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JEL: O32
Original scientific article
https://doi.org/10.51680/ev.38.1.9

Received: November 6, 2024
Revision received: January 23, 2025
Accepted for publishing: January 30, 2025

EXPLORING CONSUMER INTENTION TO USE 5G TECHNOLOGY: A CROATIAN PERSPECTIVE

Abstract

Purpose: This paper examines consumer intention to use 5G technology in the personal and professional aspects. It focuses on how perceived value, ease of use, performance expectancy, perceived security, and employment status influence this intention in the Republic of Croatia.

Methodology: Data was collected through an online survey targeting consumers with prior experience using 5G technology in September and October 2023 in the Republic of Croatia. The multivariate linear regression statistical method was implemented using JASP statistical software.

Results: The authors found that ease of use, perceived security, and performance expectancy significantly and positively impact consumer intention to use 5G technology. Contrary to initial expectations, perceived value showed a non-significant relation towards the intention to use 5G technology, which could be due to the research sample reasons. The employment status variable showed a negative and significant relationship with 5G adoption intentions. However, it indirectly moderated the ease-of-use variable, which significantly impacted the intention to use 5G technology. Consequently, employment status emerged as a significant predictor when included in the analysis.

Conclusion: The key contribution of this paper lies in the analysis of the employment status variable and its explanatory power: while consumers may not view 5G technology as essential (direct relationship), they are more likely to intend to use it if it makes their everyday lives easier (indirect relationship). Additionally, the paper showed the extension of the TAM and UTAUT theoretical models, thus covering the research gap. Furthermore, the paper recommends future research to explore the economic and cultural impacts of the intention to use 5G technology, including factors such as income, cultural variation, and infrastructure.

Keywords: 5G technologies, emerging technologies, efficiency, cooperation, security

1. Introduction

Wireless communication, which gained momentum in the late 90s, has spread globally through mobile technology and its users. Since its inception with 1G in the late 80s, wireless communication has evolved through various technological advancements, reaching 4G in 2010 and 5G in 2019 (Teodorescu et al., 2023). From the early analog 1G networks to the ultra-fast 5G networks of today,

each generation has substantially improved speed, capacity, and capabilities. These advancements have enabled the development of new services and applications, such as mobile internet, video calling, and the Internet of Things (IoT). Furthermore, due to the 5G technology's ultra-low latency and good communication bandwidth with the possibility to connect multiple devices, new business opportunities might arise (Pons et al., 2023). Development and implementation are already occurring in some industries, such as medicine, transportation, and construction (Devi et al., 2023). For example, there are cases of real-time automation or remote surgery cases enabled by 5G technology (Javaid et al., 2023). As technology progresses, we can expect even more exciting developments in future generations of cellular networks (Parcu et al., 2023, Deloitte, 2020).

On the other hand, the adoption of 5G technology is of genuine interest to the practical and research community. Some of the factors it can be influenced by are perceived value, ease of use, performance expectancy, and security concerns. This paper analyzes factors under the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) frameworks, which were modified in the research model. The TAM was initially proposed by Davis (1989) and it defines perceived ease of use and perceived usefulness as a way of understanding reasons behind technology adoption. The primary research objective is to examine attitudes, perceptions, and the level of acceptance of 5G technologies. The main goal is to assess how this acceptance influences individual usage. The paper focuses on understanding the strong interdependence between 5G acceptance and effective individual usage with the potential for business collaboration, where only a high level of 5G adoption can drive successful collaboration. The specific goals include assessing knowledge and current use of 5G technologies with evaluating the intention to use 5G technologies in the future. Furthermore, the authors of the research paper will focus on the intention to use 5G technology concerning consumer perceived value, ease of use, performance expectancy, employability, and perceived security.

Consumer perceived value is an evaluation of the advantages 5G technology presents against current substitutes. Shah et al. (2023) showed that every technology needs to adapt to user demands. They are the end users, and their perceived value of the technology will ultimately determine whether its adoption spreads globally or remains limited. Therefore, some of those elements are faster download and upload rates, lower latency, consistent connectivity, and the possibility to enable creative ideas. These elements taken together affect a consumer's intention to use 5G technology, as shown by Gandhi and Shah (2024) and Mustafa et al. (2022). Ease of use is the impression of simplicity or complexity a customer has with adopting and using 5G technology. When a technology is user-centric and easy to use, its global presence becomes inevitable. Akbari et al. (2020) argue that the ease of use builds trust in the consumer to use a certain technology, especially 5G apart from those that are not so easy to use. Some of the important elements are educational materials, network coverage, user interface, and device compatibility. Taken together, these elements affect a consumer's intention to use 5G technology, as demonstrated in the study by Jericho and Jayadi (2023). Performance expectancy captures user opinions on the possibilities of 5G technology. Mustafa et al. (2022) suggest that 5G technology will likely be accepted if it is beneficial in routine life and if it reduces human effort while increasing performance and efficiency. Therefore, this element covers expectations in speed, dependability, latency, and coverage. Should these standards fall short, consumer happiness may suffer and 5G technology uptake could be minimized, as is the case in the study by Chivanov and Dymkova (2024). A consumer view of the possible hazards connected with 5G technology is known as perceived security. Consumers may perceive potential risks, in terms of security breaches, governmental interference, or system weaknesses, as inhibiting the growth of technology adoption despite the advantages it offers (Wang et al., 2022). Consumers with higher perceived security of 5G networks, characterized by lower concerns about data privacy, health risks, and network vulnerabilities, will exhibit stronger intentions to use 5G services (Balassa et al., 2024, Bauer et al., 2021). Consumer willingness and capacity to adopt 5G technologies can be influenced by consumer employment. Employed people with higher incomes are able to purchase data plans and gadgets suited for 5G. Moreover, the specific workplace sometimes calls for technological expertise, which results in more comfort and familiarity with fresh technologies like 5G. Employed consumers may also have more demanding lives requiring constant connectivity, which increases their requirement for a dependable network (Ardi et al., 2024; Cheng et al., 2021). With Croatia's dropping unemployment rate and improving economic situation, consumer em-

ployment levels are probably going to help the intention to use 5G technology.

The model has been developed based on papers by Agrawal et al. (2021) and Al-Maroof et al. (2021). Due to the novelty of this topic, fewer relevant research papers are tackling this impact. Some papers used the Technology Acceptance Model (TAM) to check the perceived ease of use (Akbari et al., 2020; Crnobori et al., 2022), while this paper will focus on perceived value, performance expectancy, ease of usage, perceived security, and the employment status of its respondents in determining the intention to use 5G technology. It employs data collected in the Republic of Croatia in September and October 2023, and analyzed using the multivariate linear regression technique to examine relationships between key factors influencing 5G adoption. The findings aim to deepen our understanding of how consumer perceptions, contextual variables, and demographic factors drive 5G acceptance. By addressing existing gaps in the literature and developing a new model not previously used in the Republic of Croatia, this study provides actionable insights for both academia and industry stakeholders, offering a foundation for informed decision-making and future research.

The research paper structure is as follows. The literature review will be presented in the second section. The third section includes research methodology. The fourth section includes research results, while the final sections include a discussion, a conclusion, limitations, and further research recommendations.

2. Literature review

5G technology and its general acceptance among the consumers indicated strong academic interest due to its lucrative potential across various sectors. Some of the most developed world countries have already implemented 5G technology in their everyday context, while countries in transition, such as Croatia, have been researching and creating foundations to do so. Therefore, there is space for research and implementation processes to explore unique socio-economic and demographic dynamics influencing 5G adoption. Theoretical models such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) have been widely applied to understand consumer behavior regarding emerging technologies. While these models have provided valuable insights into general technology adoption, their application to 5G-specific contexts reveals the necessity of additional variables to address its unique attributes. Some of the recent papers showed a lack of research on factors such as perceived security, economic accessibility, and contextual factors such as employment status. These factors might play important roles in the 5G consumer acceptance, as demonstrated in the papers by Mustafa et al. (2022) and Crnobori et al. (2022).

Within the 5G context, the consumer's perceived value arises as a multi-dimensional factor, including the network performance, ease of use, and socio-economic benefits. Gandhi and Shah (2024) highlight that consumer expectations of faster speeds, greater reliability, and seamless connectivity drive perceptions of value, which, in turn, influence adoption intentions. Furthermore, research by Patel et al. (2022) indicates that the perceived 5G benefits in enhancing productivity and user experiences significantly outweigh concerns about initial adoption challenges. On the other hand, additional negative factors such as learning curves, cost of 5G technology infrastructure implementation, and compatibility might compromise the 5G benefits. The importance of performance expectancy, defined as the degree to which consumers believe that using 5G technology will enhance their productivity and satisfaction, has been confirmed by several studies (Jericho and Jayadi, 2023; Al-Maroof et al., 2021). Still, the performance expectancy together with socio-economic variables, such as employment and income levels, have not been sufficiently researched, especially in the context of developing and transitional economies.

Security concerns constitute another crucial factor influencing 5G technology adoption. Despite the technological advancements in encryption and data protection protocols, consumer skepticism regarding data privacy, potential cyber threats, and government surveillance persists (Ahmad et al., 2024; Scalise et al., 2024). This skepticism is further endorsed by Nkrumah (2024), who identifies the perception of weak regulatory oversight as a significant barrier to 5G adoption in regions with limited experience in managing advanced telecommunications infrastructures. These concerns are often present in regions with moderate digital literacy and complex regulatory frameworks, as is the case in the Republic of Croatia. Addressing such issues requires a public awareness campaign approach to build trust and

transparent policies to ensure accountability among service providers. Georgiou et al. (2021) note that the public trust in the security around new technologies, especially 5G is vital for their adoption in societies where people are cautious about interacting with various innovative digital ecosystems.

Employment status represents a new variable in the 5G adoption process, reflecting the intersection of socio-economic capability and technology readiness. Ardi et al. (2024) and Cheng et al. (2021) argue that employed individuals not only have the financial capacity to afford 5G-enabled devices and data plans, but are also more likely to encounter environments that encourage adoption, such as technology-driven workplaces. Furthermore, research by Briglauer et al. (2024) shows that higher income levels associated with employment positively correlate with the likelihood of early adoption of high-speed broadband availability, therefore 5G itself, particularly in urban regions. In transitional economies like Croatia, where economic disparities persist despite declining unemployment rates, employment status could serve as a significant moderator in consumer adoption behaviors. Understanding these dynamics is particularly important for designing targeted strategies to promote digital inclusion and meaningful access to advanced technologies.

This paper focuses on bridging the gap in consumer intention to use 5G technology by analyzing relevant factors such as perceived value, performance expectancy, ease of use, perceived security, and employment status. Furthermore, by focusing on perceived security and employment status, this paper extends the scope of traditional TAM and UTAUT models, recognizing that income level, trust, and risk perception are particularly influential in the context of advanced communication technologies like 5G (Ahmad et al., 2024; Scalise et al., 2024; Cheng et al., 2021). Therefore, the analysis of this paper supports the regional and demographic variations that shape consumer perceptions and behaviors. The potential research gap and contribution of this paper can be seen in the specific regions of transitional economies such as the Republic of Croatia and its residents' intention to use 5G technology with this paper's research model, which was not covered by similar papers, such as Mustafa et al. (2022) and Crnobori et al. (2022). By pursuing the analysis within the socio-economic and regulatory landscape of the Republic of Croatia, this research builds on previous papers, while providing a foundation for future exploration of transitional economies. The integration of constructs like perceived value, ease of use, and performance expectancy, and the additional factors like perceived security and employment status, into a robust, context-specific framework enhances our understanding of consumer intention to use 5G technology and supports the development of strategies to support its widespread acceptance.

To test the model factor relationships, a multivariate linear regression analysis will be conducted. Regression will use latent variables and quantify them using manifest variables. Descriptive statistics will be used to summarize the data. The following will be further explained in the methodology section.

3. Methodology

The research was conducted through social media channels with a sample of 122 respondents, consisting of the Republic of Croatia adult citizens, in September and October 2023. The study included participants of both genders, and only those familiar with 5G technologies and who have used it have been included in the research, thus decreasing the total number of respondents to 72. The questionnaire was organized into four sections: the first section focused on general socio-demographic questions, the second on knowledge, usage, and intentions to use the 5G network, the third on the perceived value, ease of use, and performance expectancy of the 5G network, and the fourth on attitudes regarding the impact and safety of 5G technologies. The questions were designed with responses based on the Likert scale, allowing respondents to express their level of agreement with the statements. The questionnaire was developed using elements from the studies "Public Perception on Huawei's Global Race for 5G - A Case Study of India V.S. USA" by Agrawal et al. (2021), and "Acceptance Determinants of 5G Services" by Al-Maroof et al. (2021). The questionnaire was conducted anonymously through a Google form. Completing the questionnaire took approximately 10 minutes, and participation was voluntary and anonymous. After collection, the data were analyzed using JASP statistical software. Descriptive statistics were employed for data summaries of nominal and ordinal variables. Multivariate linear regression was applied to test the factor relations, and the results are presented in tables and graphs.

4. Research findings

In the survey, 61.1% of participants were women and 38.8% were men. The majority were aged 26 to 35 (48.6%), followed by those under 25 (27.8%). A smaller proportion of respondents were aged 36-45 (15.3%), followed by those aged 46-55 (5.5%), and those older than 56 (2.7%). In terms of education, most participants had completed secondary vocational education (58.3%), and the majority were employed (86.1%). All sociodemographic characteristics are shown in Table 1.

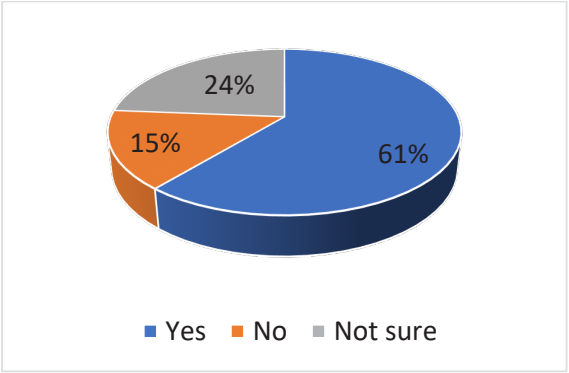
Table 1 Sociodemographic characteristics of the respondents

Category	Subcategory	Frequency (n)	Share (%)
Gender	Men	28	38.8
	Women	44	61.1
Age	18-25	20	27.8
	26-35	35	48.6
	36-45	11	15.3
	46-55	4	5.5
	56 and above	2	2.7
Education level	Secondary school	42	58.3
	Associate/Bachelor's degree	29	40.3
	Graduate/Master's degree and above	1	1.4
Employment status	Unemployed	1	1.4
	Student	8	11.11
	Retired	1	1.4
	Employed	62	86.1

Source: Authors' data (2023)

Furthermore, 61% of respondents reported that they have used or are currently using 5G technologies. Meanwhile, 8% indicated they do not know what 5G technologies are, and 19% expressed uncertainty about it. Additionally, 15% stated that they had never used 5G technologies, and 24% were unsure whether they had (Figure 1). Therefore, for this research, the authors included only those respondents who are familiar with 5G technology and have used it. By doing so, the respondent pool decreased to 72 participants who have the intention to use and have used 5G technology (IU).

Figure 1 Use of 5G technologies



Source: Authors

The following tables show descriptive statistics for research manifest variables. Perceived value, ease of use, performance expectancy, and perceived security of 5G technologies were rated on a scale from 1 to 5, with 1 meaning "I do not agree at all" and 5 meaning "I completely agree." Table 2 details the perceived value (PV) of using 5G technologies.

Table 2 Perceived value of using 5G technologies

Topic – Perceived value	N	Minimum	Maximum	Mean	Std. Deviation
I understand 5G technologies	72	1	5	3.42	1.285
I can use my skills to download any material via 5G technologies	72	1	5	3.39	1.276
I am skilled enough to use different applications and 5G technologies	72	1	5	3.45	1.318

Source: Authors' data (2023)

On average, respondents are neutral about whether they are skilled enough to use 5G technologies. However, they generally agree that they are skilled enough to use various applications and services through the 5G network. This finding aligns with earlier results regarding the intention to use services via 5G technologies (Mustafa et al., 2022). Table 3 below provides an insight into the results of the ease of use (EU) of 5G technologies.

Table 3 Ease of use of 5G technologies

Topic – Ease of use	N	Minimum	Maximum	Mean	Std. Deviation
I think it is generally easy to use 5G technologies	72	1	5	3.58	1.304
I think it is easy to use 5G technologies for business purposes	72	1	5	3.56	1.240
I think using 5G technologies is easy to learn	72	1	5	3.67	1.301

Source: Authors' data (2023)

On average, respondents agree that 5G technologies are generally easy to use, both for personal and business purposes, and that they are easy to learn. However, these results are marginal, with large standard deviations indicating significant variability in responses. A closer analysis reveals that a substantial portion of respondents neither agree nor disagree with these statements, suggesting a possible lack of familiarity with 5G technologies and their use. Table 4 shows performance expectancy (PE) of 5G technologies.

Table 4 Performance expectancy of 5G technologies

Topic – Performance expectancy	N	Minimum	Maximum	Mean	Std. Deviation
Using 5G technologies will be/is useful in my personal life	72	1	5	3.40	1.271
Using 5G technologies will be/is useful in my business life	72	1	5	3.50	1.287
Using 5G technologies will be/is useful for improving my business	72	1	5	3.52	1.241
Using 5G technologies will be/is useful for downloading apps and services	72	1	5	3.57	1.253
I think 5G infrastructure is beneficial for the future of the economy	72	1	5	3.58	1.272
I think that 5G infrastructure can improve the business of any company	72	1	5	3.61	1.263

Source: Authors' data (2023)

On average, respondents agree with the statements regarding the perceived usefulness of 5G technologies. However, when it comes to expectations related to personal life and other areas, many respondents neither agree nor disagree. This pattern, observed through a more detailed analysis, may suggest a limited understanding of 5G technologies and their potential. The final question addressed respondents' perceived security (PS) in using 5G technologies (Table 5).

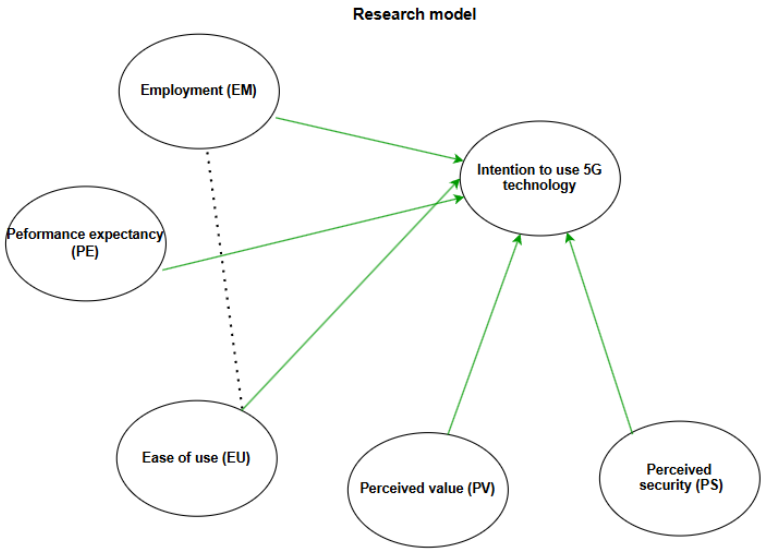
Table 5 Perceived security of 5G technologies

Topic – Perceived security	N	Minimum	Maximum	Mean	Std. Deviation
5G technologies in my country are completely safe	72	1	5	3.27	1.179
5G technologies in the world are completely safe	72	1	5	3.25	1.194

Source: Authors' data (2023)

On average, respondents are neutral regarding whether 5G technologies are completely safe both nationally and globally. However, a more detailed analysis reveals that a significant portion of respondents do believe that using 5G technologies is safe. Furthermore, the research model is shown in Figure 2.

Figure 2 Research model



Source: Authors

Table 6 presents the research latent variables. Descriptive statistics were used to show the data mean, skewness, kurtosis, and Shapiro-Wilk test results. The data show that skewness is negative for all variables, except for the employment (EM) variable. The kurtosis metrics indicate a flatter curve for most variables, except for the employment (EM) variable, where the distribution is more peaked. Furthermore, the Shapiro-Wilk test shows statistically significant values under a 1% significance level, meaning that the research data are not normally distributed. Due to that, the Spearman non-parametric test will be applied.

Table 6 Descriptive statistics for latent variables

Measure	IU	PV	PS	PE	EU	EM
Valid	72	72	72	72	72	72
Missing	0	0	0	0	0	0
Mean	3.819	3.963	3.639	3.863	4.106	0.181
Std. Deviation	1.000	0.905	1.035	1.028	0.904	0.513
Skewness	-0.868	-0.401	-0.736	-0.679	-0.571	3.494
Std. Error of Skewness	0.283	0.283	0.283	0.283	0.283	0.283
Kurtosis	0.211	-1.044	0.128	-0.087	-0.787	14.151
Std. Error of Kurtosis	0.559	0.559	0.559	0.559	0.559	0.559
Shapiro-Wilk	0.911	0.880	0.892	0.894	0.838	0.401
P-value of Shapiro-Wilk	< .001	< .001	< .001	< .001	< .001	< .001
Minimum	1.000	2.333	1.000	1.000	2.000	0.000
Maximum	5.000	5.000	5.000	5.000	5.000	3.000

Source: Authors

The non-parametric Spearman test is shown in Table 7. Most variables show a moderate positive correlation, with IU-PV, IU-PS, and PV-PE exhibiting a high correlation under a 1% significance level. Non-significant correlations are observed between PV-EM and EM-EU, indicating a non-linear relation.

Table 7 Non-parametric Spearman test

Variable relations	Spearman's rho	p-value
IU-PV	0.739	<0.001
IU-EM	-0.359	0.002
IU-PS	0.745	<0.001
IU-PE	0.810	<0.001
IU-EU	0.673	<0.001
PV-EM	-0.022	0.855
PV-PS	0.507	<0.001
PV-PE	0.772	<0.001
PV-EU	0.877	<0.001
EM-PS	-0.318	0.007
EM-PE	-0.306	0.009
EM-EU	0.147	0.219
PS-PE	0.669	<0.001
PS-EU	0.424	<0.001
PE-EU	0.698	<0.001

Source: Authors

The model summary is presented in Table 8. The model shows that 81% of variance in the dependent variable is explained by the independent variables. Furthermore, the Bayesian information criterion (BIC) and Akaike information criterion (AIC) values are lower than those of the null model and explain better the proposed research model. Therefore, the null model was rejected and the new model accepted at the 1% significance level. On the other hand, although slight autocorrelation is evident, as indicated by a Durbin-Watson value of 1.932, an autocorrelation value of 0.068 was considered negligible by the research authors.

Table 8 Model summary

Metrics/Model	R^2	AIC	BIC	p-value	Durbin-Watson
Model	0.810	97.825	113.762	<0.01	1.932

Source: Authors

Table 9 presents the multivariate linear regression results for the research model without the latent employment variable (EM). The results show significant values at the 1% level for perceived security and performance expectancy, while the values are insignificant for consumer perceived value and ease of use. The employment variable was excluded in order to demonstrate the difference it might make in the model relationships, which will be shown in Table 10.

Table 9 Multivariate linear regression results for the research model without the employment variable (EM)

Variables	Unstandardized	Standard error	Standardized	p-value
PV	-0.005	0.141	-0.005	0.970
PS	0.364	0.087	0.377	<0.001***
PE	0.440	0.105	0.452	<0.001***
EU	0.202	0.138	0.183	0.146

Note: Statistical significance at the ***1% probability level.
Source: Authors

The multivariate linear regression results for the research model including the employment variable (EM) are presented in Table 10. After adding the employment variable (EM), the ease of use (EU) variable became statistically significant at the 5% level. Furthermore, the employment (EM) variable itself shows a negative impact on the dependent variable and is significant at the 5% level. All other variable relationships remained the same as in Table 9.

Table 10 Multivariate linear regression results for the research model with the employment variable (EM)

Variables	Unstandardized	Standard error	Standardized	p-value
PV	-0.047	0.138	-0.043	0.734
PS	0.369	0.084	0.382	<0.001***
PE	0.359	0.108	0.369	<0.001***
EU	0.319	0.142	0.142	0.029**
EM	-0.279	0.121	-0.143	0.024**

Note: Statistical significance at the ***1% and ** 5% probability level.
Source: Authors

The research findings show that respondents are familiar with 5G technologies, have used them, and are interested in using them both personally and professionally. While they find 5G easy to use, they consider their skills moderate and rate its security as average. Following the presentation of the research results, several key observations emerge. There is no significant correlation between consumer perceived value (PV) and the intention to use 5G technology, which is not correlated with the findings of Mustafa et al., 2022. This discrepancy could be attributed to differences in the research samples. The relationships between ease of use (EU), performance expectancy (PE), and perceived security (PS) indicated a positive and significant influence at the 1% level, which is in line with the findings of Al-Maroof et al. (2021), Akbari et al. (2020) and Siagian et al. (2022). On the other hand, consumer employment (EM) showed a negative and significant influence at the 5% level on the intention to use 5G technology. This unexpected result suggests that employment status may not directly drive 5G adoption. Instead, its influence appears to be indirect, moderating the ease of use variable, which in turn significantly impacts the intention to use 5G technology. This finding extends existing research by highlighting the important role of employment status, suggesting that while employed individuals may not view 5G technology as essential to their professional lives, they are more inclined to adopt technologies that simplify and enhance their daily routines.

6. Conclusion

This research paper explores consumer intention to use 5G technology in both private and business-related contexts. This research is focused on analyzing the influence of perceived value, ease of use, performance expectancy, security attitudes, and employment status on the intention to use 5G technologies. The research sample included individuals with prior experience and knowledge of 5G technology. The research instrument was composed of an online survey distributed via social media channels in September and October 2023. Using a multivariate linear regression model, the study found that ease of use and performance expectancy show a strong and positive influence on consumer intention to adopt 5G technology, indicating that consumers prioritize functionality and practical benefits when evaluating new technologies.

The key contribution of this paper lies in the employment status variable, which, although negatively associated with the intention to use 5G technology, demonstrates an indirect influence through its effect on ease of use. This finding indicates the importance of 5G technology design, emphasizing the need for solutions that are usable across various consumer groups, particularly employed individuals seeking to enhance their daily lives. Furthermore, the paper extends the TAM and UTAUT theoretical frameworks by integrating perceived security and employment status as contextual factors, thereby addressing the research gap referring to socio-economic factors in consumer intention to use 5G technology. Lastly, this paper advances the understanding of consumer intention to use 5G technology by bridging theoretical and practical gaps, offering actionable insights for academics, policymakers, and industry stakeholders. By highlighting the interconnection of technological, socio-economic, and contextual factors, it provides a robust framework for understanding and improving the intention to use 5G technology in transitional economies, such as the Republic of Croatia.

The research has some limitations. First, the use of an online survey might have resulted in selection bias, as it might have been distributed to a particular group of people or those who were more likely to be interested in technology. Second, the study only observed a small number of variables, ignoring other possible factors like socio-economic position, cultural variations, or particular use cases. Third, consumer intention to use 5G technology may potentially be impacted by the economic environment surrounding the rollout of 5G technology. Therefore, an expanded model should potentially include variables such as economic growth, income disparity, and the general cost of living. Lastly, the intention to use 5G technology may also be impacted by the quality and accessibility of 5G infrastructure, including network coverage and device compatibility.

Future research could address these limitations and improve our understanding of 5G user intention by employing qualitative techniques similar to focus groups or interviews, cross-cultural comparisons, longitudinal studies, the economic impact of 5G technology, and a comparison of 5G adoption with earlier mobile network generations. Furthermore, future studies could provide a more comprehensive understanding of consumer intentions to embrace 5G technology in Croatia or similar transitional countries by investigating these areas in greater depth.

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