SATISFACTION WITH SERVICE INNOVATIONS IN SERBIA

Ivana Erić, Phd
BELGRADE ACADEMY OF BUSINESS AND ARTS APPLIED STUDIES, Belgrade, Serbia
ivana.eric@bpa.edu.rs
Slavica Dabetić, Phd
BELGRADE ACADEMY OF BUSINESS AND ARTS APPLIED STUDIES , Belgrade, Serbia
slavica.dabetic@ bpa.edu.rs

ABSTRACT

The aim of this paper is to observe the customers satisfaction with service innovations in Serbia. Dealing with the fact that services are generating approximately 71,6 % of EU nominal GDP, it could be said that services are strongly representing the future of economy[1]. In this paper will be present service innovations in context of their term, importance, classification and the both manifesting forms of service innovations: classical and contemporary. Also, the paper will point to indicate factors for service innovation's success. Empirical part of this issue obtained interviewees from the field of commerce, banking and public administration. Finally, the service innovations satisfaction degree is determined by SERVQUAL adaptive model and ANOVA application.

Key words: *service innovations, satisfaction of clients, factors of success*

---

[1] https://de.statista.com/statistik/daten/studie/249078/umfrage/anteile-der-wirtschaftssektoren-am-brutto-inlandsprodukt-bip-der-eu, retrieved 17.03.2019.

1. INTRODUCTION

Thanks to a long time underestimation of service innovations, process innovation and product innovation were taking some primacy over for a while. But still, it is impossible to study, any activity on other scientific field or discipline by omitting the service innovations. The presence of service innovations is overwhelmingly and obviously intensive in the fields of management, macroeconomy, finance, marketing, architecture, medicine, construction, pharmacy and companies such as Ikea, Amazon, Google, Alixpress, McDonald. Actually, financial agents discovered the fact that the main part of their own success they owe to service innovations. However, the main research problem of services innovations are their non material, indivisible and heterogeneous nature: namely, they have singular entirety-formed dimension of structure, process, and result[2]. Finally, the importance of innovation in the service domain is undeniable, due to their contributed to EU nominal GDP income of approximately 66% in a year of 2017.[3]

2. THEORETICAL BACKGROUNF OF SERVICE INNOVATION

Some authors define as: *" the rebundling of diverse resources that create novel resources that are beneficial (i.e., value experiencing) to some actors in a given context."*[4] Another authors look at service innovation as: *„the collaborative recombination or combinatorial evolution of practices that provide novel solutions for new or existing problems."*[5] Service innovation can be presented as: *„institutionalized change (hence, change of context) based on reconfiguration of resources, actors and institutional arrangements, enabling actors to integrate resources and create value through collaboration in new and useful ways."*[6] Finally, service innovation can be defined as: *„creating value for customers, employees, business owners, alliance partners, and communities through new or improved service offerings, service processes, and service business models"*[7]

---

[2] Jančetović, M., & Erić, I. (2015). *Menadžment inovacija*. Beograd: BPS, p. 105.
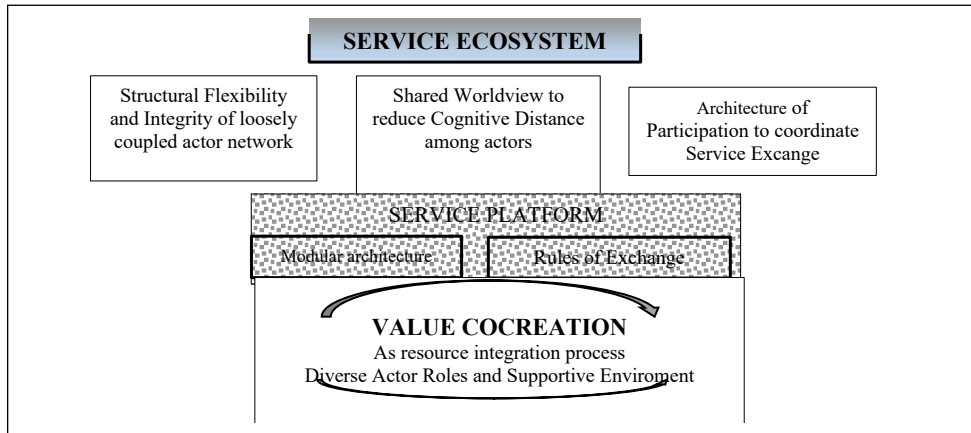
[3] *Ibid* as 1.

[4] Lusch, R. F., & Nambisan, S. (2015). *Service innovation: A service-dominant logic perspective. MIS quarterly*, 39(1), p.161.

[5] Vargo, S. L., Wieland, H., & Akaka, M. A. (2015). Innovation through institutionalization: *A service ecosystems perspective. Industrial Marketing Management*, 44, 63-72., p. 64.

[6] Edvardsson, B., Frow, P., Jaakkola, E., Keiningham, T. L., Koskela-Huotari, K., Mele, C., & Tombs, A. (2018). *Examining how context change foster service innovation. Journal of Service Management*, 29(5), 932-955., p. 934.

[7] Tseng, M. L., Wu, K. J., Chiu, A. S., Lim, M. K., & Tan, K. (2018). *Service innovation in sustainable product service systems: Improving performance under linguistic preferences. International Journal of Production Economics*, 203, 414-425., p. 415.

Picture 1. Contemporary model of service innovation

Source: Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic per-spective. MIS quarterly, 39(1), p. 612.

The core of the model is the claim that service innovation can be explained through three different processes, namely: the service ecosystem, the service platform, and value creation as the primary economic goal. The service ecosystem is made up of organizations and individuals who seek to pool their knowledge and skills to ensure the survival and effectiveness of operations. The suthos define it as: „ *self-contained, self-adjusting system of mostly loosely coupled social and economic (resource-integrating) actors connected by shared institutional logics and mutual value creation through service exchange."*[8] The service platform, on the other hand, is a modular architecture, composed of tangible and intangible resources, which would facilitate interaction between actors and resources. Finally, value creation would relate to different processes and activities, which would foster resource integration, create internal mechanisms that coordinate interactions between different actors, and improve the transparency of resource integration into the ecosystem.

Recent scientific research showed some flaws of previous model narrowly focused on lack-of-resources assumption. As natural result of previously mentioned, managers should be bricolage – mindful oriented, as a way of having an alternative versus previously presented rigidly –formed process. Before, mentioned concept has been applied only with product innovation and process innovation, but last research has shown that this praxis is quite acceptable in case of service innovations. In that sense, there are opportunities, and they

---

[8] *Ibid* as 4, p. 161.

Ivana Erić et. al.: SATISFACTION WITH SERVICE INNOVATIONS IN SERBIA...

Journal of Accounting and Management 2019, vol.: 09; no.: 02; page 77 - 86

are:[9] 1. Actively addressing resource scarcity; 2. Making do with what is available, 3. Improvising when recombining resources, and 4. Networking with external partners. Thus, the authors have empirically demonstrated the possibility that the concept of bricolage will replace the formalized process of service innovation if there is a lack of resources.

Generally, over the years, three universal approaches have been developed that explain the evolution of understanding of service innovation over many years of research. These are the following approaches:[10]

1. Assimilation – is based on the assumption that service innovations can be fully analyzed by terms and tools used in the analysis of product and process innovations. The service sector is considered to be technologically intensive, as for example adoption and use of new IT technologies.

2. Demarcation – includes studies that emphasize the fundamentally different nature of service

innovation versus process and product innovation. The specifics of service innovation, such as customer-focused services, relational learning, and more, are highlighted. In particular, it points to the intangible nature of services, which greatly contributes to the growth of profits, such as tourism, cleaning and more, which need not be related to the use of technology.

3. Syntesis – By using the previous two approaches, a new, more integrative view of service innovation has been created. Economic development has been fueled by the emergence of new combinations, which are more economically viable than the previous two approaches. Thus, service innovation suggests that innovation as a perspective can be used to understand all types of innovation offerings (processes, products, organizational and others, along with service innovation, as an integral part).

Some basic features of service innovations and affirmative recommendations for their successful implementation will be point out in the extension of this paper.

3. TYPES OF SERVICE INNOVATION AND PERFORMANCE FACTORS

One of the largest groups classification of innovation is by the degree of change to radical innovations and incremental innovations. [11] In that sense,

---

[9] Witell, L., Gebauer, H., Jaakkola, E., Hammedi, W., Patricio, L., & Perks, H. (2017). A bricolage perspective on service innovation. *Journal of Business Research*, *79*, 290-298., p. 292.

[10] Janssen, M. J., Castaldi, C., & Alexiev, A. (2016). Dynamic capabilities for service innovation: conceptualization and measurement. *R&D Management*, *46*(4), 797-811., p.799.

[11] Gallouj, F., & Weinstein, O. (1997). Innovation in services. *Research Policy*, *26*(4–5), 537– 556, p. 547.

radical innovations referr to brand new services offer while incremental innovations add new elements to existing supply, actually the upgrading concretely, without changing the total services supply. Furthermore, there are *interactive service innovations* and i*ncentive service innovations* too. Interactive service innovations are external (services concept) while incentive service innovations are internal (service offering)[12]. At the end, there is distinction between *explicit service innovations* and *tacit service innovations*.[13] Tacit service innovations, i.e. *experimental services* are known for simultaneously production and consumption, because their form is based on direct delivery in interpersonal relations (medicine, fashion, etc.). Delivery of explicit service innovations is technology based delivery, and for that cause it covers services in a field of banking, insurance, telecommunications, and other. After all, there is a classification based upon target able segments suitable for changes which could be aimed to physical objects, people, or information codification.[14] Primary, physical services are services for taking care about people and goods or they transport of them. People based services as *social services* and *community services* (education, health) promote and take care about the community welfare. Likewise, these sorts of services can be focused to individual business too (hair stylists, catering). Certainly, IT services are services narrowly related with mass media, telecommunications, marketing agencies and other.

There are a number of recommendations in the literature for improving service innovation. One of the most cited is the following recommendations:[15]

1. Comprehensive customer-experience management; 2. Investment in employee performance; 3. Continuous operational innovation; 4. Brand differentiation; 5. An innovation champion; 6. A superior customer benefit; 7. Affordability; and 8. Continuous strategic innovation.

Thus, access to service innovation is a very complex concept, requiring the interaction of organizations, users and part of the state.

---

[12] Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2013). Competing through service innovation: The role of bricolage and entrepreneurship in project-oriented firms. *Journal of Business Research*, *66*(8), 1085–97, p. 1087.

[13] Storey, C. and K.B. Kahn. 2010. The role of knowledge management strategies and task knowledge in stimulating service innovation. Journal of Service Research 13(4): 397-410, p. 401.

[14] Hauknes, J. (1998). Services in innovation-innovation in services. STEP Report, p. 16.

[15] Berry, L. L., Shankar, V., Parish, J. T., Cadwallader, S., & Dotzel, T. (2006). Creating new markets through service innovation. *MIT Sloan Management Review*, *47*(2), 56 -63, p. 60.

4. DEFINITION OF SAMPLE, HYPOTHESIS AND RESEARCH METHODOLOGY

In accordance with the research goals, the following hypotheses were made:

H1: Users of innovative services in Serbia are satisfied with them.

H2: Gender and age define the expectations and perceptions of innovative services.

In the assessment of customer satisfaction with innovation in services in Serbia used the primary data source, i.e. a survey. In the assessment of customer satisfaction with innovation in services in Serbia used the primary data source, i.e. a survey. The survey conducted in Belgrade, Novi Sad and Niš in companies, of which 4 are privately owned and 2 state-owned. These are respondents who are clients of banks, public administration and commerce.

The total number of respondents was 367, of which 141 (75 male and 66 female) belonged to banking, 101 (41 male and 60 female) to the public administration sector and 125 (68 male and 57 female) to the trade sector. Survey questions have been formulated following the most significant service innovation in the sectors mentioned over the past three years. The questions are of a Likert type, where: 1 - no; 2 - partially; 3 - completely.

A custom SERVQUAL model was used to prove the first hypothesis, since the original examines the quality of service viewed across five dimensions: tangibility, reliability, responsibility, security, and empathy. The custom model will only investigate customer satisfaction with innovative services, but will not measure service quality by dimensions.

Table 1. T test paired samples for testing significance of difference between perceived and expected service

Sector	Item		The difference of mean value	Standard error differences	t	df	p
Banking **N= 141**	E banking is adapted to customer requirements	Perceived - expected	0.2	0.09	2.34	140	0.021
	Money laundering is successful	Perceived - expected	0.2	0.07	2.93	140	0.004
	is good	Perceived - expected	0.9	0.06	14.32	140	0.000
C ommerce **N= 125**	Selfservice cash register are simply for use	Perceived - expected	0.18	0.08	2.26	124	0.026
	Delivery of goods to home address is reliable	Perceived - expected	0.19	0.06	3.27	124	0.001
	E –commerce is simply	Perceived - expected	0.2	0.06	3.50	124	0.001

Sector	Item		The diffe- rence of mean value	Standard error diffe- rences	t	df	p
Public Ad- ministra- tion N= 101	E taxes come to life	Perceived - expected	0.9	0.09	10.56	100	0.000
	E building permits come to life	Perceived - expected	0.8	0.08	11.40	100	0.000

Source: Calculation of authors

, [16] ; and, [17].

Two-factor analysis of variance enables the study of the individual and joint effects of independent variables (gender and age category) on dependent variables (expectation and perception) at the observed services ibtrade, p

Any worth mentioned differences for average expectation level values in banking sector which are categorized by sex are not recognizable, i.e. research-used pattern didn't prove that male and female have any differences in terms of expectation in this innovation service analysis. age, such as in a group of men and women young and middle-aged greater expectations from a group of elderly men and women of e- banking services and prevention of money laundering(p=0,001<0,05 and p=0,024<0,05). Results have given in

Table 2. ANOVA for e - banking - expectation

Tests of Between-Subjects Effects					
Dependent Variable:	**E banking expectation**				
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Corrected Model	13.443[a]	3	4.481	9.088	.000
Intercept	551.349	1	551.349	1118.205	.000
Gender	1.094	1	1.094	2.218	.139
Age	12.033	1	12.033	24.404	.000
Gender* Age	.435	1	.435	.881	.349
Error	67.550	137	.493		
Total	641.000	141			
Corrected Total	80.993	140			
a. R Squared = .166 (Adjusted R Squared = .148)					

Source: Calculation of authors

---

[16] , RS Official Gazette, Nos 36/2011 and 139/2014, Electronic Government, RS Official Gazette, Nos 27/2018

[17] The categorization was done on the basis of the categorization of the RS Bureau of Statistics

Table 3. ANOVA for anti money loandering - expectation

| Tests of Between-Subjects Effects					
Dependent Variable:	**Antimoney loandering expectation**				
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Corrected Model	2.686[a]	3	.895	2.245	.086
Intercept	367.417	1	367.417	921.343	.000
Gender	.569	1	.569	1.426	.234
Age	2.086	1	2.086	5.232	.024
Gender * Age	.035	1	.035	.089	.766
Error	54.633	137	.399		
Total	426.000				
Corrected Total	57.319	140			
a. R Squared = .047 (Adjusted R Squared = .026)					

Source: Calculation of authors

The influence of interaction the observed factors for all three observed services in the banking sector is not statistically significant (p> 0.05) and the research shows that the influence of gender on expectations does not change depending on the age of the service users, ie that the homogeneity of variance is not in all groups. Consumer services satisfaction survey in a domain of banking didn't show any evidence that sexes (m/f) or age based factors influence on services innovation satisfaction.

During the survey period in the sector of commerce there are noticeable changes related to sex (m/f) factor criteria (p = 0,001 < 0,01) in that way where have much lower expectations and higher level of precaution towards e-shopping at young and middle age women than at older women. ,interaction factor (p=0,022<0,05),where we find that the influence of one factor on customer satisfaction varies with the other factor.

This means that the variance in the perceived rating of e - commerce users differs in men and women in sense that the perceived value in men with age increases, while in women, it decreases. These survey outcomes are enough qualifying proof for conclusion that the influence of age on the level of perception changes depending on whether the user is a female or a male.

Picture 2. ANOVA for e - commerce - percepcions
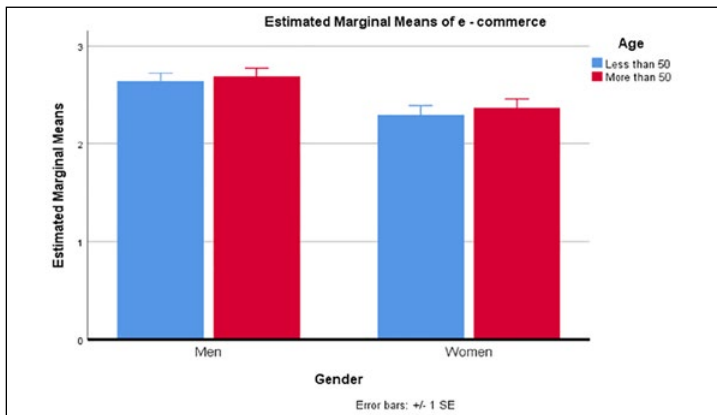
Source: Calculation of authors

In proving the second hypothesis in the Public Administration sector, a survey of service expectations and perceptions shows that the differences are not statistically significant, i.e. the sample did not prove that men and women of any age differed in expectations and perceptions of electronic building permits and electronic taxes.

5. CONCLUSION

The service innovations discussed in the paper began with the introduction on small doors 10 years ago in order to experience widespread use and continually development only in the last three years. rDespite these facts innovations were conducted, and they were the main culprit not for above mentioned worker anxieties but for better customer satisfaction as showed survey outcomes.At the same time, analysis of variance indicated that in the examined sample, the simultaneous influence of the gender and age exist only in the perception of e - commerce. Specifically, the perceived value of e - commerce in men increases with age and in women it decreases.

ASstate system oshadyeeSGnthe

LITERATURE

1. Berry, L. L., Shankar, V., Parish, J. T., Cadwallader, S., & Dotzel, T. (2006). Creating new markets through service innovation. *MIT Sloan Management Review*, *47*(2), 56 -63.
2. Edvardsson, B., Frow, P., Jaakkola, E., Keiningham, T. L., Koskela-Huotari, K., Mele, C., & Tombs, A. (2018). Examining how context change foster service innovation. *Journal of Service Management*, *29*(5), 932-955.
3. Gallouj, F., & Weinstein, O. (1997). Innovation in services. *Research Policy*, *26*(4–5), 537– 556.

4. Hauknes, J. (1998). Services in innovation-innovation in services. STEP Report.
5. Jančetović, M., & Erić, I. (2015). *Menadžment inovacija*. Beograd: BPŠ.
6. Janssen, M. J., Castaldi, C., & Alexiev, A. (2016). Dynamic capabilities for service innovation: conceptualization and measurement. *R&D Management*, *46*(4), 797-811.
7. Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. *MIS quarterly*, *39*(1)
8. RS Official Gazette, Nos 36/2011 and 139/2014.
9. RS Official Gazette, Nos 27/2018.
10. Salunke, S., Weerawardena, J., & McColl-Kennedy, J. R. (2013). Competing through service innovation: The role of bricolage and entrepreneurship in project-oriented firms. *Journal of Business Research*, *66*(8), 1085–97.
11. Storey, C. and K.B. Kahn. 2010. The role of knowledge management strategies and task knowledge in stimulating service innovation. Journal of Service Research 13(4): 397-410.
12. Tseng, M. L., Wu, K. J., Chiu, A. S., Lim, M. K., & Tan, K. (2018). Service innovation in sustainable product service systems: Improving performance under linguistic preferences. *International Journal of Production Economics*, *203*, 414-425.
13. Vargo, S. L., Wieland, H., & Akaka, M. A. (2015). Innovation through institutionalization: A service ecosystems perspective. *Industrial Marketing Management*, *44*, 63-72.
14. Witell, L., Gebauer, H., Jaakkola, E., Hammedi, W., Patricio, L., & Perks, H. (2017). A bricolage perspective on service innovation. *Journal of Business Research*, *79*, 290-298.
15. *https://de.statista.com/statistik/daten/studie/249078/umfrage/anteile-der-wirtschaftssektoren-am-bruttoinlandsprodukt-bip-der-eu*, retrieved 17.03.2019.

ZADOVOLJSTVO INOVACIJAMA USLUGA U SRBIJI

SAŽETAK RADA:

Cilj rada je sagledati zadovoljstvo inovacijama usluga njihovih korisnika u Srbiji. Usluge predstavljaju budućnost nacionalnih gospodarstava, s obzirom na to da su generirale 66% bruto društvenog dohotka EU-a. U radu će se prezentirati pojam, značaj, klasifikacija, klasičan i suvremeni model inovacija usluga. Također, ukazat će se na faktore koji utječu na uspešnost inovacija usluga. Empirijski dio obuhvatio je ispitanike iz područja trgovine, bankarstva i javne uprave. Konačno, primjenom prilagođenog SERVQUAL modela i ANOVA analize, utvrđena je razina zadovoljstva klijenata inovativnih usluga.

Ključne riječi: *inovacije usluga, zadovoljstvo korisnika, faktori uspješnosti inovacija*