

Boris Jevtić¹
Milan Beslač
Dragan Janjušić
Milan Jevtić

THE EFFECTS OF DIGITAL NATIVES' EXPECTATIONS OF TECH HOTEL SERVICE QUALITY ON CUSTOMER SATISFACTION

Article info:
Received 28.12.2022.
Accepted 17.06.2023.

UDC – 005.336.3
DOI – 10.24874/IJQR18.01-01



Abstract: *This paper aims to investigate the significance of the impact of customer expectations of the use of digital technology services by hotels on their level of satisfaction. For these purposes, an empirical study was provided in Serbia in 2022. The research sample consists of 392 respondents from a specific growing demographic group of hotel services users, digitally born Gen X, Gen Z, and Millennials, aged 21 to 41, who stayed in hotels in the highest category during the year. Regression analysis and a five-level Likert attitude evaluation scale were used in the methodology of the research. The significant influence of customer expectations and positive experiences in using technological hotel services on satisfaction is confirmed. The findings of the paper can contribute to the literature and hotel management decision-making in designing a modern strategy of technological business development, digitalization of services, and digital marketing relations with service users, millennials as technological leaders of change, and further hospitality organizations' survival in the tourist market.*

Keywords: *tech services, customer expectations, customer satisfaction, digitalization, hospitality.*

1. Introduction

The digital revolution and technologies affect the changes and development of all economic branches today, the behavior and knowledge of people and society (Schwab, 2017; Nikolskaya et al., 2021), and the hotel industry also transforms the sector, involving modern knowledge and skills to meet the needs of new digital users and reach new markets (Miletić & Ćurčić, 2021). The beneficial effects obtained by services that can use high technologies and add value determine much greater wealth and living standards than in previous centuries (Cioban, 2014). The digitization of services includes the development of new digital services or

the improvement of existing services and ways of providing them through digital technologies. Hotel mobile applications, online reservation systems through the hotel website, hotel presence on social networks, self-service technologies, cloud, blockchain technology, virtual reality, artificial intelligence, and big data technology are some of the digital technologies that are increasingly used in the hotel industry. They improve hotel operations, communicate with customers, and, above all, digitalize hotel services to meet customer needs.

The paper aims to examine the effects of customer expectations and assessments of perceived tech hotel service quality on customer satisfaction.

¹ Corresponding author: Boris Jevtić
Email: boris.jevtic@digit-star.com

Hotel service in the information age concerns customers' needs to understand new segmentation and types of the hospitality market. The target group of customers chosen for this research is digital natives because surveys were done to assess that they make up more than 40% of clients in the hospitality and tourist markets, with their specific values, beliefs, and behaviors

toward tech hotel services. The paper aims to research the impact of such an important group of customers and their expectations of digital and tech hotel services on the level of their satisfaction and new usage. Because of that, it is important for digital services hotel strategies to closely analyze this market segment (Table 1).

Table 1. Market segments of service users criteria (Source: Authors)

Geographical	Socio-demographic	Psychological	Patterns of behavior
Country, nation, region, city, domestic market	Gender, age, education, employment, religion, family status, income, socio-economic group, reasons, and type of travel	Values, beliefs, activities, interests, opinions, attitudes, lifestyle, personality, and social group	User behavior, purchasing power, loyalty, user status, user rate, travel experience, and the average length of stay

Millennials, Gen X, and Gen Z are the generations of young people deeply digitally embedded.

While Gen X might have gotten their first iPhone at the ripe old age of 42, they became the first generation to massively adopt technology and are now the demographic with the most disposable income. Millennials, the first digital natives, became young adults during the social media revolution, dated using Tinder, and used Facebook when it was still considered cool. The oldest, Gen Z, was born after the founding of Netflix. Independent people who are entrepreneurial, multitask, and have jobs working at the same time, earning high incomes, have successful careers, work on a flexible timetable, and often engage in some form of philanthropic activity. As they grow up surrounded by digital media, they learn more about information and communication technologies. They expect an immediate response to their problems or matters of interest. They use digital communication channels, rating portals, and social networks as primary sources of information about services before deciding to purchase or use them (Xiang & Gretzel, 2010). To succeed in the market, hotel organizations must identify and meet modern

customers' different explicit and latent needs related to their problems and expectations by using self-service channels, social media, and SMS—the generations bridging the digital divide. Data gravity is the notion that the more data you have, the more you'll attract. What digital natives want and expect of services is good for all customers and employees, and what's good for them is good for business, too; their expectations for customer service won't be fast, easy, connected, and integrated.

Hotel brands must rethink their approach to digital customer engagement to reach the high bar of digitally native consumers. The delight strategy doesn't work alone, as customers just want an easy way to solve their problems and move on. Hotels need to think about the mechanics of how customers and brands interact in processes like booking a hotel room, returning a product, renting a car, or approving a B2B purchase and change the definition of customer engagement to be more comprehensive. The hotel customer experience becomes more important.

So, the biggest challenge for hotel brands in the next five years will be to cope with a rapidly changing technological world. To create the firm to assist clients with digital

disruption and technology changes, maintaining that hospitality would be better interested in starting to explore digital technologies to see how they could be relevant for their hotel brand, the complex problem-solving requirements, and making multiple perspectives for customers. Being faced with this challenge, hotels would have to pay more attention to the segmentation criteria of their market, to the characteristics of that generation, demographic, behavioristic, and psychological, creating adequate responses by programs of service quality improvement and digitalization increasingly employing millennials wishes and needs (Jevtic et al., 2013; 2014; 2020; 2020a; Arsovski, Arsovski & Stefanovic, 2023; Arosvski, 2023).

User expectations can be defined as a certain standard by which customers evaluate the quality of the service they receive (Zeithaml et al., 2006), from the ideal level of service they strive for to an adequate level. According to the literature (Rust & Oliver, 1994; Parasuraman et al., 1988; Grönroos, 1984), it can be described as a set of various behaviors, benefits, actions, and environments according to the different products or services. With the advancement of technology and digitalization, the digital expectations of customers are rising. The paper concerns just those digital expectations of tech services in hospitality concerning the needs of digital natives' demographic group of customers. Identification of customer expectations is important to explore and to know more about the target audience and things that customers value concerning the relevant services. To satisfy customers, perceiving the product or service to be of the level of quality they expect would influence their repeat usage, purchases, and positive word of mouth.

In a company's effort to fulfill or exceed the expectations of customers, it is necessary to identify, research, and analyze them through customer surveys, interviews, and reviews. Besides that, understanding customer expectations requires continuous

communication with them to be able to value their expectations and be better satisfied. Customer expectations of the quality of services provided by an organization are very important for their satisfaction, positive relations with the services, and the image of the provider. Most often, the set of behaviors benefits the customer, and interactions with the provider of the services can better define the customer's expectations, dissatisfaction, or satisfaction. (F.1).



Figure 1. User expectations and satisfaction correlations (Source: Authors)

These are the reasons that motivated the authors of the research in this paper to explore the impact of the expectations of digital native generations on their satisfaction with hotel tech hotel services. After the introduction and literature review, the findings of the empirical research are presented, with a conclusion and references used.

2. Methods and materials

The empirical research aims to explore the attitudes of Millennials, a specific growing demographic group of hotel customers, and the Z generation, popularly called digital natives, on their satisfaction with the level of quality of the tech and digital hotel services according to their expectations.

The research sample consists of 392 respondents, ranging in age from 21 to 41 years old, concerning the demographic characteristics concerning gender, education level, personal income level, knowledge of foreign languages, and usage of the Internet. They were supposed to spend their holidays or business trip time in hotels in Serbia in 2022. The hotels chosen for the research are those with the highest categories, as the authors suppose them to have digitalized

their hotel services, reached high-tech offers, and modernized their marketing communication with social media. The customers give their assessment of tech, or digital hotel services, during the whole customer life cycle, from the pre-arrival stage to arrival.

stage, their stay in the hotel, and the stage of leaving the hotel. The research used a Likert scale of five levels for the customer assessment and regression analysis of the research results. Figure 2 presents a defined research model.

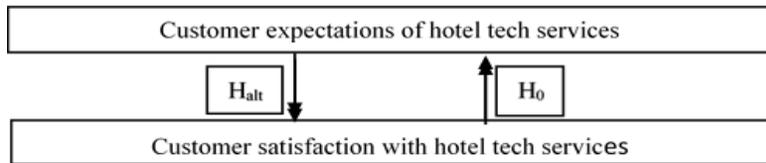


Figure 2. Research model (Source: Authors)

The task of the research is to determine whether the level of user expectations of hotel tech services affects the satisfaction level of users with the tech service of the hotel. Based on the theoretical model, further hypotheses are defined:

- *H₀*: Customer expectations of hotel tech services do not significantly influence customer satisfaction with hotel tech services.
- *H_{alt}*: Customer expectations of hotel tech services significantly influence customer satisfaction with hotel tech services.

Figure 3 shows the values for the gender of the customers. There were more females (260, or 66.32%), and fewer males (132, or 33.67%), out of a total of 392 respondents.

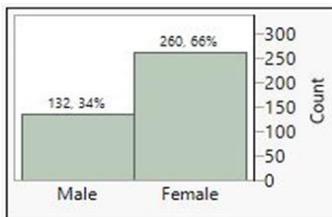


Figure 3. Respondent's representation relative to gender

Table 2 shows values for the level of education of the respondents. There were respondents with higher education (372, or 94.89%), and fewer with secondary

education (20, or 5.10%), out of a total of 392 respondents.

Table 2. Representation of respondents relative to education level

Level	Count	Prob
Higher education	372	0.94898
Secondary education	20	0.05102
Total	392	1.00000

Frequencies for the respondents' social status are given in Table 3. According to social status, permanent employees numbered 348 (88,77%) and contractual employees numbered 44 (11,22%), out of a total of 392 respondents.

Table 3. Respondents relative to their social status

Level	Count	Prob
Contractual employee	44	0.11224
Permanent employee	348	0.88776
Total	392	1.00000

Values of the respondents' income show that most have over 90,000 (RSD) (765€), 156 (39.79%), and the least of them up to 45,000 (RSD) (380€), 32 (8.16%), out of a total of 392 respondents.

According to data on respondents' use of the Internet, all of them interviewed, 392 (100,00%), use the Internet and speak foreign languages.

As the obtained Cronbach's coefficient $\alpha = 0.8346$ (based on the sample size required for significance to identify the factor distributions for a sample of 392 respondents and based on the significance of the factor loading of 0.30 for the number of respondents greater than 350), it can be concluded that it is significant. This coefficient is higher than the theoretical one, which is good. Also, based on the Internal Consistency Rule, the obtained Cronbach's coefficient is within the limits of $0.7 < \alpha < 0.9$, which confirms good consistency.

In Table 4, based on the statements made for user expectations of hotel tech services, the sizes of the attitudes expressed by frequency and percentage are given. It can be seen that it is for claims:

- *The hotel met my expectations regarding the type of tech services it provides;* the highest expressed opinion is 140, or 37.71% of respondents out of a total of 392, who think that they neither agree nor disagree.
- *The quality of the tech services provided by the hotel met my expectations;* the highest expressed opinion is 120, or 30.61% of respondents out of a total of 392, who think that they neither agree nor disagree.
- *The hotel met my expectations of consistency in the provision of tech services;* the highest expressed opinion is 148, or 37.76% of respondents out of a total of 392, who think that they neither agree nor disagree.
- *The reliability of hotel employees' tech service provision met my expectations;* the highest expressed opinion is 128 or 32.65% of respondents out of a total of 392, who think that they neither agree nor disagree.

- *The hotel met my expectations regarding the convenience of the tangible tech services.* The highest expressed opinion is 124, or 34.63%, of respondents out of a total of 392, who think that they neither agree nor disagree.

Table 4. User expectations of hotel tech services

The hotel met my expectations regarding the type of tech service it provides.	N	Total
Disagree	20	5.10%
Partly disagree	36	9.18%
Neither agree nor disagree	140	35.71%
Partially agree	92	23.47%
Completely agree	104	26.53%
The quality of the tech services provided by the hotel met my expectations.		
Disagree	20	5.10%
Partly disagree	32	8.16%
Neither agree nor disagree	120	30.61%
Partially agree	108	27.55%
Completely agree	112	28.57%
The hotel met my expectations of consistency in the provision of tech services.		
Disagree	28	7.14%
Partly disagree	24	6.12%
Neither agree nor disagree	148	37.76%
Partially agree	92	23.47%
Completely agree	100	25.51%
The reliability of hotel employees' tech services provision met my expectations.		
Disagree	24	6.12%
Partly disagree	40	10.20%
Neither agree nor disagree	128	32.65%
Partially agree	96	24.49%
Completely agree	104	26.53%
The hotel met my expectations regarding the convenience of the tangible tech services.		
Disagree	16	4.08%
Partly disagree	56	14.29%
Neither agree nor disagree	124	31.63%
Partially agree	104	26.53%
Completely agree	92	23.47%

In Table 5, based on the statements made for user satisfaction with hotel services, the sizes of attitudes expressed in frequency and percentage are given. From the findings, it can be seen that for the statements:

- *I am satisfied with the price of the hotel's services.* Partially agree was expressed by 152 (38.78%) of the respondents out of a total of 392, and the least expressed attitude was 16 (4.8%), considering that they partly disagree.
- *I am satisfied with the value of the services I received for my money.* The least expressed attitude was 20 or 5.10% of the respondents out of a total of 392, who considered that they totally disagree, and the highest opinion, partly agree, was expressed by 148 (37.76%) of the respondents.
- *I am satisfied because the hotel's services met my expectations.* The highest expressed opinion is 176, or 44.90%, of respondents out of a total of 392, who consider that they partially agree.
- *I am satisfied with the hotel's digital services.* The least expressed attitude was 32, or 8.16%, of the respondents out of a total of 392, who considered that they partly disagreed; the highest expressed opinion was 124, or 31.63%, of neutral respondents (neither agree nor disagree).
- *Staying at the hotel was a pleasant experience.* The least expressed attitude was 4 or 1.02% of the respondents out of a total of 392, considered that they partly disagree, and the highest expressed opinion is partially agreed, expressed by 140 or 35.71% of respondents.

Table 5. User satisfaction with hotel services

I am satisfied with the price of the hotel's services	N	Total
Totally Disagree	28	7.14%
Partly disagree	16	4.08%
Neither agree nor disagree	80	20.41%
Partially agree	152	38.78%
Completely agree	116	29.59%
I am satisfied with the value of the services I received for my money		
Totally Disagree	20	5.10%
Partly disagree	28	7.14%
Neither agree nor disagree	52	13.27%
Partially agree	148	37.76%
Completely agree	144	36.73%
I am satisfied because the hotel's services met my expectations		
Totally Disagree	12	3.06%
Partly disagree	16	4.08%
Neither agree nor disagree	60	15.31%
Partially agree	176	44.90%
Completely agree	128	32.65%
I am satisfied with the hotel's digital services		
Totally Disagree	32	8.16%
Partly disagree	52	13.27%
Neither agree nor disagree	124	31.63%
Partially agree	92	23.47%
Completely agree	92	23.47%
Staying at the hotel was a pleasant experience		
Totally Disagree	8	2.04%
Partly disagree	4	1.02%
Neither agree nor disagree	32	8.16%
Partially agree	140	35.71%
Completely agree	208	53.06%

The Pearson correlation coefficient between the independent variable, user expectations of hotel tech services, and the dependent variable, user satisfaction with hotel services, is 0.7257, and it is positive and medium-strong. The coefficient of determination is 0.5266, as seen from Table 7, and with 52.66%, the dependent variable, user satisfaction with hotel services, can be defined via independent user expectations of hotel tech services (Table 6).

Table 6. Fit Summary

RSquare	0,526627
RSquare Adj	0,525413
Root Mean Square Error	0,610392
Mean	3,902041
Observations	392

The analysis of variance and its sum is [F (1,218) =362.1871, p<0.0001].

The statistical significance is presented (Table 7).

Based on the data on parameter estimates from Table 8, a linear regression equation was performed according to which the set

H₀: The level of user expectations of hotel tech services does not affect the level of user satisfaction with hotel services, can be rejected. An alternative hypothesis is confirmed: H_{alt}: The level of user expectations of hotel tech services affects the level of user satisfaction with hotel services.

Table 7. Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	161,65262	161,653	433,8749
Error	390	145,30575	0,373	Prob > F
Total	391	306,95837		<0,0001

Table 8. Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t	Std Beta	VIF
Intercept	1,70324	0,109971	15,49	<0,0001	0	.
Customer expectations	0,6163687	0,029591	20,83	<0,0001	0,725691	1

The equation is presented as follows:

$$\text{Customer satisfaction with hotel tech services} = 1,70324 + 0,6163687 \cdot \text{Customer expectations of hotel tech services}$$

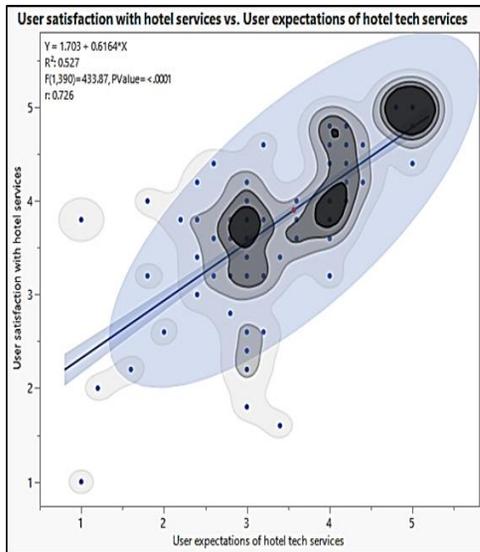


Figure 4. Linear regression equation of the theoretical model

There is a positive and medium-strong correlation between the independent

variable, user expectations of hotel tech services, and the dependent variable, user satisfaction with hotel services, as seen from the value of 0.7257. These key findings of the research are based on the regression analysis and the Pearson correlation coefficient between the variables. **It confirms the alternative hypothesis** on the significant influence of consumers' expectations of the quality of tech hotel services on their satisfaction.

The coefficient of determination further confirms that with 52.66%, the dependent variable, user satisfaction, can be defined by the independent variable, user expectations. It can be said that the target group of customers, called digital natives, who make up more than 40% of hotel customers today, have an important impact on the future digitalization of services in the hospitality sector.

3. Conclusion

This theoretical and empirical research has explored the issues of the impact of the expectations of digital native generations on their satisfaction with hotel tech services. Based on the findings, it can be concluded that for the hotel industry, customer satisfaction is important for survival and prosperity. Research shows that there are significant relationships between modern technologies presented through the level of tech, digital services, and customer satisfaction increase (Lee & Baker, 2017), concerning the attitudes and values of digital natives as the growing market segment of customers.

Being faced with the challenge of employing millennials, hotels would have to pay more attention to the segmentation criteria of their market, to the characteristics, demographics, behavioristics, and psychological characteristics of that generation, creating adequate responses through programs of service quality and digitalization of processes, services, and marketing communication with guests because, according to Gilchrist (2019), B2B buyers are younger, more technologically savvy, and more independent; they're a generation of digital natives. And they're making waves across the B2B buying landscape and changing how marketers must work to reach new customers. This new reality of digital natives as customers means that hotel marketers trying to reach new customers must make big changes in the way they target and engage today's buyers. Marketers have had to shift their focus from outbound marketing to inbound tactics, like content marketing, to engage and connect with their

target audiences, learn more about how their tech-savvy ways have changed the B2B purchasing process, and accept that online searches, websites, and reviews are their most valuable resources for solution research. Millennials identify social media as an important source of information. Work on connecting digital natives who prefer trust, compatibility, and connection over business benefits; online content should drive customer engagement.

These findings can confirm the motivation of the authors of the paper to choose the millennials and Gen Z generation as the target group for this research and to support the ability of hotels to use this information for effective engagement and fulfill the expectations and satisfaction of these customers.

Consider further learning how digital natives' data platforms have evolved beyond the marketing of hotels to provide a deeper view of the customer for better CX and bottom-line benefits. Customer 360 is a comprehensive customer profile that unifies customer data from multiple sources across a hotel organization, creating a better, more proactive customer experience and building trust and loyalty with your customers at the same time.

To keep up with the fast-changing hospitality market, hotel brands need to be able to make strategic decisions quickly, given the technological environment and habits of digital natives. This paper can contribute to hospitality brands having the opportunity to leverage their data and make a lasting connection with their customers, boosting the digital experience with their tech services.

References:

Arsovski S. (2023). Quality 5.0: from challenges to reality. *Journal of Innovations in Business and Industry*, 1(1), 13-21. doi 10.61552/JIBI.2023.01.002

- Arsovski Z., Arsovski S., Stefanovic M. (2023). Impact of ICT support, leadership and quality on sustainability and business excellence. *Journal of Innovations in Business and Industry*, 1(1), 1-12. doi 10.61552/JIBI.2023.01.001
- Cioban, G. L. (2014). Towards a service economy? *Ecoforum*, 3(2), 111-116.
- Giese, J. J., & Cote, J. A. (2000). Defining consumer satisfaction. *Academy of Marketing Science, Review*, 4, 1-24.
- Gilchrist K. (2019). How millennials and Gen Z are reshaping the future of the workforce, Retrieved on 10.12.2022 from <https://www.cnbc.com/2019/03/05/how-millennials-and-gen-z-are-reshaping-the-future-of-the-workforce.html>
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 16(7), 30-41. doi:10.1108/EUM0000000004784
- Jevtić, B., Dedjanski, S., Beslać, M., Grozdanić, R., Papić, Z. (2013). The Impact of Skilled Workers in Implementing ICT on Firm Performance, *Metalurgia International*, 18,(4), 152, Bucharest.
- Jevtić, B., Zakić, N., Popović, J., Corić, G., & Kvrđić, G. (2020). Digital Challenges for SMEs Organisations in Human Capital Investments and Change, Economic and Social Development, Book of Proceedings, ISSN 1849-7535/2020, 20-29. https://www.esd-conference.com/upload/book_of_proceedings/Book_of_Proceedings_esdLisbon2020_Online.pdf.
- Jevtić, B., Kvrđić, G., Corić, G., & Beslać, M. (2020a). SME Organisations IT Technology Challenges Addressing the Future Human Resource Skill Shortages, Gaps, *Limes plus*, 1/2020.
- Jevtic, B., & Grozdanić, R. (2014). The strategic importance of open innovation for SMEs, Proceedings: Economic growth and sustainable development challenges: Serbia and western Balkan countries, ISBN 978-86-6069-104-2, 88- 106, Faculty of Business Economics and Entrepreneurship.
- Lee, M., & Baker, A. M. (2017). Technology, customer satisfaction, and service excellence. In Koc. E. (Ed.), *Service failures and recovery in tourism and hospitality*, 83-99. Wallingford, CT: CAB International. doi:10.1079/9781786390677.0083.
- Miletić, V., Ćurčić, N. (2021). Građenje strateških alijansi - faktor internacionalizacije poslovanja nacionalnih preduzeća. *Ekonomija: teorija i praksa*, 14(3), 64–82. <https://doi.org/10.5937/etp2103064M>
- Nikolskaya, E. Y., Zakharova, E. V., Galkin, D. V., Kovaleva, N. I., & Panova, N. A. (2021). The impact of digital technologies on the transformation of the tourism and hospitality industry. *Revista GEINTEC-Gestao Inovacao E Tecnologias*, 11(4), 623-632.
- Parasuraman, A., Zeithaml, V. A., Berry, L. L. (1988). Alternative scales for measuring service quality: A comparative assessment based on psychometric and diagnostic criteria. *Journal of Retailing*, 70(3), 201-230. doi:10.1016/0022-4359(94)90033-7.
- Rust, R.T., & Oliver, R.L. (1994). Service Quality: Insights and Managerial Implications from the Frontier. In R.T. Rust & R.L. Oliver (Eds.), *Service Quality: New Directions in Theory and Practice*, 1-19. Thousand Oaks, CA: Sage Publications. doi:10.4135/9781452229102.n1.
- Schwab, K. (2017). The Fourth Industrial Revolution. New York, NY: Currency Book.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). *Services marketing: Integrating customer focus across the firm* (4th ed.). New York, NY: McGraw-Hill.

Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management, 31*(2), 179-188. doi:10.1016/j.tourman.2009.02.016

Boris Jevtić

Computing Faculty, RAF,
Belgrade,
Serbia

boris.jevtic@digit-star.com

ORCID 0000-0001-5789-4728

Milan Beslac

Faculty of Law and
Entrepreneurship,
Belgrade,
Serbia

beslac011@gmail.com

ORCID 0000-0001-9497-0582

Dragan Janjušić

Faculty for Management,
Belgrade,
Serbia

dragan.janjusic@gmail.com

ORCID 0000-0002-5847-9339

Milan Jević

Friedrich Ebert Foundation,
Belgrade,
Serbia

jevitic87@gmail.com

ORCID 0000-0001-7410-0416
