

# MASS CUSTOMIZATION STRATEGIES IN PANDEMIC CONDITIONS

**Aleksandar Vekic, Jelena Borocki, Angela Fajsi**

University of Novi Sad, Faculty of Technical Sciences, Novi Sad, Republic of Serbia

**Abstract:** *In changed business environment, which is accompanied by a high level of uncertainty, all types of business strategies are challenged to effectively adapt to new circumstances. In pandemic conditions, mass customization requires adopting strategies that further enhance flexibility, respond quickly to customer demands, and take into account important elements such as: low production costs, high quality of products and services, reasonable prices, active role of customers in the process of product design and the achievement of an appropriate level of profitability. In this term, innovating and adapting mass customization strategies requires a clearly defined business vision, well-structured business plans, and quality human resources that will enable this process. The aim of this paper is to make link between mass customization and pandemic crises on the one hand, and to demonstrate the possibilities of using different MC strategies in a pandemic, characterized by a high level of uncertainty, on the other hand.*

**Key Words:** *Mass Customization, Business Strategies, Innovation, Modern Technologies, Pandemic.*

## 1. INTRODUCTION

The development of world economies is always accompanied by changes which this process causes. In recent years, rapid technological changes have stood out as a carrier of the transformation potential of the world. This trend leads to the design of greater opportunities for global development, as well as the creation for the improvement of people's lives. Also, they affect all industries in different ways, which often leads to a permanent change in their functioning.

However, observing economies as a whole, but also as particular industries, this phenomenon is often accompanied by certain barriers and limits for which it is often very difficult to find adequate answers and solutions. According to their influence, these barriers can be internal and external in nature.

Examples of internal barriers can be: lower levels of productivity, lack of skilled labor, unclear vision, etc. Examples of external barriers include natural disasters, financial and health crisis, increasing migration of population, ability to adapt to global technological change and innovation, etc.

Today, special attention is paid to periods of crisis, which despite all modern techniques and scientific

achievements, are often very difficult to predict. Usually, a very small fraction and hazards lead to crisis [1] with different effect and consequences. Therefore, the crisis arises as consequence of one of more „hazardous events“, which may be internal and external [2]. One definition says a crisis is „events that belong in the “un-ness” category: unexpected, undesirable, unimaginable, and often unmanageable situations“ [3]. Each crisis leads to a change in the way of doing business, which can significantly affect the change of business goals and strategies. The effects of economic crises have been mainly observed in the literature, but in recent years the world has increasingly faced health crises, in the form of epidemics and pandemics.

According to World Health Organization pandemic can be defined as: the worldwide spread of a new disease. Influenza pandemics are unpredictable, but recurring events that can have several consequences on human health and economic well being worldwide [4].

In the light of influence that the pandemic has on different segments of life, its impact on production and mass customization as its specific strategy can also be viewed. Mass customization (MC) is firmly linked to the way in which the needs of individual customers are met and the delivery of products and services to them. The main goal of this concept is to provide affordable goods and services with enough variety and customization that everyone finds nearly exactly what they want [5]. MC satisfies the demands for customization efficiently [6][7] and leads to a higher level of service and customer satisfaction. One definition of MC viewed this concept as „an organization's ability to provide customized products and services that fulfil each customer's idiosyncratic needs without considerable trade-offs in cost, delivery, and quality“ ([8] based on [9]-[13]).

This concept requires continuous innovation as the process of adopting, integrating, and implementing new knowledge and technologies in product and process development [14]. Also, innovation refers to new applications of knowledge, methods, and skills that can generate enhanced products and processes to meet customer demands and market needs [15][16]. Hence, innovation represents the essential strength of MC for survival in conditions of uncertainty and specific user requirements. MC strategies must necessarily include innovation in the process of their definition and implementation.

## 2. RESEARCH METHODOLOGY

In this paper literature review method was used, as well as the methods of analysis and synthesis. A literature review was used as systematic way of collecting and synthesizing previous research with the aim to provide an overview of MC area and pandemic periods. Also, overview of guidelines and different types of MC strategies is provided. This methodological tool has aim to provide answers about very important questions about pandemic conditions and its influence on MC strategies, and create grounds for future research.

Methods of analysis and synthesis were used in this paper for qualitative research. For this purpose few databases were searched, some contents of several hand-searched journals were included, as well as reviewed websites of key organizations, and relevant texts from the reference lists of the different available documents were examined.

## 3. MASS CUSTOMIZATION IN DYNAMIC BUSINESS ENVIRONMENT

A highly changing business environment requires detailed analysis of parameters such as: revenues, profits or loss, costs, risks, profitability of products and services, and these are important parameters, also in terms of the strategies of mass customization.

According to the business dictionary „business environment is defined as the combination of internal and external factors that influence a company’s operating situation” [17].

Features of business environment are [18]:

1) *Dynamic*: The environment in which the business operates changes continuously because there is a wide variety of factors that exist in the environment, causing it to change its shape and character.

2) *Complex*: There are many forces, events and conditions that constitute business environment, arising from various sources. So, it is a bit difficult to understand the relative influence of a particular factor, on the operation of the organisation.

3) *Uncertain*: Uncertainty is an inherent characteristic of the business environment because no one can predict what is going to happen in future.

4) *Multi-faceted*: A single change in the business environment, can be viewed differently by different observers because their perceptions vary.

5) *Far-reaching Impact*: The survival, growth and profitability, of a business enterprise, depends largely on the environment in which it exists. A small change in the environment has a far-reaching impact on the organisation in different ways.

6) *Relative*: The notion of a business environment is relative since it varies from one location to another.

Today's business environment is very unpredictable and dynamic and can be presented in the following figure:



Fig. 1. Today's dynamic business environment [19]

Business environment consists of the surrounding internal and external factors that either help or hinder the development of businesses.

- 1) The economic and legal environment
- 2) The tech environment
- 3) The competitive environment
- 4) The social environment
- 5) The global business environment

Very important role has business management and process of job creation as key factors of sustainable economy.

Taking into account possibilities of changes as an important factor of MC, it's possible to define four basic MC approaches [20]:

- 1) Transparent customization
- 2) Collaborative customization
- 3) Adaptive customization
- 4) Cosmetic customization

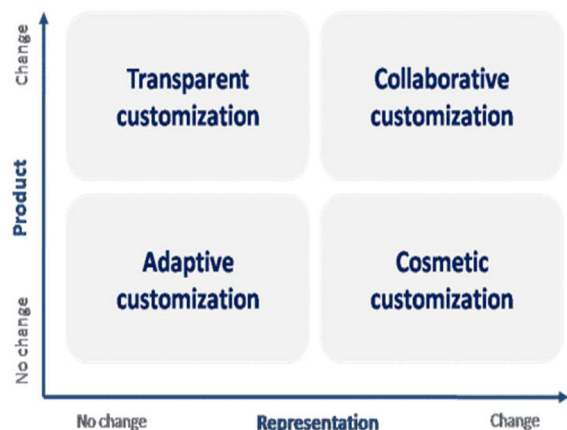


Fig. 2. Four basic MC approaches [21]

By considering different approaches to mass customization their basic goals can be determined.

Table 1: *The aims of different MC approaches*

Approach	Aims
<b>Transparent customization</b>	Providing customized products to individual clients without telling them that the products are exclusively produced for them.
<b>Collaborative customization</b>	The efficiently recognizing of customer needs, to recognizing factors that will fulfill those needs and to creating customized products following those guidelines.
<b>Adaptive customization</b>	Offering one standard product to the customers along with a few customization options. This approach makes sure that the product is designed in a manner that it can be customized by the end client with absolute ease.
<b>Cosmetic customization</b>	Advertizing a standard product differently to different groups of clients. Such products are not customized but instead they are packaged differently to suit different kinds of customers.

MC is also constantly faced with a different level of changes that are increasingly intense and difficult to predict. It's very important to consider MC capability to offer a relatively high-volume of product options for a relatively large market that demands customization, without substantial tradeoffs in cost, delivery, and quality [22], especially in a dynamic environment and increasingly rapid changes. Customers often change their requirements because their needs grow increasingly diverse, so companies embrace mass customization in an attempt to avoid those pitfalls of unpredictable changes and provide unique value to their customers in an efficient manner [23].

Special emphasis is placed on ability to producers and service providers to quickly respond to changes in environments and benefit from market dynamics, which are fundamental for their competitiveness [20] and business success. Also, they adopt MC philosophy because they face cost pressures from changing business environments, such as periods of crisis, political changes, currency changes, increasing material and labor costs, changes in foreign trade policy, etc. This special conditions and occurrences demand favor MC strategies.

#### 4. MASS CUSTOMIZATION STRATEGIES AND THEIR ADAPTATION TO CHANGE

MC can be understood as a special strategy that aims to meet the needs of the client, by creating products and services that fully or largely meet their specific requirements. Defining and developing of MC strategies depends on the conditions in each industry. To successfully define and implement an MC strategy, it is important for companies that it shift from a supply-side

orientation to a demand-side orientation, innovate and change product development and manufacturing processes [24]. In conditions of dynamic MC environment, the needs for introduction MC strategies which are focused on individual customer is increasingly being noticed.

Four types of MC strategies according to the logical basis for their adoption by organizations are [25]:

1) *Entry barriers*- used as an entry barrier, MC aims to create obstacles to the entry of new competitors.

2) *The learning vehicle*- used as a learning vehicle, MC provides the conditions for acquiring new organizational skills and new technological capabilities.

3) *Organization / brand symbol*- as a brand symbol, the adoption of a suitably communicated MC will result in gains for the company's or the brand's reputation.

4) *Adopting MC for profit (profit-taker)*- this type of strategy comprising customized products, high prices and all the costs charged to the customer's account.

Some of the benefits of the MC strategies are: an increase in customer satisfaction, an increase in market, share, an increase in customer knowledge, a reduction in response times to production orders, a reduction in production costs and an increase in profits [26].

According to Lampel and Mintzberg MC strategies can be divided into: pure standardization, segmented standardization, customized standardization, tailored standardization and pure customization [27].

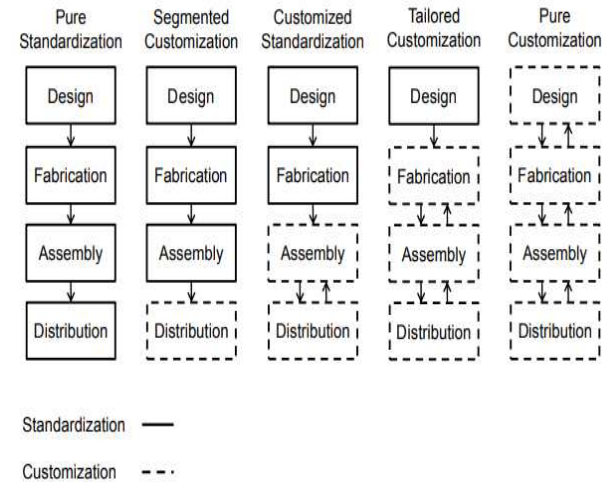


Fig. 3. *MC strategies and their continuum* [28]

Lampel and Mintzberg states that customization can take place at four different stages in the production process and therefore they define five strategies ranging from pure standardization to pure customization [27]:

1) *Pure standardization*- means that every stage from design to distribution, is standardized and does not include any adaption to the customer.

2) *Segmented customization* - takes certain heterogeneity of the consumers into account and divides the demand into clusters.

3) *Customized standardization* - allows the customer to choose from standardized components that will then be assembled according to the customer's.

4) *Tailored customization* - includes customized fabrication. A customer will be shown a prototype of a product that is then adjusted to accommodate his wishes.

5) *Pure Customization* - is the most distinct strategy as the customization also affects the design process of the product. The customer is involved in every decision. Each product is a unique item *and will* only be produced on customer request.

Some of very implemented strategies in modern concept of MC are [29]:

**Differentiation-** This strategy is a basic requirement if the requirement is to apply mass customization. The competition on differentiation must be intensive. Individual demands may be very different from each other, so mass customization means that we can differentiate our products to changing demands. Also, in the view of industry, if competition among companies is the try to meet needs of each person, in that context a mass customization company owns a competitive edge, since it is capable of providing wider options of products to customers than its competitors.

**Lower cost-** according to MC approach lower costs come from lower inventory, higher cash flow, customer satisfaction maximization, quicker responsiveness, etc. The combination of differentiation and lower cost often directs a mass customization company toward the strategy of best value provider.

**Supplier Relationships (Or Alliance) Outsourcing-** companies have to build up strong and broad relationships with suppliers to reduce the risk of input fluctuation. According to this strategy, it is very important to build a strong their own network of suppliers that can be achieved by alliance with key input suppliers.

**Forward Integration Distribution Network of Customer Relationship Developments-** modern MC requests direct communication with end-user, therefore it means communication which is not distorted through intermediaries. It allows automatic recognition of customer's needs and demands. Also, MC companies have to invest money to integrate distribution network into its value chain.

**Organizational Structure-** "Modular product design" and "flexible manufacturing process" require a particular organizational structure. The general tendency is that organizational hierarchies with many levels are definitely not relevant for a MC company. The organization structure should be flattered with fewer levels, and create freedom for the coordination among processes (modules). It focuses on a high degree of cross-functional integration and employee participation. This results in much higher degree of decentralization in decision making. The organization structure should be as follows:

- Management focuses on three parts: supplier relation, customer relation, and resource management
- All departments integrate along value chain
- Information system links organization's parts, and also provides the connection with suppliers and customers.

#### 4.1. The impact of pandemic on MC strategies

Any change in business conditions caused by internal or external factors leaves a mark on the implementation of strategies and the achievement of the company's business goals. The proclamation of a pandemic by the

WHO (*World Health Organization*) also appears as an important factor influencing business. A pandemic is a type of epidemic that has spread to at least three countries within the WHO region [30].

Several pandemics occurred during the 20<sup>th</sup> and 21<sup>st</sup> century, with different impacts on national economies and the global economy as a whole.

Table 2: *Pandemics of the 20<sup>th</sup> and 21<sup>st</sup> century* (Based on [31] and [32])

Name of pandemic	Year	Interval years	Deaths
Spanish flu	1918	18	40-80 million
Asian flu	1957	39	1-1,5 million
Hong Kong flu	1968	11	1-1,5 million
SARS-CoV	2002	34	770 people
Swine flu	2009	7	Between 151-575 thousands
MERS-CoV	2012	3	858 people
Ebola	2014	2	11300 people
COVID-19	2019	5	*707 thousands

\*As of 05 August 2020

In addition to the great impact that a pandemic has on people's lives in terms of the number of illnesses and deaths, its impact on the economy, particular industry and business of each individual company is also significant. The appearance of the latest ongoing pandemic has led to negative trends in almost all world economies, with negative movements of the observed key economic parameters. Of course, this affects both the manufacturing and service industries, as well as companies that apply the concept of MC. These companies are facing the phenomena such as: declining profitability, business failure, rising unemployment, and declining consumption.

Some of the various challenges encountered when companies come to implementing MC strategies [33]:

(1) *Acquisition:* the challenge of building and operating an effective interconnection platform with the end consumer in such way that it will enable the company to identify and acquire information and external knowledge that is critical to its operations;

(2) *Incorporation:* modifying internal production routines, thereby allowing for the processing, analysis, interpretation and understanding of external information in such way as to include the end consumer in the value creation process;

(3) *Transformation:* the challenge of using the information provided during the end consumer participation process in order to construct the capacity to design and redesign internal routines that facilitate combining existing knowledge with newly acquired knowledge, in order to construct a consumer-centered organization, strategic level included;

(4) *Taking advantage:* the challenge of transforming this production system into a long term sustainable model in order to refine, extend and leverage existing competences or create new ones over time.

These challenges are even more underlined during the periods of crisis, and also in this case of pandemic. All current and future MC strategies must be carefully modified and adapted to the new circumstances, which are not at all simple. It is necessary to take into account innovation as a special mechanism for removing unforeseen barriers and problems. Also, it is very important to emphasize MC strategies that have the most potential to show a positive impact on business success of the companies in a pandemic period.

Customer requirements, which are the basis of the MC concept, are becoming more than sensitive to new circumstances, and with feelings of panic and fear, they are changing their habits and preferences. More than ever before, customers want to reduce their costs, and the *low cost* strategy here have been facing additional pressures to reduce them further. Companies need to act quickly to retain existing customers and provide adequate value for them. They are most often forced to reduce their sales margins, with a constant search for models to further reduce production and delivery costs. In that case, companies can implement retrenchment strategies which involve cutting operating costs and divestment of non-core assets [34].

By using a strategy of *differentiation*, companies should initiate demand for their products and take care to maintain an adequate supply of different products with adapting to customer requirements in line with current capabilities. Also, for these companies it is very important to take care of their competitors and the ways in which they implement their business strategies and adapt to them in difficult pandemic conditions. Companies can perceive existing situation as opportunities to invest, innovate and expand into new markets in order to achieve or extend a competitive advantage [34] during and after pandemic.

Relationships with suppliers are on a big test due to the pandemic circumstances and it is important to be full of understanding and willingness for all parties to compromise in the interdependent business process. A well-built network of diverse suppliers can be a guarantee and basis for overcoming the consequences caused by pandemic.

The current pandemic situation has led to a reduction of direct social contacts to the lowest level and the field of communication has moved to online channels. Great benefits are being realized thanks to use of modern technologies and the development of the Internet which enable a higher level of interaction with customers, during the unexpected situation such as pandemic. Special attention should be paid to the development Internet of Things (IoT) and Artificial Intelligence (AI) and their wide applicability in this segment. Consequently, it is important to innovate and adapt MC strategies, which should enable direct recognition of user needs and quick response to them in the form of a customized product or service.

In the term of *organizational strategies* during pandemic, there is a change in the way of working and performing work tasks. Alternative ways for human participation in the work process are being sought, taking into account the quality and suitability of products and

services that are being customized and delivered to customers.

In order for MC companies to get as close as possible to their customers, survive on the turbulent and reduced market and maintain their competitive position, they should apply a *pure customization strategy* as a relevant strategy in pandemic conditions.

## 5. CONCLUSION

Considering the basic characteristics of MC strategies, this paper presented the possibility of their application, and their selection was made according to the degree of their positive impact on business in a pandemic. In order to make an adequate selection, a detailed review of MC strategies was made according to different criteria.

Given the rapid changes in the world and their predictable and unpredictable consequences, companies also need to be very fast in terms of changing and redesigning their business strategies. Considering the realization complexity of this process, it should be taken into account that some important influencing factors have never appeared before. Companies are required to be aware of the new pandemic reality and changes it brings. This phenomenon can be considered as a totally new type of crisis. This issue cannot be ignored given the increasing frequency of pandemic situations, especially during this century.

There is no single 'best practice' strategy that guarantees business survival, or success, because business performances are highly variable under condition of uncertainty caused by, for example, a pandemic. Thus, this paper only highlights some suggestions for implementation of specific MC strategies.

Problems that occur in pandemic time affect the internal processes in the company, but also their relationship to the market and customers. Therefore, a detailed analysis of market conditions and consideration of approaches that can be applied at this specific time is so important.

For MC companies is crucial to undertake strategic analysis in order to perceive the key impacts of pandemic on business performances and relationship with their customers. Cost escalation, reduced liquidity, operative problems, workforce shortages, lack of materials and other necessary resources, reducing customer contacts through traditional channels are just some of the problems that arise.

The limitations of this study include the impossibility of accurately estimating the duration of the actual pandemic caused by COVID-19 virus and its overall impact on the business of companies. Such information would significantly facilitate the selection of adequate MC strategies and the need for their additional adaptation to current conditions. The majority of consequences of actual crisis are still largely difficult to predict. Also, one of the important limitation is the insufficient number of researches in this field that would lead to the comparison of the previous results on this topic.

Future research will significantly contribute to understanding the business conditions for companies during this health crisis, which has significantly affected the global economy. This might enable timely preparation and adaptation of MC strategies in accordance with the conditions of the pandemic crisis. The choice of MC strategy for the company could minimize the negative effects of the pandemic on the company's business

The future will require more mass customization, which will take full advantage of the digital world, smart technologies, AI systems, as well as the establishment of a new set of challenges that will require rapid response and the establishment of an innovation system to enable optimization of all production performance. New MC strategies should be like a vaccine for quick recovery and gaining immunity to the potential pandemic challenges that an uncertain future brings.

## 6. REFERENCES

- [1] E.L. Quarantelli, P. Lagadec and A. Boin, *A Heuristic Approach to Future Disasters and Crises: New, Old, and In-Between Types*, In: Handbook of Disaster Research. Handbooks of Sociology and Social Research, New York, USA, Springer, 2007.
- [2] J. Callahan, "Defining crisis and emergency", *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 1994.
- [3] K. Hewitt, The idea of calamity in a technocratic age. In K. Hewitt (Ed.), *Interpretations of calamity from the perspective of human ecology*, London: Allen and Unwin, pp. 3–32, 1983.
- [4] World Health Organization, *Pandemic influenza preparedness and response: a WHO guidance document*. Geneva: World Health Organization, 2009.
- [5] M. M. Tseng and J. Jiao, "Mass customization". Handbook of industrial engineering, Vol. 3, pp. 684-709, 2001.
- [6] T. Jitpaiboon, T., D.D. Dobrzykowski, T.S. Ragu-Nathan and M.A. Vonderembse, "Unpacking IT use and integration for mass customisation: a service-dominant logic view", *International Journal of Production Research*, Vol. 51, No. 8, pp. 2527-2547, 2013.
- [7] S. Kortmann, C. Gelhard, C. Zimmermann and F.T. Piller, "Linking strategic flexibility and operational efficiency: The mediating role of ambidextrous operational capabilities", *Journal of Operations Management*, Vol. 32, Issue 7-8, pp. 475-490, 2014.
- [8] N. Suzić, E. Sandrin, S. Suzić, C. Forza, A. Trentin and Z. Anišić, A Review of Mass Customization Implementation Guidelines to Support Researchers, *8<sup>th</sup> International Conference on Mass Customization and Personalization – Community of Europe (MCP-CE 2018)*, Novi Sad, September 19-21, 2018.
- [9] N. Suzić, F. Cipriano, A. Trentin and Z. Anišić, "Implementation guidelines for mass customization: current characteristics and suggestions for improvement," *Production Planning & Control*, Vol. 29, Issue 10, 2018.
- [10] E. Sandrin, A. Trentin and C. Forza, "Organizing for mass customization: Literature review and research agenda," *International Journal of Industrial Engineering and Management*, Vol. 5, No. 4, pp. 159–167, 2014.
- [11] J. B. Pine, *Mass Customization: The New Frontier in Business Competition*, Boston: Harvard Business School Press, 1993.
- [12] G. Liu, R. Shah and R. G. Schroeder, "Linking Work Design to Mass Customization: A Sociotechnical Systems Perspective," *Decision Sciences*, Vol. 37, No. 4, pp. 519– 545, 2006.
- [13] B. Squire, S. Brown, J. Readman and J. Bessant, "The impact of mass customisation on manufacturing tradeoffs," *Production and Operations Management*, Vol. 15, No. 1. pp. 10–21, 2006.
- [14] F. A. Manu and V. Sriram, "Innovation, marketing strategy, environment, and performance", *Journal of business Research*, Vol. 35, Issue 1, pp. 79-91, 1996.
- [15] D. Y. Kim, V. Kumar and U. Kumar, "Relationship between quality management practices and innovation", *Journal of operations management*, Vol. 30, Issue 4, pp. 295-315, 2012.
- [16] D. Wan, D., C.H. Ong and F. Lee, "Determinants of firm innovation in Singapore", *Technovation*, Vol. 25, Issue 3, pp. 261-268, 2005.
- [17] Business Dictionary, "Business environment", from: <http://www.businessdictionary.com/definition/business-environment.html>, 2020.
- [18] Business Jargons, "Business environment", from: <https://businessjargons.com/business-environment.html>, 2020.
- [19] QUIZLET, "Chapter 1: Taking risk and Making Profits within the Dynamic Business Environment", from: <https://quizlet.com/229144930/chapter-1-taking-risks-and-making-profits-within-the-dynamic-business-environment-diagram/>, 2020.
- [20] J. H. Gilmore and B. J. Pine, "The four faces of mass customization", *Harvard business review*, Vol. 75, Issue 1, pp. 91-102, 1997.
- [21] M. Luenendonk, "Mass Customization: What, Why, How and Examples", from: <https://www.cleverism.com/mass-customization-what-why-how/>, 2015.
- [22] X. Huang, M.M. Kristal and R.G. Schroede, "Linking learning and effective process implementation to mass customization capability", *Journal of Operations Management*, Vol. 26, Issue 6, pp. 714-729, 2008.
- [23] L. Chaisung, S. Han and I. Hiroshi, "Capability building through innovation for unserved lower end mega markets", *Technovation*, Vol. 33, Issue 12, pp. 391-404, 2013.
- [24] A. Sharma, "Mass Customization Strategies", Wiley International Encyclopedia of Marketing, 2010.
- [25] M. Spring and J. Dalrymple, "Product Customization and Manufacturing Strategy",

- International Journal of Operations & Production Management*, Vol. 20, No. 4, pp. 441-467, 2000.
- [26] P. Åhlström and R. Westbrook, “Implications of Mass Customization for Operations Management: An Exploratory Survey”, *International Journal of Operations and Production Management*, Vol. 19, No. 3, pp. 262-274, 1999.
- [27] J. Lampel and H. Mintzberg, “Customizing customization”, *Sloan Management Review*, Vol. 38 21–30, 1996.
- [28] D. Bazzi, “*Customer Value of Service Customization: an Analysis of Mass Customization Potential in Transportation Services*” Doctoral dissertation, University of St. Gallen, 2017.
- [29] D. Pollard, S. Chuo and B. Lee, “Strategies for mass customization”, *Journal of Business & Economics Research (JBER)*, Vol. 14, Issue 3, pp. 101-110, 2016.
- [30] Healthline, “What is a Pandemic?”, from: <https://www.healthline.com/health/what-is-a-pandemic#pandemic-vs-epidemic>, 2020.
- [31] B.C. Mathew, R.S. Daniel and I.W. Campbell, “Swine-origin influenza A (H1N1) pandemic revisited“, *Libyan Journal of Medicine*, Vol. 4, No. 3, 2009.
- [32] Worldometer, „COVID-19 Coronavirus Pandemic“, from: <https://www.worldometers.info/coronavirus/>, 2020.
- [33] S.N. Zilber and J.J. Nohara, “Mass customization and strategic benefits: a case study in Brazil”, *The Electronic Journal of Information Systems in Developing Countries*, Vol. 36, Issue 1, pp. 1-26, 2009.
- [34] J. Kitching, R. Blackburn, D. Smallbone and S. Dixon, “Business strategies and performance during difficult economic conditions”, 2009.

## CORRESPONDENCE



Aleksandar Vekić, Assistant-master  
University of Novi Sad  
Faculty of Technical Sciences,  
Trg Dositeja Obradovića 6,  
21000 Novi Sad, Serbia  
[vekic@uns.ac.rs](mailto:vekic@uns.ac.rs)



Jelena Borocki, Associate Professor  
University of Novi Sad  
Faculty of Technical Sciences,  
Trg Dositeja Obradovića 6,  
21000 Novi Sad, Serbia  
[borocki@uns.ac.rs](mailto:borocki@uns.ac.rs)



Angela Fajsi, Assistant-master  
University of Novi Sad  
Faculty of Technical Sciences,  
Trg Dositeja Obradovića 6,  
21000 Novi Sad, Serbia  
[angela.fajsi@uns.ac.rs](mailto:angela.fajsi@uns.ac.rs)