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ENHANCING SERVICE QUALITY THROUGH MARKETING AUTOMATION: IMPLICATIONS FOR THE DIGITAL ECONOMY

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Abstract: *The paper aims to explore the impact of marketing automation on service quality within the context of the digital economy. As contemporary businesses increasingly implement automated marketing tools to enhance customer satisfaction and operational efficiency, understanding their influence on perceived service quality becomes a significant topic. To address this issue, the study uses the SERVQUAL model to measure the five key dimensions of service quality from the perspective of marketing automation: tangibility, reliability, responsiveness, assurance and empathy. A quantitative research approach was adopted, utilizing descriptive statistics and a regression model to analyse data collected from a sample of 155 service users in the Republic of Serbia. In addition, the research analyses differences in satisfaction levels across various service industries, including financial services, hospitality, healthcare and telecommunications. The findings indicate statistically significant relationships between marketing automation and several dimensions of service quality, suggesting that automation can positively influence customer perceptions when implemented effectively. This study contributes to the theory on digital transformation in services and offers practical implications for businesses seeking to implement marketing automation tools to enhance customer experience.*

Keywords*: marketing automation, service quality, digital economy, service marketing, digital transformation*

JEL Classification: *M21, M31, L90*

INTRODUCTION

Marketing automation is one of the pillars of modern customer relationship management, significantly transforming marketing processes and providing deeper in-

sights into consumers, with an emphasis on personalizing the user experience. From the perspective of the digital economy, marketing automation contributes to cost efficiency, personalization at scale, the creation of additional value for both consumers and the environment, and improved data-driven decision making. In the service sector, the application of marketing automation has multiple effects on the dimensions of service quality, considering that it participates in shaping consumer perception.

Given the importance of marketing automation, this paper aims to examine its impact on service quality within the context of the digital economy. When defining the topic and objectives of this article, it was considered that there is a research gap in the limited exploration of how marketing automation influences customer perceptions of service quality in the service sector, despite the fact that marketing automation tools have been widely studied in sales management. To address this issue, the study uses the SERVQUAL model to measure the five key dimensions of service quality from the perspective of marketing automation: tangibility, reliability, responsiveness, assurance and empathy. The research was conducted on a sample of 155 (N=155) service users in the Republic of Serbia in 2025. During the analysis and interpretation of the data, descriptive statistics and a regression model were applied to examine the impact of individual dimensions of service quality on overall user satisfaction. . In addition, the research analyses differences in satisfaction levels across various service industries, including financial services, hospitality, healthcare and telecommunications.

MARKETING AUTOMATION AND SERVICE QUALITY: LITERATURE REVIEW

The American Marketing Association (AMA) defines marketing automation as "the use of software and technology to expedite and improve repetitive or time-consuming marketing activities" (American Marketing Association, 2025). The results of a 2024 global survey published by Statista revealed that email, social media and content management are the key areas where marketing automation is most commonly applied (Statista, 2024).

The literature review identified various studies that address the impact of marketing automation on business performance (Mahmoud, et al., 2020) (Silva, Corbo, Vlačić, & Fernandes, 2023), consumer buying behaviour (Boozary, Hosseini, Pourmirza, GhorbanTanhaei, & Sheykhan, 2024), sales (Jena & Panda, 2017), promotion (Sun, Li, Guo, & Gao, 2023), database management and campaign execution (Biegel, 2009).

When analysing the benefits of implementing marketing automation, studies point to the following. The Statista report (Statista, 2024) highlights the importance of marketing automation for time management and improving efficiency. This is especially evident when using email campaigns and social media marketing tools that allow managers to save resources and focus on strategic decisions. In a study conducted by Jovanovic et al. (Jovanovic, Djokovic, & Pusara, 2024) it was indicated that the application of digital technologies and particularly digital media enhanced the added value of products and services. In addition, research in a banking sector revealed the positive effects of mobile banking tools on cost efficiency (Koyluoglu & Acar, 2023). Furthermore, the study provided by Joseph emphasizes the importance of marketing automation for digital marketing, primarily in the domain of lead generation and personalized

content creation (Joseph, 2023). Significant insight into the contributions of marketing automation in the digital economy was provided by Forrester that demonstrated its impact on database decision making, which is of great importance for running digital campaigns and managing customer relationships (Forrester, 2024). A significant number of studies point to the importance of marketing automation for improving the customer experience. According to Reddy (2022), AI-driven marketing automation tools can significantly enhance customer engagement and satisfaction (Reddy, 2022). The study analyses the transformative potential of using AI in marketing to create personalized experiences that meet individual customer needs. Given the evident impact of marketing automation on the consumer experience, the term customer experience automation (CXA) has come into use in marketing theory and practice. According to McKinsey, customer experience automation is defined as "the integration of automation technologies and data-driven insights to manage and personalize interactions with customers at scale" (McKinsey & Company, 2023).

Literature review on marketing automation in the service sector indicates the effects of its application in various industries, such as improved market segmentation, efficiency of business processes, enhanced user experience through personalized communication and better insight into consumer needs. A study (Van Leeuwen & Koole, 2022) dealing with marketing automation in the hospitality sector highlights that machine learning enables data-driven market segmentation based on in-depth analysis of hotel guest profiles. Research by Gerling and Lessmann (2024), exploring the use of artificial intelligence and natural language processing (NLP) in the banking industry, highlights their crucial role in creating value and enhancing customer engagement (Gerling & Lessmann, 2024). In addition, a study (Visan, Ionita, & Filip, 2020) dealing with data analysis in the telecommunications market indicated the positive effects of using marketing automation on business efficiency and decision – making processes. Furthermore, Pearson emphasizes the new opportunities enabled by marketing automation, particularly in redefining the relationship with consumers and delivering the right information throughout the entire customer journey and purchasing process (Pearson, 2021).

When researching the impact of marketing automation on service quality, the literature highlights its positive implications, primarily on marketing communication with consumers through digital channels and providing a personalized user experience. In addition, marketing automation provides targeted communication (Boozary, Hosseini, Pourmirza, GhorbanTanhaei, & Sheykhan, 2024) that significantly shapes the digital consumer experience, as a result of which it affects the quality of service.

However, despite the significant positive implications of marketing automation for service quality, it is important to recognize that achieving higher levels of customer satisfaction requires a balanced integration of digital tools with traditional service approaches. Similar observations were highlighted in a research (Naumov, 2019) on the example of the hotel industry, indicating that human presence is a very important segment of the service experience.

It is important to highlight that the literature review revealed a limited research on the impact of marketing automation on service quality, which served as one of the primary motivations for conducting this study. To address the research topic, it was necessary to analyse the theory that deals with service quality, as well as the ap-

plications of the SERVQUAL model, which was utilized in this paper. According to Grönroos (Grönroos, 1984), service quality is defined as "the outcome of an evaluation process where the customer compares his expectations with the service he perceives he has received". Lewis & Booms (Lewis & Booms, 1983) consider service quality as "a measure of how well the service delivered matches customer expectations". Furthermore, The SERVQUAL model developed by Parasuraman, Zeithaml, and Berry, evaluates service quality based on five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml, & Berry, 1988). This model has been widely used in traditional service contexts such as banking, hospitality, and healthcare. However, its application in digital environment is still relatively underexplored. Limited literature has addressed the quality dimensions of the SERVQUAL model in a digital context. In recent studies, Demirel (Demirel, 2022) has explored services in digital environments, indicating that "digital service quality is defined by dimensions such as digital tangibles, reliability, digital interaction, digital trust and customer-centricity". In addition, Zygiaris et al. analysed the concept of service quality within the post- pandemic landscape, highlighting "the effective use of digital tools and social media to provide responsive updates to customers" (Zygiaris, Hameed, Alsubaie, & Rehman, 2022). Their study emphasized the continued relevance of empathy, assurance, reliability, responsiveness and tangibles in influencing customer satisfaction.

HYPOTHESIS DEVELOPMENT

Based on the SERVQUAL framework and literature review (Zygiaris, Hameed, Alsubaie, & Rehman, 2022) (Demirel, 2022) (Parasuraman, Zeithaml, & Berry, 1988), the following hypotheses were developed to examine the relationship between service quality dimensions and overall satisfaction with automated services:

H1: Reliability of automated services has a positive and significant effect on overall satisfaction.

H2: Assurance provided by automated systems has a positive and significant effect on overall satisfaction.

H3: Tangibles (visual and design elements of automated systems) have a positive and significant effect on overall satisfaction.

H4: Empathy in automated communications positively influences overall satisfaction.

H5: Responsiveness of automated systems positively influences overall satisfaction.

METHODOLOGY: RESEARCH INSTRUMENT AND SAMPLE

In this study, the 5-point Likert scale (1.Strongly disagree – 5. Strongly agree) was utilized to assess customer expectations and perceptions of service quality across the five SERVQUAL dimensions, such as reliability, assurance, tangibles, empathy and responsiveness.

The research was conducted in 2025 on a sample of 155 service users (N = 155) in the Republic of Serbia, from four industries: financial services (23.2%), hospitality (21.9%), healthcare (32.3%) and telecommunications (22.6%) (Table 1).

Table 1: Respondents by service industry

Service industry					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	financial services	36	23.2	23.2	23.2
	Hospitality	34	21.9	21.9	45.2
	Healthcare	50	32.3	32.3	77.4
	Telecommunications	35	22.6	22.6	100.0
	Total	155	100.0	100.0	

Source: Authors' calculation in SPSS

To calculate the overall satisfaction related to automated service quality, the SERVQUAL model was adapted using 20 items grouped under the five dimensions.

Reliability:

VAR 1: The company's automated messages (emails/SMS) are accurate and timely.

VAR 2: Automated systems always provide consistent information.

VAR 3: I can rely on the company's automated tools to function properly without errors.

VAR 4: The service provided—automated or human—is dependable.

Assurance:

VAR 5: The automated service systems (e.g., chatbots, emails) seem trustworthy.

VAR 6: I feel confident sharing information with the company, even through automated systems.

VAR 7: Automation makes me feel secure and well-informed.

VAR 8: Automated messages clearly explain services and inspire confidence.

Tangibles:

VAR 9: Automated messages are professionally designed and easy to read.

VAR 10: The website/app, including automated tools, is visually appealing.

VAR 11: Automated communications are personalized and visually engaging.

VAR 12: The company's digital tools appear modern and well-maintained.

Empathy:

VAR 13: Automated messages reflect my preferences and previous interactions.

VAR 14: The company uses automation to deliver personalized support.

VAR 15: Even automated responses feel tailored to my needs.

VAR 16: Automation helps the company understand and care about my needs.

Responsiveness:

VAR 17: Automated systems respond to inquiries promptly.

VAR 18: I receive timely updates and follow-ups through automated channels.

VAR 19: It is easy to get fast support through chatbots or auto-responses.

VAR 20: Automation helps the company address issues efficiently.

For each item, respondents rated both their expectations and perceptions of the service. The gap scores were calculated as the difference between perceived and expected service quality (Gap = Perception – Expectation). This approach aligns with the traditional SERVQUAL methodology, where positive gap scores indicate satisfaction

exceeding expectations, while negative scores reflect unmet expectations (Parasuraman, Zeithaml, & Berry, 1988).

In order to derive an aggregate measure of satisfaction, the overall satisfaction score was computed as the mean of all 20 gap scores. The formula used in SPSS was as follows:

Overall_Satisfaction = MEAN(Gap1, Gap2, ..., Gap20)

This method assumes that each dimension contributes equally to the overall perception of service quality, which is consistent with prior studies employing the SERVQUAL framework in digital and automated service contexts (Zeithaml, Parasuraman, & Malhotra, 2002). The resulting score was used as the dependent variable in subsequent regression analysis to determine the impact of individual service quality dimensions on overall satisfaction. Similar approach was used in a study dealing with tourist satisfaction that demonstrates the model's adaptability across different service industries (Veranga, 2024).

To evaluate the internal consistency of the SERVQUAL-based instrument adapted for assessing user satisfaction with automated service quality, Cronbach's alpha coefficients were calculated for each of the five dimensions based on the computed gap scores (the difference between perceived and expected service quality for each item). The results demonstrated in Table 2 indicate a generally high level of internal consistency across all dimensions. According to the guidelines, an alpha coefficient of 0.70 or above is considered acceptable for exploratory research, while coefficients above 0.90 are indicative of excellent internal reliability (Nunnally & Bernstein, 1994).

Table 2: Cronbach's alpha coefficients for SERVQUAL dimensions

Reliability Statistics Reliability dimension Gaps Var 1-Var 4	
Cronbach's Alpha	**N of Items**
.744	4

Reliability Statistics Assurance dimension Gaps Var 5 – Var 8	
Cronbach's Alpha	**N of Items**
.953	4

Reliability Statistics Tangibles dimension Gaps Var 9 –Var 12	
Cronbach's Alpha	**N of Items**
.904	4

Reliability Statistics Empathy dimension Gaps Var 13-Var 16	
Cronbach's Alpha	**N of Items**
.950	4

Reliability Statistics Responsiveness dimension Gaps Var 17 – Var 20	
Cronbach's Alpha	**N of Items**
.951	4

Source: Authors' calculation in SPSS

The testing of the hypothetical framework was based on the application of a linear regression model supported by SPSS software. For the purposes of this research, ANOVA and the Tukey HSD post hoc test were used to compare customer satisfaction levels across different service industries.

RESULTS AND DISCUSSION

Hypothesis 1 (H1): Reliability of automated services has a positive and significant effect on Overall Satisfaction, was tested using a linear regression model, as presented in Table 3.

Table 3: Regression model for Reliability

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.890[a]	.793	.791	.38630

a. Predictors: (Constant), Reliability_score

ANOVA[a]						
	Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	87.235	1	87.235	584.591	.000[b]
	Residual	22.831	153	.149		
	Total	110.066	154			

a. Dependent Variable: Overall_Satisfaction
b. Predictors: (Constant), Reliability_score

Coefficients[a]						
	Model B	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		Std. Error	**Beta**			
1	(Constant)	-.124	.040		-3.122	.002
	Reliability_score	1.022	.042	**.890**	24.178	.000

a. Dependent Variable: Overall_Satisfaction
Source: Authors' calculation in SPSS

Given the data presented in the Table 3, the regression model was statistically significant, $F(1, 153) = 584.59$, $p < 0.05$, indicating that Reliability significantly predicts satisfaction with automated services. The model explains approximately 79.3% of the variance in satisfaction ($R^2 = 0.793$, Adjusted $R^2 = 0.791$), demonstrating that reliability is a significant contributing factor to the variation in satisfaction scores.

The unstandardized coefficient ($B = 1.022$, $p < 0.05$) indicates that a one-unit increase in the perceived Reliability score is associated with a 1.022 unit increase in overall satisfaction. The standardized coefficient ($\beta = 0.890$) further confirms that Reliability has a strong positive effect on satisfaction. The t-value (24.178) also shows that the predictor is highly significant.

The testing of Hypothesis 2 also involved the application of a linear regression model (Table 4), aimed at examining whether assurance provided by automated systems has a positive and significant effect on overall satisfaction.

Table 4: Regression model for Assurance

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.932[a]	.869	.868	.30698

a. Predictors: (Constant), Assurance_score

ANOVA[a]						
	Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	95.648	1	95.648	1015.010	.000[b]
	Residual	14.418	153	.094		
	Total	110.066	154			

a. Dependent Variable: Overall_Satisfaction
b. Predictors: (Constant), Assurance_score

Coefficients[a]						
	Model B	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		Std. Error	**Beta**			
1	(Constant)	-.016	.029		-.554	.580
	Assurance_score	.652	.020	**.932**	31.859	.000

a. Dependent Variable: Overall_Satisfaction
Source: Authors' calculation in SPSS

The results of the regression analysis indicate that Assurance is a significant and strong predictor of Overall Satisfaction, explaining a substantial portion of the variance in user satisfaction.

The regression model for Assurance explains approximately 86.9% of the variance in Overall Satisfaction ($R^2 = 0.869$). This is a high level of explanatory power, suggesting that Assurance plays a critical role in determining how satisfied users are with automated services. The Adjusted R^2 value (0.868) further confirms that the model is robust, accounting for the number of predictors in the analysis.

The F-statistic for the regression model was 1015.010, with a p-value of less than 0.05, indicating that the model is statistically significant and that Assurance is a reliable predictor of satisfaction. This supports the hypothesis that the perceived trustworthiness, confidence, and clarity of automated services significantly influence how satisfied users feel with these services.

The unstandardized coefficient for Assurance was 0.652, indicating that for each unit increase in the perceived Assurance (e.g., trust in automated systems, clarity of communication), Overall Satisfaction increased by 0.652 units. This is a strong positive relationship, highlighting the importance of trust-building features in automated systems. The standardized coefficient of 0.932 confirms that Assurance is the most influential predictor of satisfaction among all the service quality dimensions assessed. This implies that Assurance has the greatest impact on user satisfaction compared to other factors such as reliability, empathy, tangibles, and responsiveness.

Table 5 presents the findings related to the regression model analysing the relationship between Overall Satisfaction and Tangibles, in order to test Hypothesis 3.

Table 5: Regression model for Tangibles

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.872[a]	.761	.760	.41454

a. Predictors: (Constant), Tangibles_score

ANOVA[a]						
	Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	83.775	1	83.775	487.513	.000[b]
	Residual	26.292	153	.172		
	Total	110.066	154			

a. Dependent Variable: Overall_Satisfaction
b. Predictors: (Constant), Tangibles_score

Coefficients[a]						
	Model B	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		Std. Error	**Beta**			
1	(Constant)	.156	.036		4.294	.000
	Tangibles_score	.910	.041	**.872**	22.080	.000

a. Dependent Variable: Overall_Satisfaction
Source: Authors' calculation in SPSS

The regression model for Tangibles explains 76.1% of the variance in Overall Satisfaction ($R^2 = 0.761$). This is a relatively high level of explanatory power, indicating that Tangibles is a critical factor influencing satisfaction. The Adjusted R^2 value of 0.760 further strengthens this conclusion, showing that the model accounts for a substantial portion of the variance while adjusting for the number of predictors.

The F-statistic of 487.513, with a p-value of less than 0.05, indicates that the regression model is statistically significant, and Tangibles_score is a reliable predictor of Overall Satisfaction. The unstandardized coefficient for Tangibles_score is 0.910, meaning that a one-unit increase in the perceived quality of the tangible aspects of the service leads to a 0.910 unit increase in Overall Satisfaction. The standardized coefficient ($\beta = 0.872$) further emphasizes the strength of this relationship, showing that Tangibles has a considerable impact on satisfaction in comparison to other predictors.

The t-value for Tangibles_score (22.080) is very high, with a p-value of 0.000, confirming that Tangibles is a statistically significant predictor of satisfaction. This strong relationship suggests that users' perceptions of the design, visual appeal, and usability of automated services have a direct and substantial effect on their overall satisfaction with these systems.

Furthermore, the regression model presented in Table 6 explored the relationship between Overall Satisfaction and Empathy, and was used to test Hypothesis 4 (H4).

The regression results demonstrate that Empathy_score has a significant role in determining overall user satisfaction, accounting for a large proportion of the variance in Overall Satisfaction.

Table 6: Regression model for Empathy

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.809[a]	.655	.653	.49832

a. Predictors: (Constant), Empathy_score

ANOVA[a]						
	Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	72.072	1	72.072	290.232	.000[b]
	Residual	37.994	153	.248		
	Total	110.066	154			

a. Dependent Variable: Overall_Satisfaction
b. Predictors: (Constant), Empathy_score

Coefficients[a]						
	Model B	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		Std. Error	**Beta**			
1	(Constant)	.139	.045		3.108	.002
	Empathy_score	.691	.041	**.809**	17.036	.000

a. Dependent Variable: Overall_Satisfaction
Source: Authors' calculation in SPSS

The R^2 value of 0.655 indicates that Empathy_score explains 65.5% of the variance in Overall Satisfaction, implying that the perception of empathy, such as the personalization and responsiveness of automated services, is an important driver of user satisfaction.

The Beta standardized coefficient of 0.809 shows the existence of a strong positive relationship. This implies that for every one-unit increase in perceived empathy, Overall Satisfaction is expected to increase by 0.809 units.

Furthermore, the F-statistic of 290.232 (p =0.000) indicates that the model significantly explains the variance in Overall Satisfaction, where Empathy_score is an important contributor. The high t-value of 17.036 for Empathy_score (p =0.000) suggests that the relationship between Empathy_score and Overall Satisfaction is statistically significant.

Hypothesis 5 (H5): Responsiveness of automated systems positively influences Overall Satisfaction, was tested using a linear regression model presented in Table 7.

Table 7: Regression model for Responsiveness

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.804[a]	.646	.644	.50451

a. Predictors: (Constant), Responsiveness_score

ANOVA[a]						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	71.122	1	71.122	279.420	.000[b]
	Residual	38.944	153	.255		
	Total	110.066	154			

a. Dependent Variable: Overall_Satisfaction
b. Predictors: (Constant), Responsiveness_score

Coefficients[a]						
	Model B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	.357	.041		8.689	.000
	Responsiveness_score	.583	.035	**.804**	16.716	.000

a. Dependent Variable: Overall_Satisfaction
Source: Authors' calculation in SPSS

The regression analysis revealed that Responsiveness is a statistically significant and strong predictor of Overall Satisfaction in the context of automated service systems. The standardized coefficient ($\beta = 0.804$) indicates a robust positive relationship, suggesting that users who perceive automated systems as responsive—i.e., capable of providing prompt replies, timely updates, and efficient problem resolution—are significantly more likely to report higher satisfaction levels.

The model's R^2 value of 0.646 demonstrates that approximately 64.6% of the variance in overall satisfaction can be explained solely by the perceived responsiveness of automated services. The F-statistic ($F = 279.420$, $p < 0.05$) further confirms that the model is highly statistically significant, providing strong evidence that responsiveness is not only relevant but central to satisfaction outcomes.

The application of linear regression models between Overall Satisfaction ($N = 155$) and each individual SERVQUAL dimension demonstrated a significant influence on service quality, thereby confirming the proposed hypotheses.

The results of the ANOVA (Table 8) and Tukey HSD (Table 9) tests have provided insights into the overall satisfaction levels across four different industries: financial services, hospitality, healthcare, and telecommunications. The ANOVA test indicated a statistically significant difference in overall satisfaction between the industries ($F(3, 151) = 111.213$, $p < 0.05$).

Table 8: ANOVA test

ANOVA Overall_Satisfaction					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	75.773	3	25.258	111.213	.000
Within Groups	34.294	151	.227		
Total	110.066	154			

Source: Authors' calculation in SPSS

The Tukey HSD test (Table 9) demonstrated that healthcare has significantly lower satisfaction level (M = -0.3880, $p < 0.05$) compared to hospitality (M = 1.4897, Mean Difference = 1.88, $p < 0.05$), financial services (M = 0.7792, Mean Difference = 1.17, $p < 0.05$), telecommunications (M = 0.4000, Mean Difference = 0.79, $p < 0.05$). On the other hand, the respondents rated hospitality with the highest satisfaction (M = 1.4897). The satisfaction difference between telecommunications and financial services was not significant, suggesting that customers in these two industries have similar levels of satisfaction.

Table 9: Tukey HSD test

Multiple Comparisons						
Dependent Variable: Overall_Satisfaction						
Tukey HSD						
(I) industry	**(J) industry**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
					Lower Bound	**Upper Bound**
financial services	Hospitality	-.71054*	.11397	.000	-1.0066	-.4145
	Healthcare	1.16717*	.10417	.000	.8966	1.4378
	Telecommunications	.37917*	.11313	.006	.0853	.6731
Hospitality	financial services	.71054*	.11397	.000	.4145	1.0066
	Healthcare	1.87771*	.10593	.000	1.6025	2.1529
	Telecommunications	1.08971*	.11475	.000	.7916	1.3878
Healthcare	financial services	-1.16717*	.10417	.000	-1.4378	-.8966
	Hospitality	-1.87771*	.10593	.000	-2.1529	-1.6025
	Telecommunications	-.78800*	.10503	.000	-1.0609	-.5151
telecommunications	financial services	-.37917*	.11313	.006	-.6731	-.0853
	Hospitality	-1.08971*	.11475	.000	-1.3878	-.7916
	Healthcare	.78800*	.10503	.000	.5151	1.0609

*. The mean difference is significant at the 0.05 level.

Overall_Satisfaction					
Tukey HSD[a,b]					
Industry	**N**	**Subset for alpha = 0.05**			
		1	**2**	**3**	**4**
healthcare	50	**-.3880**			
telecommunications	35		.4000		
financial services	36			.7792	
hospitality	34				1.4897
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 37.821.
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Source: Authors' calculation in SPSS

The findings presented in this paper may be compared with the following research results. A study investigating the quality of services in air transport highlighted the importance of implementing digital tools that impact the user experience (Büyüközkan, Havle, & Feyzioğlu, 2020). The application of the SERVQUAL model has also proven to be suitable in a study conducted in China (Shi & Shang, 2020), which indicated its relevance across various industries, including retail, medical services, e-commerce and tourism. In exploring the concept of service quality in online shopping, Rita et al. (Rita, Oliveira, & Farisa, 2019) have found that digital services tend to achieve higher levels of customer satisfaction, primarily due to factors such as website design, security, and fulfilment. Similar findings were noticed in a research dealing with digital customer relationship management (CRM) indicating that dimensions like trust, enthusiasm, and sensitivity positively impact customer satisfaction (Demirel, 2022).

When interpreting the results, it is important to consider certain limitations, which provide opportunities for future research. The relatively higher share of healthcare service users should be taken into account, as well as the need to compare satisfaction levels for each quality dimension across different industries.

CONCLUSION

In this paper, it is indicated that the application of marketing automation significantly affects the perception of service quality and user experience, which are shaped by the dimensions of tangibility, reliability, responsiveness, assurance and empathy. Using the regression model, it was determined that Assurance has the greatest impact on the satisfaction of service users, with a standardized coefficient of 0.932, which is significantly higher compared to the other quality dimensions.

When comparing the overall satisfaction levels of service users across industries, it was found that respondents rated the quality of service in hospitality the highest (M = 1.4897), while healthcare recorded the lowest level of satisfaction (M = -0.3880). These results point to the conclusion that the application of marketing automation tools in the hospitality industry has contributed to greater personalization of the user experience and provided a better approach to understanding guest needs. Using the example of lower satisfaction levels with services in the healthcare sector, a recommendation can be made for managers in this field. They should consider that users have a need for more effective communication and a personalized experience, which has not been fully realized due to the inconsistent application of marketing automation. The results presented in this paper provide a foundation for future research into the impact of marketing automation on service quality, and demonstrate the successful application of the adapted SERVQUAL model in a digital context. This study also opens up new opportunities for research, primarily into the relevance of quality dimensions in shaping digital customer experience in the service sector.

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