e. market value, but also vulnerability in case of adverse effects of external factors, such as the current corona virus pandemic. Using both the classical methodology of theoretical research, based on insights into an available literature on the topic, and the results of research of world best practice, as well as monitoring statistical indicators of market value of the world's best companies, the results confirm the initial assumption that nowdays companies which implement business model of the platform prevail. However, the results of the research also showed the vulnerability of the platforms, especially those based on the sharing economy, in the conditions of a corona virus pandemic. Given that there is very little research in the academic literature on the economic consequences of the current COVID-19 pandemic, the originality and significance of the research is in an attempt to stress out the consequences of the pandemic on the current market value and position of platform companies, and also on their survival and growth in the future.

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1. Introduction

The increasing digitalization of products, processes and networks has led to fundamental changes in the way modern companies do their business. The integration of new digital technologies in all areas of business is defined as the digital business transformation (Schwertner, 2017, p. 389), which leads to changes in customer experience, as well as in operational processes and business models (Capgemini Consulting, 2011, p. 17; Schwertner, 2017, p. 389). Thereby, the digital transformation of business models refers to the transformation of individual elements of the business model, as well as to the entire business model, but also value chains, as well as value added networks of different actors (Schallmo et al., 2017).

The application of new software, as well as various innovative technologies based on the Internet, represents a huge potential for radical or disruptive changes in business models in almost all industries (Hanelt, 2016; Schallmo et al., 2017; Kotarba, 2018; ICV-controlling.com, n.d.). The difference between disruptive (radical) and incremental (marginal, improvement-oriented) changes in business models is precisely in the degree of digital transformation, where the former bring greater opportunities for growth nowdays. For example, in the retail industry, Amazon and eBay have long recognized that digitalization offers significant opportunities to implement business models based on the application of information and communication technologies (ICT), and the Internet, and have achieved tremendous market success. Also, over the last decade, changes related to digitalization and its potential for business model innovation have led to the emergence of new companies, such as Airbnb (a company that connects providers and users of accommodation services through the application), Netflix (a company for online streaming of movies and TV shows), Uber (a company that connects users and providers of individual ride services through applications), Peloton (a company for online streaming of workouts) and many others, which have achieved high growth rates. The characteristic of all these companies is that they are implementing the business model of the platform, more precisely the digital platform, which represents an innovation of the business model based on the use of digital technologies (Lanzolla et al., 2018; ICV-controlling.com, n.d.).

Given the strong growth and huge success they have achieved in the market, one can say that companies that base their business on the digital platform model have marked the second decade of the twenty-first century. However, the current COVID-19 pandemic and the economic crisis that accompanies it, led to stagnation during 2020, and even endangered the survival of some of them. On the other hand, despite the pandemic, stock prices, revenues as well as value of some of the platform based companies are skyrocketing, as we will show in our paper. Therefore, the aim of this paper is to point out the basic characteristics of the business model of the platforms, especially those based on the so-called "sharing economy" and to try to find out, by using current indicators of the market value of

these platforms, who the real "winners" as well as "losers" of the current corona virus pandemic are. The basic assumption of the paper is that, despite the fact that companies that base their business on the platform model achieve the highest market value nowdays, not all platform companies are equally affected by the crisis caused by the COVID-19 pandemic, and that their vulnerability depends on the type of platform and its characteristics. Therefore, in the next chapter the author will talk first about the characteristics of the platform as a business model, with special emphasis on the platform of the so-called "sharing economy". Then we will present and analyze data on market capitalization of the most valuable and well-known platform companies, as well as try to explain the reasons of a such dynamics. The conclusion will summarize the research results reached in the paper.

2. Platformization as a business model and specifics of the sharing economy platform

The digital transformation of business leads to change of: customer, i.e. user experience, operational processes as well as business models, based on the integration of new digital technologies (Capgemini Consulting, 2011, p. 17; Schwertner, 2017, p. 389). Although the most significant and visible change that digitalization has for customers is the change in customer experience - through interactive communication in the process of selling products and services in order to adapt the offer to the needs of specific market segments, which strengthens customer loyalty (ibid.), a significant part of the academic research is focused on the transformation of business models. In doing so, Teece (2010, p. 173; 2017, p. 4) points out that the business model "articulates the logic ... that demonstrates how a business creates and delivers value to customers". The value created, as pointed out by Schallmo et al. (2017), provides differentiation of the company from competitors and achieving competitive advantage.

Business model research has been increasingly present in modern management theory and practice in recent decades, especially since some research has shown that business model innovation is on average 6% more profitable than traditional product or process innovation activities performed within the research and development (R&D) function (ibid., p. 11). Business model innovation involves improving existing or creating new business models through incremental or radical innovation (Cuc & Miina, 2018). Innovation can relate to individual elements of the business model - where changes have occurred in at least two elements of the business model (Gassmann et al., 2014 cited in: ICV-controlling.com, n.d.) or, in addition to individual elements, may also relate to to the entire business model (Schallmo et al., 2017). A significant innovation of business models, caused by the digitalization of businesses, refers to the emergence of platforms (Wirtz et al., 2019, ICV-controlling.com, n.d.), more precisely digital platforms of various types. Platforms mediate between different groups, such as sellers (suppliers of

products and services) and buyers (consumers, users), so due to the number of participants on both sides, they are, in essence, the so-called multi-sided platforms (Sussan & Acs, 2017; de Reuver et al., 2018). Precisely, digital platforms most often perform as multi-sided platforms and help suppliers and customers as well as other stakeholders (and thus creating a kind of ecosystem) to find each other and enter into transactions. These platforms, based on the use of digital technologies, are becoming relevant in an increasing number of industries, often leading to fundamental changes in the competitive structure within these industries (ICV-controlling.com, n.d.).

A fundamental feature of platforms is the emergence of network effects: platforms become more valuable the more users are using them. The more users join the platform, the more attractive the platform becomes to potential new users. This explains why some platforms have viral growth (Evans & Gawer, 2016). There are two types of network effects: direct network effects (where more users on one side contribute to even more users on the same side of platform, as in the case of Facebook) and indirect network effects, where more users on one side of the platform (for example, video game users) create more participants on the other side of the platform (e.g. video game developers) (Gawer & Cusumano, 2012; Evans & Gawer, 2016; Wirtz et al., 2019; Valdez-De-Leon, 2019).

There are many types of digital platform. Platform business models stressed out by Wirzt et al. (2019, p. 453) include: "search, communication, social media, matching, content and review platforms, booking aggregator, retail platforms, payment, crowdsourcing, and crowdfunding platforms, and development platforms" (for of software, modules, etc.), as well as so-called "sharing economy" platforms.

The sharing economy represents a radical change in the way business is conducted, i.e. in the business model itself and calls into question many management theories and practices that deal with employment issues, the way of operating, the boundaries of the company, innovation as well as the understanding of entrepreneurial ventures in general. Companies that based their business on the sharing economy model connect thousands of suppliers and customers (users) through platforms that use digital technologies, and rely on the active participation of a number of different stakeholders within a broader system, referred to as the digital ecosystem (Laamanen et al., 2018). Thereby, the sharing economy is defined as: "a socioeconomic ecosystem that commonly uses information technology to connect different stakeholders – induviduals, companies, governments, and other – to share or access different products and services and to enable collaborative consumption" (ibid., p. 213). This is not an easy task, because through digital platforms, a large number of participants need to be connected and orchestrated on a common task of creating value.

Because it connects a large number of partners - suppliers, customers, platform providers, complementors and other stakeholders, the so-called ecosystem of the sharing economy is created in which all participants ensure the delivery of a

solution to the problem observed (Wirtz et al., 2019). Therefore, the path of digital transformation of business model inevitably leads to the creation and strengthening of the digital ecosystem. Value is jointly created by users, suppliers and other participants in the platform ecosystem, orchestrated by the platform provider, and each participant benefits from interaction with other participants and has an interest in continuing to participate in the ecosystem (Valdez-De-Leon, 2019; Van Alstyne, 2019). A business model based on the sharing economy platform, compared to traditional business models, implies that a high level of different inter-relationships between partners in the ecosystem has been developed, as well as that opportunities for joint investment (so-called co-investing), joint learning (co-learning), and joint research and development of innovation (co-innovation) of partners are used. This leads to blurring of boundaries between organizations, as well as pressures to include partners in more open models of organization such as virtual organization (Laamanen et al., 2018), i.e. network of affiliated firms.

Digital sharing economy platforms can be of different types (Wirzt et al., 2019, p. 454):

- 1. Platforms for sharing resources and assets of constrained capacity, which can be:
 - a) Platforms for sharing assets of *peer-to-peer* type² (for example Uber and Airbnb), and
 - b) Platforms for sharing resources and assets which are the ownership of the platform (e.g. ZipCar and WeWork);
- 2. Platforms for sharing resources and assets of unconstrained capacity (information, music, video content etc.).

Also, Rinne (2019) cites the platform classification according to the activity of platform companies, and according to her the sharing economy sector includes companies for: on-demand staffing, online media streaming, induvidual ride sharing (by car, scooter or bicycle), home sharing, as well as *peer-to-peer* and crowdfunding financing. Many of these different types of platform companies have achieved significant business success, measured not only by the generated revenues, but also by the growth of stock prices and market value, i.e. market capitalization, which will be discussed in the next part of this paper.

3. Analysis of the market value dynamics of platform companies in the conditions before and during the COVID-19 pandemic

The development of the platforms has become a key trend in the digital transformation of business, because in modern business conditions, the most

² The *peer-to-peer* (P2P) economy is a decentralized model where two individuals interact directly with each other, to make a sale, or make certain products (provide certain services) together without intermediaries (third parties) i.e. without incorporating a firm. In such a transaction, the buyer and the seller perform the transaction (in terms of product or service delivery and payment) directly (Chappelow, 2018).

valuable companies base their businesses on the model platforms. Companies such as Apple, Google, Amazon and Alibaba have achieved, by developing the business model of the platform, exponential growth and gained significant market share at the expense of established firms (Schenker, 2019). According to a McKinsey research report cited by Schenker (2019), digital platforms could mediate over 30% of global economic activity over the next six years, totaling US\$ 60 trillion, while experts estimate that only 3% of incumbent companies have adopted an effective platform strategy. So, managers of companies that have not yet developed a business model based on digital platforms are increasingly recognizing their importance. The results of one study show that 40% of companies believe that owning their own digital platform and participating in the digital platforms of other firms will be a crucial factor in their future success (ICVcontroling.com, n.d., p. 7). The authors of this study conclude that when digital platforms become part of the competitive "landscape", it leads to fundamental changes in the basic structures and mechanisms that affect the industry, so a new type of competition appears and creates added value. Such a change jeopardizes the added value generated by companies that do not have business models based on digital platforms and, consequently, endangers their competitiveness.

Platforms can be transactional, innovative, integrated and investment platforms (Ewans & Gawer, 2016, p. 9). A transactional platform refers to a technology, product, or service that acts as a channel (or intermediary), enabling exchanges or transactions between different participants, i.e. customers and suppliers. An innovation platform is a technology, product or service that serves as the basis on which other firms (which are "loosely" connected into an innovative ecosystem) develop complementary technologies, products or services. An integrated platform refers to a technology, product or service that acts both as a transactional and an innovation platform. The investment platform acts as a holding company of other platform companies, as an active investor in the platform or both (ibid.).

The dynamics of market capitalization obtained on the basis of data from the list of Global Top 100 companies (PwC.com, 2020) shows that today the top 10 companies are dominated by those which have a business model that is mainly or predominantly shaped by digitalization such as Apple, Microsoft, Amazon, Alphabet, and Facebook. Over the years, companies that have not developed a digital business model, such as energy giants Exxon and Shell (oil and gas production), are no longer among the top 10 on the list of Global top 100 companies by market capitalization (compare: PwC.com, 2020; ICV-controling.com, n.d.). Moreover, Exxon Mobile dropped from the top of the list of companies with the largest market capitalization in the world in 2006 (available at: https://fortboise.org/Top100/top100-20061022.html), to the 41st place in mid-2020 (see in: PwC.com, 2020). The world has changed significantly over the last decade, and many of the companies that have shaped the world business scene in the past have disappeared from the list of the most valuable companies, while the scene is

ruled by new companies that base their business on digital technologies. Table 1 shows the world's most valuable companies, measured by market capitalization, in 2006 and their rank and value in mid-2020.

Table 1 Top 10 companies by market capitalization on October 22, 2006 and on June 30, 2020

Rank October	Company name	Sector	Market capitalization on October 22, 2006 (US\$ bn)	Data on June 30, 2020	
2006				Rank June 2020	Market capitalization (US \$ bn)
1	Exxon Mobile	Oil and gas	412	41	187
2	General Electric	Industry, technology, and infrastructure	367	Not on the Top 100 list	58*
3	Total S.A.	Oil and gas	323	Not on the Top 100 list	99*
4	Microsoft	Technology	283	3	1,505
5	CitiGroup	Financials	248	89	106
6	Bank of America	Financials	243	31	203
7	Royal Dutch Shell	Oil and gas	223	76	121
8	British Petroleum	Oil and gas	221	Not on the Top 100 list	79*
9	Pfizer	Health Care	204	44	181
10	WalMart Stores	Consumer Services	201	12	337

Source: Author, for the year 2006 retrieved from:

https://fortboise.org/Top100/top100-20061022.html, for the year 2020 (PwC.com, 2020, retrieved from: https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-june-2020-update.pdf), for companies with * (Ycharts.com, n.d., retrieved from: https://ycharts.com/companies/market_cap, and Macrotrends.net, n.d., retrieved from: https://www.macrotrends.net/stocks/stock-screener), accessed: 08.08.2020.

As we can see in Table 1, among the top 10 companies from 2006, oil & gas and finance companies dominate, and only one company is from the field of high technologies (Microsoft), who is also the only company that has been held among the top 10 companies by market capitalization since 2006. If we compare this table with the following table 2, which shows the current available data on the market capitalization of the top 10 companies, we can see that among the top 10 companies are mostly high-tech companies, as well as financial and consumer services companies, who base their businesses mainly on the platform model. Only the first-placed Saudi Arabian Oil Company (Saudi Aramco) comes from the traditional sector of oil and gas production. Saudi Aramco has overtaken former industry giants Exxon Mobile (now 41st), Royal Dutch Shell (now 76th) and BP

(now not in the Top 100 list) (PwC.com, 2020), probably thanks to its position (oil reserves and daily production)³ in relation with the recent crisis over the price of oil on the world market. Looking at the full list of Global Top 100 Companies for 2006 (available at: https://fortboise.org/Top100/top100-20061022.html), we can see that among the top 100 companies were only the companies: Berkshire Hathway (at that time on the 19th place with a market capitalization of \$ 153 billion), Google (otherwise now owned by Alphabet Inc.), which was then in 27th place with a market capitalization of 127 billions of \$, and Apple (at that time ranked 82nd with a market capitalization of "only" \$ 34.7 billions, compared to the current \$ 1,568 billions). Companies such as Tencent Holding and VISA Inc. at that time were not even present among the first hundred in the world, and some did not even exist (Amazon, Facebook, Alibaba).

Table 2 Top 10 companies in the world by market capitalization on June 30, 2020 and December 31, 2019

Rank	Company name	Sector	Market	Data on December 31,		Change
June			capitalization	2019		(in %)
2020			on June 30,	Rank	Market	
			2020	Dec.	capitalization	
			(US \$ bn)	2019	(US \$ bn)	
1	Saudi Arabian Oil	Oil and gas	1,741	1	1,879	- 7.34
2	Apple Inc.	Technology	1,568	2	1,305	20.15
3	Microsoft Corp.	Technology	1,505	3	1,203	25.10
4	Amazon.com Inc.	Consumer	1,337	5	916	45.96
		Services				
5	Alphabet Inc.	Technology	953	4	923	3.25
6	Facebook Inc.	Technology	629	6	585	7.52
7	Tencent Holding	Technology	599	9	461	29.93
8	Alibaba GRP-ADR	Consumer	577	7	569	1.40
		Services				
9	Berkshire Hathway	Financials	430	8	554	- 22.38
10	VISA Inc.	Financials	372	12	370	0.54

Source: Author, based on PwC (2020), retrieved from: https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-june-2020-update.pdf, accessed: 08.08.2020.

Based on current indicators of market capitalization of the Global Top 100 Companies, one can conclude that the companies that are most successful in developing the platform business model (for example: Apple, Microsoft, Amazon, Google, Facebook, Alibaba, Tencent) are also the companies with the highest

³ Saudi Arabian Oil Company i.e. Saudi Aramco has secured its position as the most valuable company listed on the stock exchange in history, at the first day when it went public with the initial public offering - IPO (December 11, 2019), when it achieved value measured by market capitalization of \$ 1,880 billion (Jolly & Ambrose, 2019). Saudi Aramco is the world's second largest oil company by size and the world's largest producer measured by daily oil production (Wikipedia.org, n.d.).

market value. Moreover, their value on the financial market, i.e. market capitalization, increased in relation to the situation on December 31, 2019, so most of them can be assessed as successful even in times of crisis caused by the corona virus pandemic. It is obvious from the data presented above that, in the conditions of imposed social isolation caused by the corona virus pandemic (the so-called "lockdown"), companies that based their business model on digital platforms did well especially compared to companies from traditional industries. The data in Table 2 show that in the observed period, which coincides with the current corona virus pandemic, the largest growth in market value was achieved by Amazon (allaround 46%), then Tencent Holding (allaround 30%), Microsoft (25%), and Apple (20%). Among the top 10 companies by market capitalization, only Saudi Arabian Oil (from traditional oil & gas industry) recorded a decline in market value at the time of the corona (allaround 7%) as well as Berkshire Hathway - Financials (as much as 22%), i.e. companies whose business is mostly not based on digital platforms, which confirms the first part of our initial assumption in the research. However, it must be noted that the most successful platform companies achieved growth in market value in the previous period, i.e. during 2019 as well. Thus, if we compare the growth of market capitalization in the first six months of 2020 (at the time of the COVID-19 pandemic) of the most successful platform companies, with the growth of market capitalization achieved in the period from December 31, 2018 up to December 31, 2019, we can see that the "absolute winner" is the company Amazon, which in the first half of 2020 achieved a growth of 45.96%, while in the period from December 31, 2018 up to December 31, 2019 the growth of the market capitalization of this company amounted to "only" 18.34%. Other platform companies recorded growth in the first half of 2020, but more modest compared to the previous year, which indicates that they were also affected by the corona virus pandemic. It is significant that even in such conditions, when companies in many traditional industries recorded a significant decline in market value, these platform companies achieved growth⁴.

The question arises: what happened to the yesterday "stars" of the business model of platformization, which are mostly digital platforms of the so-called sharing economy?

⁴ For example, Microsoft's market capitalization has grown by 25% in the first six months of 2020, in relation to 54% in the previous year. Or, in the case of Apple, the growth of market capitalization in the period from December 31, 2018 up to December 31, 2019 was as high as 88%, compared to 20% in the first half of 2020. However, the most modest growth during the COVID-19 pandemic was achieved by Alibaba and VISA. For example, Alibaba achieved on the date December 31, 2018 a market capitalization of US \$ 45 billion, to have a market value on the date December 31, 2019 of a staggering US \$ 569 billion, or a increase of whopping 1,182%, but only 1.4% growth during first half of 2020. Of the platform companies, the most modest growth in the first half of 2020 was achieved by the company VISA, of only 0.54%, compared to 38% in the period from December 31, 2018 up to December 31, 2019 (calculated by author on the basis of data available on: https://www.macrotrends.net/stocks/stock-screener, accessed: 20.08.2020).

Companies that emerged over the past decade on the business model of the sharing economy have grown at incredible rates thanks to the aggregation of underutilized assets of individuals and capitalizing on the use of the trend that individuals value access to assets rather than ownership. The success they achieved was the basis for predictions that the market of the sharing economy will grow significantly in the coming years. Yaraghi and Ravi (2017, p. 26), for example, predicted that the market of the sharing economy would grow from \$ 14 billion in 2014, to \$ 335 billion by 2025. Goldman Sachs also once estimated that the global ride-sharing market could grow eightfold by 2030, to reach a total value of \$ 285 billion in 2030, compared to \$ 36 billion in 2017 (Huston, 2017).

Table 3 follows the market capitalization trends of selected world-famous platforms mostly based on sharing economy in the period from December 31, 2019 up to August 7, 2020.

Table 3 Market capitalization of selected platforms

Company - platform	Sector	Market	Market	Change
		capitalization on	capitalization on	(in %)
		August 7, 2020	December 31,	
		(US \$ bn)	2019 (US \$ bn)	
Netflix	Online video	218.18	141.98	53.67
	streaming			
Zoom Video	Video	72.98	15.72	367.11
Communications	communication			
	technologies and			
	services			
Pinterest	Web sharing of	20.52	10.58	93.95
	information and			
	social media			
	services			
Uber	Individual ride	57.46	51.05	12.55
	services based on			
- 0	application			
Lyft	Individual ride	9.92	13.2	- 24.85
	services based on			
D 1	application	10.01	0.05	110.01
Peloton Interactive	Recreation	19.34	8.05	140.24
Inc.	equipment and			
	online workouts			
G 11 1	streaming	6.10	1.22	12.05
Grubhub	Food delivery from	6.19	4.33	42.95
	local restaurants			
	services based on			
	application			

Source: Author, based on Ycharts.com, n.d., retrieved from:

https://ycharts.com/companies/market_cap, and Macrotrends.net, n.d., retrieved from: https://www.macrotrends.net/stocks/stock-screener, accessed: 08.08.2020.

As Table 3 shows, many platform companies record an increase in value compared to the end of 2019, despite (or perhaps thanks to) the COVID-19 pandemic. The absolute "star" among the platform companies is Zoom Video Communications, with the growth of the market capitalization from December 31, 2019 up to August 7, 2020 of 367%. It is joined by Peloton Interactive Inc., the largest interactive fitness platform in the world, which has made a real "boom" with online streaming workouts for various groups of users, with value growth over the same period of 140%, then Pinterest - a platform for sharing information and video content on the web with almost 94% increase in market value, as well as Netflix, a company for online streaming of video or multimedia content, whose value in the same period increased by about 54%.

While the initial success of sharing economy platforms promised further growth, the corona virus pandemic brought a sharp drop in value for some of them. The question is - what about the former "stars" of the sharing economy, such as the famous platforms: AirBnB, Uber, Lyft and WeWork?

Things were not going well for many platform companies, especially those of the *peer-to-peer* sharing economy type. Thus, for example, the decline in turnover during isolation, due to the COVID-19 pandemic, contributed to the dizzying decline in Uber's revenue, which was somewhat mitigated by the "opening" due to the improving epidemiological situation in the world's most developed countries. Therefore, the company even recorded an increase in value, measured by market capitalization on August 7, 2020 compared to December 31, 2019, by 12.55%, which is certainly less than the expected growth. Uber still covers about 70% of the ride sharing market, while its main competitor Lyft has about 30% market share. The corona virus pandemic has contributed to the fact that other competitors, which previously together achieved a market share of 1%, have now completely disappeared from the market (Yeo, 2020). The data in Table 3 show that in the first seven months of 2020, more precisely until August 7, 2020, Lyft had a drop in market capitalization of almost 25%.

The situation is much more difficult with Airbnb (a company-platform for connecting room/house renters and users through the application) and WeWork (a company operating in the commercial real estate industry, which is famous for its business model of sharing offices - the so-called co-working space, i.e. by its "space-as-a-service" model). These two companies recorded a significant decline in their market value⁵ during the first half of 2020, so they can be considered the

⁵ Market capitalization data for these companies are not given in Table 3 because they are not available on analytical platforms that track the financial performance of listed companies, such as Ycharts.com, PwC, PitchBook, and Macrotrends.net, as they are not listed. Namely, as pointed out (Chen, 2020), the market capitalization of a company is first established through an initial public offering (IPO) on stock exchange. Prior to an IPO, a company wishing to go public registers with an investment bank that will use valuation techniques to determine the value of the company and

biggest "losers" of the current pandemic. In 2018, Morningstar estimated that the market capitalization of Airbnb, in the case of an IPO, would be somewhere between \$ 53 billion and \$ 65 billion. That would make its value higher than the value of the world's largest hotel company - Marriott International, since the market capitalization of Marriott at that time was around \$ 46 billion (Goldstein, 2020). However, during the first half of 2020, due to the corona virus pandemic, Airbnb cut 1,900 jobs, accounting for 25% of its global workforce. CEO and cofounder of the company Brian Chesky said in a letter to employees that the company predicts that revenue in 2020 will be 50% lower than in 2019, and that it is estimated to be around US \$ 4.8 billion (ibid.). The ongoing coronavirus pandemic has disrupted the company's ambitious plans to go public with an initial public offering (IPO), scheduled for 2020, and it is estimated, based on internal valuations, that the company's value has fallen by US \$ 26 billion, compared to the previously estimated value by PitchBook (Sonnemaker, 2020).

Also, the value of WeWork droped to US \$ 2.9 billion (Pietsch, 2020). This value of the company is a "precipitous" drop in relation to the company's internal estimated value, at the beginning of 2019, which was an incredible 47 billion US \$. Later that year, the company lowered its valuation to US \$ 10 billion after postponing an initial public offering (ibid.). WeWork's value fell by as much as US \$ 4.4 billion in the first quarter of 2020, as estimated by the main investor - SoftBank in its Consolidated Financial Report (SoftBank Group, 2020, p. 9). Namely, the fair value of WeWork's capital, calculated by using the discounted cash flow method, amounted to \$ 7.3 billion as of December 31, 2019, and at the date March 31, 2020, it amounted to only \$ 2.9 billion. The significant decline in the company's value in the first quarter of 2020 was largely due to the negative effects of the outbreak of the COVID-19 pandemic⁶, the loss of customers and the closure of numerous offices in the countries in which it operates. SoftBank Vision Fund, which is a major investor in WeWork, suffered billions of dollars in losses, prompting SoftBank's CEO to say he was wrong to invest in WeWork (Pietsch, 2020).

Sokol and Pattaccini (2020) also talk about the "winners" and "losers" at the time of the corona pandemic, following the growth of stock prices of companies on the financial market for the period from January 2, 2020 up to April 30, 2020. With the exception of companies in the field of biotechnology (the absolute "champion" on their list is the biotechnology company Novacyt, with an increase in stock prices in the observed period of an incredible 2,494%), as well as companies working

determine how many shares will be offered on the stock exchange and at what price. The data on the market capitalization of these companies are the result of such estimates available.

⁶ In addition to the effects of the COVID-19 pandemic, the Consolidated Financial Statements of SoftBank, which is the main investor in WeWork, also states the reasons related to: "(i) a significant reduction in the multiples used in calculating the terminal value to account for the decline in the share price of comparable peer public companies, and (ii) an increase in the discount rate to account for price changes in WeWork's publicly traded senior unsecured notes" (SoftBank Group, 2020, p. 9).

directly on the development of vaccine against COVID-19 (in the same period company Moderna achieved an increase in stock prices of almost 140%), on the list of top fifteen companies in the world in terms of share price growth are also platform companies, namely: Zoom Video Communication at the 8th place, with a share price increase of 96.7%, then Amazon at the 12th place, with stock price growth of 30.35% and Netflix, at the 15th place, with stock price growth of 27.30%. So, these platform companies are the absolute "winners" of the pandemic. In addition to these well-known platform companies, at the 14th place is a lesserknown (although established 20 years ago) British company - a "rising star" -Ocado Group, an online supermarket that is described as the world's largest food retailer on the web. It is obvious that the growth of the value of this company is directly related to the huge growth of purchases over the Internet, including food, at the time of "lockdown", i.e. quarantine due to the corona epidemic. Ocado Group achieved an increase in stock prices in the observed period of 27.39% and thus overtook even Netflix. All other companies on the list provided by Sokol and Pattaccini (2020) are biotech, pharmaceutical and telemedicine companies, whose share price growth was directly contributed by their research in the field of nature and treatment of COVID-19 infection. However, it must be pointed out that the socalled "new reality", i.e. the change in lifestyle and work during the corona virus pandemic, which is reflected in social distancing, isolation and the consequent growth of Internet usage, also contributed to the huge growth in value and stock prices of platform companies in many other industries (primarily those based on the use of digital, i.e. mobile technologies and applications), which have made the best use of the changes in the way people are forced to live and work.

4. The COVID-19 pandemic and the future of the sharing economy platforms

Firms in the industrial era were driven by supply-side economies of scale, with high fixed costs and low marginal costs. The effects of economies of scale have enabled companies to reduce prices by increasing production and sales. This trend has especially dominated in traditional industries - in the steel industry, gas and oil production, electrical industry and automotive industry. In contrast, in the digital age firms are driven by an economies of scope on the demand side, known as "network effects", where the users themselves create value for the users in the network, which attracts more users, which further creates more value, which attracts more users, and so on. This has led to the dominance of companies in industries such as search engines, social networks, operating systems, e-commerce and mobile technologies (Van Alstyne, 2019, p. 8). In an attempt to answer the question of why platform companies are growing so fast, Van Alstyne (2019, p. 8) points out that these platform companies have shifted production or service provision outside the company (they are performed by suppliers, i.e. outside the company itself - *author's note*), due to which their marginal costs of production or

provision of services are equal to zero (for example, Uber does not own vehicles, Airbnb does not own apartments, Facebook does not create content that it places on its social network). Their growth is not determined by production costs, but by the speed with which they can add new partners to the network. Also, the same author (ibid.) in an attempt to answer why platform companies have such a high market capitalization with fewer employees, points out that their online users are actually content producers or service providers (they are the so-called users-producers, i.e. prosumers, see more in: Sussan & Acs, 2017), who as an external, flexible workforce do not incur costs as employees in traditional industries.

Platforms based on the sharing economy were praised not only by users, but also by investors, who were very optimistic about their profit potential, estimating that they would surpass traditional businesses, i.e. incumbent competitors. These high estimates were based on investors belief that players in a businesses based on sharing economy platform will be able to win large markets and become profitable for a long period to come (Wirtz et al., 2019). Moreover, such high estimates are an implication of the assessments of investors that these players will achieve significant competitive advantages that will prevent the entry of new participants and competitors into the industry and price competition encouragement. The basis of these assumptions was that platform-based businesses could potentially generate "astronomical" returns on assets when they scale (ibid.).

However, developments in the external environment that companies cannot influence, such as the corona virus pandemic, have interrupted this high growth of companies based on the sharing economy platform and pointed to a number of weaknesses in this business model. Gerwe (2020) indicates that the corona virus pandemic has literally reversed each of the strengths of the sharing economy in weakness, given the following:

First, these platforms are usually transactional, where online linking of suppliers and customers is provided, but where the service itself is provided offline (ride, accommodation, delivery of goods, use of offices, etc.). Namely, although the linking of suppliers and users of the service is based on digital applications, the transaction itself is based on the service that takes place in the real world, and not virtually. Therefore, although the digital basis of the business model has remained the same, restrictions on people-to-people contacts, due to the corona virus pandemic, have prevented companies from providing the services and consumption for which they were established. Therefore, the demand for services, i.e. for the offer of these companies, in the conditions of social distancing, has significantly decreased.

Second, in the context of a pandemic, safety requirements are being tightened, as a result of which the sharing economy business model, especially the *peer-to-peer* type of model, has been assessed as unreliable. Namely, the relaxed attitude of this model towards health and safety standards when sharing assets (apartment, car, scooter, office, etc.) in today's conditions can be assessed as carelessness.

Finally, the business model based on the sharing economy platforms focuses on temporary access to assets rather than ownership. Gerwe (2020) states that natural disasters and pandemics turn people to use only what they possess. As the possibility of accessing someone else's assets is nowdays difficult and risky, ownership becomes a much better alternative, not only because of hygiene and health standards, but also from the point of view of economic security and safety. The sharing economy is built on a simple premise: assets - from bicycles, through scooters, to cars and homes - can be most effectively used if they are shared between individuals. But in conditions of negative changes in the external environment, such as the corona virus pandemic, sharing is exactly what one is trying to avoid, which made Kari (2020) of the journal *The Guardian* to call the sharing economy – "The germ-sharing economy".

Therefore, in addition to the obvious advantages, the disadvantages of a business model based on the sharing economy are also pointed out. The great disadvantage and vulnerability of this model, according to Newcomer (2020) of the magazine Fortune, stems from the transfer of costs and risks to suppliers (independent contractors, freelancers, or on-demand employees - so-called "gig workers", i.e. employees on the platforms – author's note), which occurs at the time of decline of economy, due to unforeseen changes in external factors (natural disasters, virus pandemics, political crises, etc.). At the time of crisis the workers hired through the platform of the sharing economy are not protected by either the platform or the state. Platforms' employees have become extremely vulnerable during the economic crisis caused by the COVID-19 pandemic because they have neither health insurance nor unemployment insurance, they are not entitled to paid leave, i.e. all financial risks have been transferred to employees. Also, these employees in many countries could not apply for aid packages that many countries, i.e. their governments, intended to help entrepreneurs and owners of small and medium enterprises during the crisis.

Precisely, when it comes to the economic implications of the current corona virus pandemic on suppliers, users and platform owners in the sharing economy, all the weak points of this business model are coming to the surface. Due to the pandemic and the economic crisis that accompanies it, the demand for products and services of some platforms is declining, leading to a drop in income and earnings, so some of them will have to go out of business or disappear from the market, causing massive losses for platform owners and investors (Gerwe, 2020). Therefore, it is pointed out that what was a great source of profit, is now becoming the biggest weakness of this business model (Newcomer, 2020). Also, it is pointed out that many jobs within the sharing economy businesses are performed by less qualified and low-paid workers (such as employees working for Uber, Lyft, Deliveroo, Grubhub, etc.). These employees are particularly vulnerable in the case of losing their job and not receiving state aid for the time of their unemployment. Therefore, it is pointed out that in the case of sharing economy business model,

similarly as in the case of global supply chains, once again the old truth is proved: "Fragility and efficiency are two sides of the same coin. The more efficient a system is, the more easily it can break" (Salmon, 2020).

In addition, the "boom" of the sharing economy over the last decade and the economic benefits of sharing-based platforms have grown to the point where they have completely nullified the benefits for the environment, the local community, and wider social benefits. It is only necessary to mention the negative effects that excessive growth of the business based on home-sharing (for example AirBnB) had on the growth of low-cost air traffic and the occurrence of congestion in some tourist destinations, especially metropolises (so-called *overtourism*), often leaving locals without a place to live in the city center and buried in tons of garbage after the "invasion" of thousands of tourists. It is even stated (Manavis, 2020) that such homesharing platforms have encouraged speculative investment in real estate, where entire private-owned buildings, which were previously present in the real estate market, entered in home-sharing market and have become a competition not only to the traditional long-term house and apartment rental industry, but also to hotels, seriously changing the tourism industry. Or, the question is whether ride-sharing (an example is Uber) has led to unburdening or, conversely, to traffic congestion in big cities. It is therefore estimated that companies such as Uber, WeWork and AirBnB were in fact the "Trojan horse for a precarious economic future" (ibid.).

All of these open-ended questions, especially in light of the corona virus epidemic crisis, have prompted economists to question whether this is the end of the sharing economy. Namely, as it is pointed out, the last thing that users want in the conditions of a possible corona virus infection is - to share (an apartment, a car, an office). Therefore, Mehta (2020) points out in his article in *Forbes* magazine, that we are entering the "Isolation Economy". It is rightly emphasized that the systemic transformation of industry occurs "when capital infusion follows societal trends, never the other way around" (ibid.).

Mehta (2020) states that social trends occur as a result of breakthrough innovations, natural circumstances or those created by people, as well as significant changes in lifestyle. Therefore, the appearance of the so-called "The Isolation Economy" links to social change that results in a business model that will be sustainable for companies that innovate and manufacture products and services that will enable people's lifestyle transformation. It was "The Isolation Economy" that emerged as a necessary consequence of the corona virus pandemic and a "social distancing" lifestyle. It is based on the principle that people will travel less in order to do their daily activities. Instead, they will be able to finish them just as effectively and efficiently from their homes. Going to the office is increasingly being replaced by working from home, and going to the store has been replaced by internet purchasing and home delivery. Schools and universities will be increasingly encouraged to switch to online learning programs, and in the field of

health care, going to medicine doctors will be increasingly combined with the application of the so-called telemedicine (ibid.).

However, it is true that a human is a social being and that social contacts are necessary in order to preserve people's mental health and satisfaction with their lives. Therefore, the normalization of the situation after the pandemic will bring back some old habits and activities. Demand for sharing economy services is expected to return largely in the post-pandemic period (Gerwe, 2020). However, many of the mentioned lifestyle changes will remain permanent (Mehta, 2020). For example, companies are increasingly realizing that their real estate needs (for offices, above all) are not so great and they can be equally productive when their employees work from home, which means they do not have to pay the rent for expensive offices. In addition to the mentioned productivity, the reason for that is a significant reduction of transaction costs and costs related to ownership of assets. As pointed out, many costs when switching to online activities are equal to zero (ibid.). Namely, these costs are generally already included in the existing costs, as in the case of paying tariffs for mobile telephony and internet services, and do not induce additional costs. Therefore, it is considered that investors (especially venture capital funds) in the near future will increasingly invest in platform companies e.i. businesses related to home delivery, home entertainment, other distance services, technology provision, in online insurance companies and other online businesses that create value for the more static consumer, who spends more time at home.

5. Conclusion

The results of the research presented in this paper showed that at the time of the COVID-19 pandemic, the worst-performing sharing economy platforms were: peer-to-peer, those based on access to other people's assets/resources, and not on ownership (for example: Airbnb, Uber, Lyft), or that own assets/resources but of constrained capacity (offices - e.g. WeWork, cars - e.g. ZipCar, bicycles and scooters – e.g. Bird, Lime, etc.), also platforms that are purely transactional, i.e. where the linking between the user and the supplier is done through the application (online), but the exchange/transactions are realized on the basis of direct interaction between parties (offline) and, finally, which are privately owned, i.e. which have not yet became public through initial public offering. The platforms of the open sharing economy type went much better during the pandemic. These are the platforms in which users themselves participate in the creation of the offer (the socalled *prosumers*), for example: Apple, Facebook, Youtube, and a like, and which, although transactional in nature (e.g. Netflix, Pinterest, Spotify, Peloton, Zoom, etc.), allow sharing of resources and assets of unconstrained capacities (music, information, video and multimedia content). However, the most successful are platforms that are integrated by their nature (both transactional and innovative - for example: Amazon, Apple, Google, Facebook) or purely innovative – e.g. Microsoft (based on a classification provided by Ewans & Gawer, 2016). As a rule, these platform companies are listed on the stock exchange, since due to their characteristics (business transparency and availability of financial reports that are public, much greater compliance with regulations and laws, lower risks, etc.) (see more in: Stefanović & Ivanović-Đukić, 2015), these public platforms attract a significantly larger number of investors than those in private ownership. It can be concluded that this remarks confirm the initial assumption that, although nowdays digital platforms have the highest market value, not all platform-companies are in the same position. Namely, their vulnerability, as well as resiliece to external environmental factors, such as the COVID-19 pandemic, depends on the type and characteristics of the platform, which affect not only their business success, but also their survival and growth.

In order to survive and thrive in the future, it is necessary to make numerous changes in the business model of the sharing economy platform, even in the very foundations and principles on which it is based. These platforms must give priority to profitability, not pure growth (scaling). As we have already pointed out, health and safety standards need to be improved, which would make this sector more resilient and sustainable for all participants. Also, it is necessary to ensure compliance with regulations and laws, especially in the field of labor and employment, as well as tax payments, to bring much-needed order in the field of sharing economy, which otherwise has huge potential for further development, especially after the COVID-19 pandemic.

References

- Capgemini Consulting (2011). Digital Transformation: A Roadmap for Billion-Dollar Organizations. MIT Sloan MANAGEMENT, retrieved from: https://www.capgemini.com/wp-content/uploads/2017/07/Digital_Transformation_A_Road-Map_for_Billion-Dollar_Organizations.pdf, accessed: 14.5.2020.
- Chappelow, J. (2018). Peer-to-Peer (P2P) Economy, retrieved from: https://www.investopedia.com/terms/p/peertopeer-p2p-economy.asp. accessed: 14.05.2020.
- Chen, J. (2020). Market Capitalization, retrieved from: https://www.investopedia.com/terms/m/marketcapitalization.asp, accessed: 08.08.2020.
- Cuc, J. E. & Miina, A. (2018). Classifying the Business Model from a Strategic and Innovation Perspective. *Journal of Business Models*, 6 (2), 15-18.
- de Reuver, M., Sorensen, C., Basole, C. R. (2018). The digital platform: A research agenda. *Journal of Information Technology*, 33, 124-135.
- Evans, P.C. & Gawer, A. (2016). The Rise of the Platform Enterprise: A Global Survey, *The Emerging Platform Economy Series*, No. 1, New York: The Center for Global Enterprise.
- Gassmann, O., Frankenberger, K., Csik, M. (2014). *The business model navigator: 55 models that will revolutionise your business*. Harlow: Pearson Education Ltd. (Quoted in: ICV-controlling.com (n.d.). *Digital Business Model Innovations: Controlling in the Digital Transformation*. International Association of Controllers, retrieved from:

- https://www.icv-controlling.com/fileadmin/Assets/Content/AK/Ideenwerkstatt/Files/Dream Car GMI EN.pdf, accessed: 23.4.2020.)
- Gawer, A. & Cusumano, M. (2012). Industry Platforms and Ecosystem Innovation. Paper presented at the DRUID 2012, June 19-21, CBS, Copenhagen, Denmark.
- Gerwe, O. (2020). The sharing economy: One more casualty of coronavirus? London: Brunel University, retrieved from: https://www.brunel.ac.uk/news-and-events/news/articles/The-Sharing-Economy-One-more-casualty-of-coronavirus, accessed: 04.05.2020.
- Goldstein, M. (2020). Battered By Coronavirus, Will Hotels And Airbnb Keep An Uneasy Truce? Forbes, May 13, retrieved from: https://www.forbes.com/sites/michaelgoldstein/ 2020/05/13/battered-by-coronavirus-will-hotels-and-airbnb-keep-an-uneasytruce/#429766a41cb5, accessed: 08.08.2020.
- Hanelt, A. (2016). Managing the Digital Transformation of Business Models: An Incumbent Firm Perspective. Dissertation, Cuvillier Verlag, Germany, retrieved from: https://cuvillier.de/uploads/preview/public_file/9868/9783736992542_Leseprobe.pdf, accessed: 9.4.2020.
- https://fortboise.org/Top100/top100-20061022.html, accessed: 08.08.2020.
- Huston, C. (2017). Ride-hailing industry expected to grow eightfold to \$285 billion by 2030. MarketWatch, May 27, retrieved from: https://www.marketwatch.com/story/ride-hailing-industry-expected-to-grow-eightfold-to-285-billion-by-2030-2017-05-24, accessed: 11.02.2020.
- ICV-controlling.com (n.d.). Digital Business Model Innovations: Controlling in the Digital Transformation. International Association of Controllers, retrieved from: https://www.icv-controlling.com/fileadmin/Assets/Content/AK/Ideenwerkstatt/Files/Dream Car GMI EN.pdf, accessed: 23.4.2020.
- Jolly, J. & Ambrose, J. (2019). Saudi Aramco becomes most valuable listed company in history. The Guardian, December 11, retrieved from: https://www.theguardian.com/business/ 2019/dec/11/saudi-aramco-shares-soar-as-it-becomes-world-largest-listed-company, accessed: 17.08.2020.
- Kari, P. (2020). The germ-sharing economy: coronavirus takes toll on gig workers. *The Gardian*, March 6, retrieved from: https://www.theguardian.com/world/2020/mar/06/coronavirus-outbreak-gig-workers-risk-sick-leave, accessed: 09.04.2020.
- Kotarba, M. (2018). Digital Transformation of Business Models. Foundations of Management, 10, 123-141.
- Laamanen, T., Pfeffer, J., Rong, K., Van de Ven, A. (Eds. Intr.) (2018). Business models, ecosystems, and society in the sharing economy. *Academy of Management Discoveries*, 4 (3), 213–219.
- Lanzolla, G., Lorenz, A., Miron-Spektor, E., Schilling, M., Solinas, G., Tucci, C. (Eds.) (2018). Digital Transformation: What Is New If Anything? SPECIAL ISSUE: Academy of Management Discoveries, 4 (3).
- Macrotrends.net (n.d.), retrieved from: https://www.macrotrends.net/stocks/stock-screener, accessed: 08.08.2020.
- Manavis, S. (2020). How coronavirus proved just how dangerous the sharing economy could be. NewStatesman, April 2, retrieved from: https://www.newstatesman.com/science-tech/coronavirus/2020/04/coronavirus-proved-just-how-dangerous-sharing-economy-could-be-airbnb-uber, accessed: 09.04.2020.
- Mehta, K. (2020). Welcome To The Isolation Economy (Goodbye Sharing Economy). Forbes, March 23, retrieved from: https://www.forbes.com/sites/kmehta/2020/03/23/welcome-

- to-the-isolation-economy-goodbye-sharing-economy/#1fd03de48d88, accessed: 09.04.2020.
- Newcomer, E. (2020). The 'gig economy' rarely offers benefits. Now Uber and Airbnb are lobbying Congress to bail out their suppliers. Fortune, March 25, retrieved from: https://fortune.com/2020/03/25/uber-airbnb-lobby-congress-bailout-idled-gig-workers/, accessed: 08.04.2020.
- Pietsch, B. (2020). WeWork's valuation has fallen from \$47 billion last year to \$2.9 billion. *BusinessInsider*, May 18, retrieved from: https://www.businessinsider.com/wework-valuation-falls-47-billion-to-less-than-3-billion-2020-5, accessed: 08.08.2020.
- PwC.com (2020). Global Top 100 companies by market capitalisation, retrieved from: https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-june-2020-update.pdf, accessed: 08.08.2020.
- Rinne, A. (2019). 4 big trends for the sharing economy in 2019. The World Economic Forum, retrieved from: https://www.weforum.org/agenda/2019/01/sharing-economy/, accessed: 14.08.2020.
- Salmon, F. (2020). Coronavirus upends macro economy. Retrieved from: https://www.axios.com/coronavirus-bear-market-macroeconomics-d4770846-fe7b-4481-8a46-3d4a09f80a3e.html, accessed: 09.08.2020.
- Schallmo, D., Williams, A. C., Boardman, L. (2017). Digital Transformation of Business Models — Best Practice, Enablers, and Roadmap. *International Journal of Innovation Management*, 21 (8), December, 1740014-1 - 1740014-17.
- Schenker, J. L. (2019). The Platform Economy. *TheInnovator.news*, January 19, retrieved from: https://innovator.news/the-platform-economy-3c09439b56, accessed: 18.08.2020.
- Schwertner, K. (2017). Digital Transformation of Business. *Trakia Journal of Sciences*, 15 (1), 388-393.
- SoftBank Group (2020). Consolidated Financial Report For the Fiscal Year Ended March 31, 2020 (IFRS), retrieved from: https://group.softbank/system/files/pdf/ir/financials/financial_reports/financial-report_q4fy2019_01_en.pdf, accessed: 10.08.2020.
- Sokol, M. & Pattaccini, L. (2020). Winners and Losers in Coronavirus Times: Financialisation, Financial Chains and Emerging Economic Geographies of the COVID-19 Pandemic. Tijdschrift voor Economische en Sociale Geografie, John Wiley & Sons Ltd. on behalf of Royal Dutch Geographical Society / Koninklijk Nederlands Aardrijkskundig, 111 (3), 401–415.
- Sonnemaker, T. (2020). Airbnb has reportedly dropped its internal valuation to \$26 billion as the coronavirus halts travel worldwide. *BusinessInsider*, April 3, retrieved from: https://www.businessinsider.com/airbnb-lowers-internal-valuation-to-26-billion-ascoronavirus-hits-bookings-ft-2020-4, accessed: 08.08.2020.
- Stefanović, S. & Ivanović-Đukić, M. (2015). *Upravljanje malim i srednjim preduzećima:* strateški i operativni aspekt. Niš: Ekonomski fakultet
- Sussan, F., Acs, J. Z. (2017). The digital entrepreneurial ecosystem. Small Business Economics, 49, 55-73.
- Teece D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2), 172-194.
- Teece, D. J. & Linden, G. (2017). Business models, value capture, and the digital enterprise. *Journal of Organization Design*, 6 (8), 1-14.
- Valdez-De-Leon, O. (2019). How to Develop a Digital Ecosystem: a Practical Framework. Technology Innovation Management Review, 9 (8), August, 43-54.

- Van Alstyne, M. (2019). The Opportunity and Challenge of Platforms. In: Jacobides, M., Sundararajan, A., Van Alstyne, M. (2019). *Platforms and Ecosystems: Enabling the Digital Economy*. Briefing Paper, World Economic Forum, retrieved from: http://www3.weforum.org/docs/WEF_Digital_Platforms_and_Ecosystems_2019.pdfacc essed: 04.08.2020.
- Wikipedia.org (n.d.), retrieved from: https://en.wikipedia.org/wiki/Saudi_Aramco#cite_note-11, accessed: 17.08.2020.
- Wirtz, J., So, K. K. F., Mody, M. A., Liu, S. Q., Chun, H.H. (2019). Platforms in the peer-to-peer sharing economy. *Journal of Service Management*, 30 (4), 452-483.
- Yaraghi, N. & Ravi, S. (2017). The Current and Future State of the Sharing Economy, Brookings India IMPACT Series, No. 032017, March.
- Ycharts.com (n.d.), retrieved from: https://ycharts.com/companies/market_cap, accessed: 08.08.2020.
- Yeo, L. (2020). Uber vs. Lyft: Who's tops in the battle of U.S. rideshare companies. Second Measure, August 17, retrieved from: https://secondmeasure.com/datapoints/rideshareindustry-overview/, accessed: 09.08.2020.

POSLOVNI MODEL PLATFORME EKONOMIJE DELJENJA: KO SU "DOBITNICI" A KO "GUBITNICI" COVID-19 PANDEMIJE?

Rezime: Sve veći napredak u digitalizaciji poslovanja poslednjih godina predstavljao je značajan impuls inovacijama poslovnog modela. U tom smislu, svedoci smo sve većeg poslovnog uspeha kompanija koje svoje poslovanje baziraju na poslovnom modelu digitalne platforme. Stoga je bazična svrha ovog rada da ukaže na suštinu platformizacije kao modela poslovanja, zasnovanog na implementaciji digitalnih tehnologija, kao i da ukaže na karakteristike prednosti i nedostatke platformi tzv. "ekonomije deljenja". Takođe, svrha i cilj rada je da ukaže kako karakteristike određenih tipova platformi, a posebno platformi ekonomije deljenja, utiču na njihov poslovni uspeh, odnosno tržišnu vrednost, ali i ranjivost u slučaju nepovoljnog dejstva faktora eksternog okruženja, kao što je aktuelna pandemija korona virusa. Koristeći kako klasičnu metodologiju teorijskog istraživanja, na bazi uvida u dostupne izvore literature, tako i rezultate istraživanja najbolje svetske prakse, kao i praćenje statističkih pokazatelja tržišne vrednosti najboljih svetskih kompanija, došlo se do rezultata koji potvrđuju polaznu pretpostavku o tome da danas najveću vrednost ostvaruju upravo kompanije bazirane na poslovnom modelu platforme. Ipak, rezultati istraživanja su pokazali i ranjivost poslovnog modela platformi, posebno onih baziranih na ekonomiji deljenja, u uslovima pandemije. S obzirom na to da u akademskoj literaturi ima vrlo malo istraživanja o ekonomskim konsekvencama aktuelne pandemije COVID-19, originalnost i značaj istraživanja je u pokušaju da se ukaže na to kakve posledice pandemija ima na tržišnu vrednost i poziciju kompanija-platformi, i kako bi mogla uticati na opstanak i dalji razvoj platformi ekonomije deljenja u budućem periodu.

Ključne reči: poslovni model, digitalizacija, platforma, ekonomija deljenja, tržišna kapitalizacija, COVID-19.

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