Consumers’ Motivation to Participate in the Digital Economy and Changes Associated with the Pandemic

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Abstract: Pandemic is an external shock that influenced behavior of consumers across the world. During the pandemic, there were apparent changes in purchasing patterns in the market given the uncertainty in the markets. The uncertainty in markets generally leads to caution in spending and encouragement of saving. Another major driver of the change of behavior was the introduction of various anti-pandemic rules and lockdowns. Restrictions led to deferred consumption which was apparent in the global economy in 2021 and the first quarter of 2022. This paper provides an insight into consumer motivation in the digital economy and the changes associated with such behavior in the pandemic and post-pandemic era. The nature and characteristics of digital business models were essential during the pandemic not just because of the reduction of transaction cost and thus higher efficiency but also because of the necessity of social distancing.

1. INTRODUCTION

Digital business models are models that are primarily based on digital transformation and the development of modern technologies. Through modern technologies, companies with these models are able to add value to their customers and make a profit. A huge advantage of these models is their scalability, network effect and usually very low cost. Dozens of new business models or changes to existing models are created every year. This paper deals with the changes in the cultural market due to the digital transformation and the situation around the COVID-19 pandemic from the consumer’s point of view. The research will pay special attention to changes in consumer preferences and changes in motivations in the digital economy, as well as changes in consumer behavior.

2. DIGITAL BUSINESS MODELS AND MOTIVATION TO PARTICIPATE

A business model is a tool that expresses the logic of companies and describes how the company interacts with customers and other stakeholders. The business model describes the structure of the business and how it supplies its products and services and thus generates profit and long-term sources of income. (Osterwalder, Pigneur & Tucci, 2005) Companies using digital business models are characterized by digitization of part or the entire agenda of the company. Digital businesses have two basic features in common. The first is the widespread use of modern digital technologies and the second is a dramatic reduction in transaction costs. (Hull et al., 2007)

All of these business models have two key features in common. They use modern technology, which dramatically reduces transaction costs. Due to these business models, many changes are taking place in new and traditional markets. The relationship between the organization and customers is changing. These changes also affect the characteristics of services and products and

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the way they are delivered to the market, which opens the door to the customer-supply and value chain for existing and new market players. Dozens of new business models or changes to existing models are created every year, which adds to the importance of this phenomenon from the point of view of academic research. (Frenken & Schor, 2017; Kraus et al., 2019)

Digital business models build on the opportunities brought by technological progress, digital transformation and advances in communications technologies. These changes at an accelerating pace redefine the way people on the planet communicate, collaborate, and trade with each other. At the same time, societal changes are key to the development of digital business models. The most important changes are the adoption of modern technologies by the general population, the growth of digital literacy, the growth of wealth, change in the behavior of market agents and their preferences, and ongoing urbanization and globalization. (Narasimhan et al., 2017) Technological and societal changes mentioned above create additional space for the use of digital business models and thus contribute to their development and involvement in markets.

The development and expansion of the Internet and other communication technologies have had a significant impact around the world. Easier and less costly communication between market participants further supports the development of digital technology. Technological progress and technological sophistication have a major impact on the growth of wealth. (Akerman & Kuznets, 1955; Solow, 1956; Horvath, 2011) At the same time, societal changes are key to the development of digital business models. The most important changes are the adoption of modern technologies by the general population, the growth of digital literacy, the growth of wealth, change in the behavior of market agents and their preferences, and ongoing urbanization and globalization. (Narasimhan et al., 2017) Technological and societal changes mentioned above create additional space for the use of digital business models and thus contribute to their development and involvement in markets.

Digital business models can also be seen as a way to connect the digital world and traditional markets through new ways of doing business in the digital age. Digital technologies and digital platforms can increase the efficiency of economic goods delivery in many industries, providing traditional services and products faster, cheaper, better and more efficiently. Thus, motivating market agents including consumers to participate. An example is the provision of standard passenger transport services via a digital platform, such as Uber. Furthermore, completely new industries, companies and business models are emerging that offer new services. Examples are new streaming services such as Spotify or Netflix. (Sussan & Acs, 2017)

3. EFFECTS OF PANDEMIC ON CONSUMER BEHAVIOR

An important topic in the field of study of changes in consumer behavior in the pandemic and post-pandemic era is the so-called deferred consumption. That is the part of the income and wealth that consumers decide to defer regularly to save to spend in the future on for example holiday-type expenses. This phenomenon took on a new dimension during the pandemic. Market agents including consumers had limited opportunities to consume due to the presence of anti-pandemic measures, rules and restrictions such as the closure of restaurants, cinemas, theaters, sports venues and other sectors of the economy. In a sense, consumers put aside part of their consumption because of the restrictions in the economy. (Veselovská et al., 2021)

In case of postponement of consumption, or the impossibility of consuming certain types of economic goods, especially in the middle-income class, there was room for an increase in their
propensity to save. The situation across European countries, of course, varied according to the intensity of the disease and anti-pandemic measures. An important factor is the degree of caution of households, which preferred to save more than usual in times of uncertainty caused by the pandemic and lockdowns for them to be prepared for any unforeseen situations in the future. (Veselovská et al., 2021) (Lemes Bausch et al., 2021)

Research in household consumption habits in times of macroeconomic uncertainty speaks of a lower willingness to spend. According to a survey of European households, the higher macroeconomic uncertainty caused by the pandemic leads households to reduce their spending on services, luxury goods, travel abroad and non-durable goods. Moreover, macroeconomic uncertainties in times of the tense geopolitical situation, expensive commodities, insufficient world supply capacity, high inflation and other waves of the pandemic in Asia are unlikely to end in the coming months. Thus, the pressure to reduce the consumption of some economic goods can be expected to continue. (Coibion et al., 2021)

The effect of lower willingness to spend in uncertain times will go directly against the effect of catching up on so-called deferred consumption described above. After the abolition of anti-pandemic rules, we could see strong demand across the world economy. Postponed or deferred consumption led to a sharp increase in consumption in a number of countries. Consumers are using their savings to finance their consumption as most of them wanted to catch up on what was lost during the pandemic. The amount of deferred consumption can be relatively high, which is also in line with data on strong world demand in 2021 and the course of 2022 so far. In the first quarter of the year 2022, it seems that the effect of deferred consumption outweighed the effect of the lower willingness of households to spend in uncertain times. (Coibion et al., 2021)

Current research shows that while there were significant cut backs on spending on discretionary expenditures there was also an increase in other areas such as the purchase of groceries, household supplies, snacks, electronic goods, office supplies for home office reasons and other supplies used for at home entertainment. (Coibion et al., 2021) (Güngördü Belbağ, 2021)

4. PANDEMIC AND DIGITAL ECONOMY

The entire area of the digital economy is very interesting in light of changes in consumer behavior during and after the pandemic. The undeniable benefits of the digital economy, including the reduction of necessary social contact, have become apparent at the time of the anti-pandemic measures in place. The sudden necessity of social distancing significantly accelerated the use of digital technologies. According to LaBerge (2020) the environment of pandemic accelerated the use of digital services by three years. It is also expected that the pace of those changes will be at least maintained as there are other significant motivators to stay in the digital economy such as efficiency, lower transaction costs, broad supply of different economic goods, stronger digital infrastructure, transformation of individual businesses and whole sectors of economy. (Güngördü Belbağ, 2021) (Jiang, 2020)

Figure 1 captions the increase in average share in percentages of customer interactions that are digital. It is apparent that the global average of such interactions reached 20 % in June 2020 and stayed at that level until May 2018. There has been a rapid increase even in pre-pandemic year 2019, where the average share of customer interactions that were digital reached 36 %. In just
seven months, in July 2020, the share of digital interactions globally reached 58% as the virus was spreading and the number of anti-pandemic rules were set and enforced across the world, which is according to LaBerge (2020) estimation a leap forward in the adoption of digitalization by three years.

Highest average percentage of digital customer interactions during the pandemic month of July 2020 was present in the region of North America, where the share rose to 65% (seven percentage points above the global average). Europeans on the other hand reached 55% of total interactions being digital, which is three percentage points below the average.

![Figure 1. Average share of customer interactions that are digital, %](source: LaBerge, 2020)

The pandemic and restrictions on human behavior fundamentally changed consumer behavior, the economy, and the style of work, which enabled the creation of new habits, purchasing patterns and thus the change in preferences on the market. Joshi and Chaudhary (2021) show that 38.6% of consumers in India fundamentally changed their behavior on the market and that 55.6% of consumers in India adopted online platforms after lockdown measures were introduced.

Significant changes in consumer behavior and preferences affected the supply side as well. Figure 2 shows the change in the average share of economic goods offered partially or fully digitized between June 2017 and July 2020. In this case, partial digitalization of economic goods could represent an option to buy, find, and consume online.

As we can see the global average share of economic goods offered at least partially online was 29% in June 2017, 28% in May 2018, 35% in December 2019 and 55% in the pandemic month of July 2020. The increase in seven months of the pandemic was apparent as the average global share jumped by 20 percentage points. Figure 2 shows that the adoption of digital trends is progressed and is still progressing on both the side of the supply and the demand. (Joshi & Chaudhary, 2021)
There is an obvious difference between sectors of the economy with and without a digital presence. For example, the automotive industry and the heavy industry overall reported very little change in the use of digital technologies. On the other hand, streaming services reported a significant growth in both consumers and traffic. Another area, where changes were significant were sectors of pharma and health care as the rules of social distancing were introduced in these areas as well and consumers still needed medical attention and medicine. (Kniazieva, 2021)

5. IMPLICATIONS FOR FUTURE RESEARCH

The digital transformation is happening faster than expected because of the pandemic and anti-pandemic measures. This calls for researchers, public officials, whole states and societies to address potential challenges so it is possible to reap the benefits that the digital economy can offer. From current academic research and practice, it is apparent that one of the main challenges will be online security and online privacy which is more important with the higher volume of interactions happening online. Security and protection of all citizens including consumers and workers online is another challenge for both local and global regulators. There are also new patterns in the work environment with working from home gaining popularity, which need to be addressed. The accelerated digitalization in the world economy also calls for further research in terms of marketing, which is one of the sectors of the economy that transformed the most during the pandemic and last but not least there is and will be new data available that will allow for further economic research in times of crisis, external shocks, changes in motivation related to different types of government support and so much more.

6. CONCLUSION

A pandemic is an external shock that has brought about many societal changes and forced a lot of reactions in society. One of the fundamental changes was the acceleration of the digitalization of the economy and the use of digital technologies among the general population, public
administration and the private sector. Many restrictions following anti-pandemic rules have led entire segments of society to social distancing. At the same time, entire sectors of the economy have been closed and consumers have not been able to spend their money in the way they used to before. The combination of these factors has supported the rise of the digital economy, where consumers have been looking for alternative ways to get basic supplies and also for alternative entertainment in times of lockdowns.

Consumer behavior during the pandemic was also affected by the so-called cautionary effect, which was also evident from macroeconomic data. According to the results of the survey, households are reducing their spending on average in times of crises for precautionary reasons. Economic agents during turbulent times tend to save more so they are prepared for potential problems ahead. A combination of a cautious approach to consumption and lockdown on entire sectors of the economy led to deferred consumption. This consumption was postponed until the economies were opened again. This can now be seen in the very strong world demand in 2021 and the first quarter of 2022.

Acknowledgment

This research was supported by funds provided by Student Grant Competition of Faculty of Social and Economic studies of Jan Evangelista Purkyně University in Ústí nad Labem. Funds were provided for a student project called Analysis of consumer motivation in the digital economy and changes associated with the COVID-19 pandemic under a code: UJEP-SGS-2021-45-010-2

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