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Faruk Ahmeti[1]
Burim Prenaj[2]

DETERMINANTS AFFECTING CONSUMER ACCEPTANCE AND ADOPTION OF INTERNET BANKING IN DEVELOPING COUNTRIES: THE CASE STUDY OF KOSOVO[3]

This paper aims to examine how the demographic characteristics affect the level and intention to use and the level of usage of online banking services in Kosovo. A self-administered survey was conducted with 600 questionnaires sent, from which 510 participants responded to it and were considered accurate and appropriate for the study. The data for this research started at the end of 2020 until the middle of 2021 and a probable stratified sample was used, whereas closed-end questions were prepared through a structured questionnaire. The study adopted the technology acceptance model with additional constructs (i.e. consumer innate innovativeness (II), domain-specific innovativeness (DSI), and perceived security risk (PR)). Results showed that even though the participants appreciated the benefits of online banking as the perceived usefulness factor exerts the greatest direct effect, they yet hesitate to fully adopt the online banking system. It is recommended that banks should develop an information campaign to inform their customers about the total effects of the perceived ease of use and the security related to the online banking system. The study is limited to users of a particular region of Kosovo, which should be further widened in future studies by including other countries from the SEE. Furthermore, the study limits itself in determining consumers' intention to acceptance of online services offered by banks in a pandemic situation and, as such, may be affected by the overall chaotic situation created in the given period.

Keywords: Internet banking; Demographic factors; Economic development; Developing countries; Customer behaviour
JEL: E20; E42; G14; G21; O33

1. Introduction

Due to global technological development, the financial services sector has undergone rapid development in the past twenty years. Information technology, especially the Internet, has enabled the banking industry to expand within different markets without investing large sums

[1] *Faruk Ahmeti, Professor, University of Mitrovica "Isa Boletini", Kosovo, faruk.ahmeti@umib.net.*
[2] *Burim Prenaj, Lecturer, University of Prishtina, Kosovo, prenajburim@gmail.com.*
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of money in banking infrastructure. Thinking about the significance of internet banking services in the current state, this paper contributes to the greater understanding of the internet financial adoption decision by extending it to the indicators that directly affect the customers' decisions in that regard. In addition, the technology acceptance model will be incorporated into a new model that includes the primary five influential demographic dimensions, which have been proposed singly or bilaterally in the earlier literature. The key influential dimensions that will be resolved in this research are gender, age, education level, profession, and earnings.

The data for this study is gathered in Kosovo, which is a small country in SEE and the youngest country in Europe, which declared its independence in 2018. Furthermore, the diaspora of Kosovars is one of the largest in Europe and they are very connected to their country. Recently, Kosovo has become a place to go for many international workers that operate in different organizations, real estate investors, and lately tourists, which can cause an amazing increased demand for online banking services. These characteristics have reflected in the banks' working environment, as most customers prefer going to the financial institution branch in their neighbourhood and establishing good relationships with the financial institution personnel rather than using the choice banking channels, which is a rather common habit in small, conservative and developing countries (Ozatac et al., 2016).

This highlights the significance of this paper, which aims to provide important information about the possible customers and helps the banks' supervisors and policymakers in Kosovo in improving their marketing strategy toward benefiting from internet banking advantages. In addition, Kosovo's financial system competitivity numerous improved services and facilitates its incorporation with the global economic climate as all banks are foreign investments or the majority of shares are owned by foreign banks, which makes them easier access to new technologies and systems, and the most important the needed experience.

Furthermore, to the best of our knowledge, this paper treats an important topic, as it has shown to be crucial in situations such as lockdown and social distancing due to the Covid-19 pandemics, which the world has never faced before. Hence, it investigates the determinants affecting customer acceptance and adoption level of internet banking in Kosovo in pandemic and extraordinary situations such as Covid-19, which is now considered the new "reality". Additionally, the proposed model in this paper is a mixed model that distinguishes between reflective and confirmative constructs, because the subjective norms (SN) construct that signifies the social dimensions is measured by formative indicators since it is a result of the social communication process and it is created by the exterior influences (Rogers, 2003).

2. Literature Review

Internet banking has undergone explosive development. Thus, it is considered one of the fastest-growing changes in the banking sector, which has transformed it forever (Aydogan, Van-Hove, 2017). Through the provision of online services, banks enable cost reduction, improvement of banking services, market expansion, etc., while offering to its customers more flexible financial services, such as online fund transfer, bill payment, access to account

status, balance, and transaction printing, and many other services (Lin et al., 2020). As noted in previous studies, internet banking is recently considered an efficient and profitable strategy for providing banking services that contribute to the increase of the loyalty of customers toward the bank (Carranza et al., 2021; Kitsios et al., 2021). Therefore, today, online banking is considered equally significant and safe as traditional banking. In 2008, Bill Gates declared that banking is essential, not banks, which means that the adoption of online banking services is more related to the overall changes and it is a fact that traditional banking will be substituted by virtual banking (Kitsios et al., 2021).

This expansion was largely possible as the majority of banking services were delivered through internet banking (Mistrena, 2021). According to Consoli (2003), during the early 90s, there were many obstacles and regulations, which have hindered the adoption of new technologies by banks. Therefore, there has been little motivation to change, which has been opposed to change by the majority of banks' customers, who have considered traditional banking more secure. However, with the onset of the deregulation of the banking industry in the early 90s, the situation changed (Nazaritehrani, Mashali, 2020; Ahmad et al., 2020), whereas the majority of banks clienteles have comprehended the importance and benefits of using online technology for their banking transactions. In this regard, it was evident that the situation was putting pressure on incumbents, and the requirement in the sector was for faster change (Sloboda et al., 2018). Urged by this competition, some banks applied a more creative approach and invested in technology, which also led to the development of online services (Bin Haji Saman, 2018; Alhassany, Faisal, 2018). The growing level of usage of online banking has encouraged banks to reformulate their way of doing business, to remain competitive. Since the clients are the promotors and initiators of innovation, they require more flexible and innovative banking services (Oertzen, Odekerken-Schröder, 2019).

Various authors regarding online banking have given many definitions (Alhassany, Faisal, 2018; Lin et al., 2020). These definitions address areas such as services offered, advantages and disadvantages, types of online banking, etc. Hence, it refers to internet banking as offering banking services to its clients. In a broader sense, internet banking means providing financial services via the internet, including traditional services banking, transfer of funds, and opening of new deposit accounts, as well as new services such as electronic payment of monthly bills and automatic payments via the website of the respective bank (Lin et al., 2020).

2.1. Internet banking

Internet banking is defined as the composite of technology that offers clients the possibility to get information about products and services offered by banks (Agyei et al., 2021; Ghasemi et al., 2021). It grants them access to their accounts via the Internet while avoiding traditional forms of obtaining the same service. However, this traditional form requires more time and additional expenses for the customer to access the bank. Nowadays, there are two main forms of delivery of online banking services. The first form is by providing services through the Internet by banks. It is mainly carried out within their branches. In addition, they included internet-banking services on their website; and at the same time, they enable online services and traditional banking at the branch office. The second form is the opening of virtual banks

or online banks, which offer their services entirely online, while the deposit and withdrawal of money are provided through ATMs or bank branches that are partner banks with the virtual bank (Marakarkandy et al., 2017).

Even if internet banking seems to be identical for all service providers, the internet banking services offered vary from bank to bank. However, except for cash withdrawal and cash deposits, internet banking permits customers on every other service with a simple click (Alhassany, Faisal, 2018). According to Karajaluoto (2002), online banking facilitates clienteles to control their account balance, transfer money, pay bills, apply for loans, make payments for the purchase of securities, and many other services (Karajaluoto, 2002).

Both banks and customers, benefit from internet banking and the implementation of this innovation in the banking sector. Internet banking allows banks to expand their market and also access customers who, for different reasons, are unable to have access to traditional banks, thereby resulting to cost reduction, improvement of the overall bank reputation, increasing efficiency, enhancing customer satisfaction, and increasing customer loyalty (Marakarkandy et al., 2017). On the other hand, consumers benefit in different ways, i.e. cost reduction, scale, and spatial comfort, saving time, minimizing the importance of geographical distance, etc. (Karjaluoto, 2002).

2.2. Covid-19 pandemics as a facilitator in internet banking adoption

Using the increasingly widespread recognition of mobile products, the overall perception regarding the acceptance of new technologies has substantially transformed, especially concerning monetary transactions. Mobile transaction (in specific online payment) has already been considerably adopted within various industries lately. According to the WorldPay report, online payments made up 22% of the worldwide points of purchase spending in 2019, and this portion will increase to 30% in 2023 (WGPR, 2022). Furthermore, new world economies such as China, have additionally contributed to the overwhelming increase associated with the online sale, respectively, online payments and reached p to 50% associated with point-of-sale obligations in 2019 (WGPR, 2022). Various earlier studies have caused the understanding associated with adoption intentions associated with online payment in various contexts (Cabanillas et al., 2018; Cao, Niu, 2019). Nevertheless, presently there are still insufficiencies of determinant variance and theoretical proof of different viewpoints in emergency conditions created due to the pandemic issue (Zhao, Bacao, 2021).

As the Covid-19 pandemics were detected in 2019 (Zhou, Kan, 2021), which presented a particular high risk associated with the transmission, decreasing contact and maintaining social isolation was highly suggested by the World Health Organization (WHO) (WHO, 2020; Tang et al. 2020). Within this sense, the particular contactless characteristic associated with mobile and online payments could probably contribute to users' mental and actual expectations to assist their transaction procedures and protect their particular safety. Accordingly, usage of online payments in different countries has drastically increased due to restrictions imposed by countries and the fear of infection (Zhou, Kan, 2021). Additionally, users' payment behaviour and business versions have changed from traditional face-to-face dealings to contactless and online payment transactions during the particular pandemic,

which in turn profoundly supports the survival of companies that were struggling to continue their economic activities that were based on direct contact with customers. It is extremely valuable to understand customers' behaviour within the new pandemic situation for appropriate researchers and stakeholders to comprehensively check out information on technology usage under a crisis and to be able to further develop new strategies that may be beneficial for all parties.

Traditional usage models evaluate users' purposes determined by technical perceptions with a good clear limitation associated with the influence of users' mental perceptions (Rahman et al., 2021; Kasilingam, Krishna, 2022). Remarkably, based on the particular recommendations and restrictions imposed in different countries by local authorities as well by the WHO (2020) regarding restrictions associated with direct contacts during the Covid-19 pandemic circumstance (WHO, 2020), the particular contactless feature associated with online payment potentially inspired users' attitudes concerning the benefits associated with using online and contactless payment technologies, intended for the daily transaction, which usually indicates that environmental conditions affect users' mental process along concerning the adoption of online payment (Deilami et al. 20218). Thus, this document involved mental construction theory (MAT) to make clear customers' emotional cognitions of the particular benefits associated with using online and cash-less payment in an emergency and rather complicated situation.

Meanwhile, perceived benefits are usually considered a crucial factor regarding users' expectations and can help determine their particular decisions (Park et al., 20219). Furthermore, as a result of the new situation created by Covid-19 pandemics, perceived security and trust in online and cash-less payment technologies are considered since additional antecedents are associated with users' adoption purposes of online payment (Sahi et al., 2021). Perceived safety and perceived ease of use are the many significant determinants associated with trust and benefits related to technology application, which impacts users' intentions associated with using online payment in the future (Sahi et al., 2021).

2.3. Adoption of internet banking in emerging economies

A new paradigm has occurred under online payment and new technologies associated with it. Sahi et al. (2021) define online and cash-less payments as using newly offered possibilities from different communicative devices besides the usual computers (i.e. mobile devices) to conduct a transaction. As further noted by authors, online transaction systems provide versatility, mobility, and effectiveness to overcome everyday difficulties or meet their particular users' wishes (Sahi et al., 2021). Contribution towards the online payment definitions is transferring money to providers of goods and services through the internet and other forms such as messages, which are considered as fast and secured.

As the majority of companies that are facing difficulties in this regard, namely online payment infrastructure, are SMEs in developing countries (Ha, 2020). Hence, in this and similar situations that may occur in the future, online payment may also be essential for surviving SMEs in developing countries. In this regard, the most affected sector in developing countries is the retail industry. Many factors may affect the level of usage of

online and cash-less payments in different sectors. In developing countries, SMEs constitute the majority associated with the enterprises within developing countries, which are also considered the key component of overall economic growth (Manzoor et al., 2021), which is also evident in Kosovo, where SMEs are the biggest contributor to employment in Kosovo, by providing more than 75% of total employment and round 80% of total value-added of the private sector (OECD, 2019).

The online payment strategy is becoming a leading transaction method in developing and emerging economies (Gong et al., 2019). The launch of groundbreaking varieties of information technology (IT) services has simplified the usage and the information campaign has also convinced the present and potential users about the security and safety that online payment provides (Sahi et al., 2021). The ability to enhance and improve the use of IT has become the major criterion to promote and enhance future monetary flexibility in developing nations.

Habib and Hamadneh (2021) highlighted that perceived safety (PC) is significantly related to customers' intent to use online and cash-less payment services and technologies, which in particular affects the consumers' judgment upon mobile payment services' privacy and protection issues. On the other side, some authors also emphasize that usability difficulties (perceived ease-of-use) were considered the main factor associated with the low adoption of various online and cash-less payment systems and tools (Habib, Hamadneh, 2021; Sahi et al., 2021). Karsen et al. (2019) opinioned that will mobile devices ought to be useful for monetary transactions by applying an authentication system to create sure every transaction is safe.

2.4. Theoretical background and hypotheses development

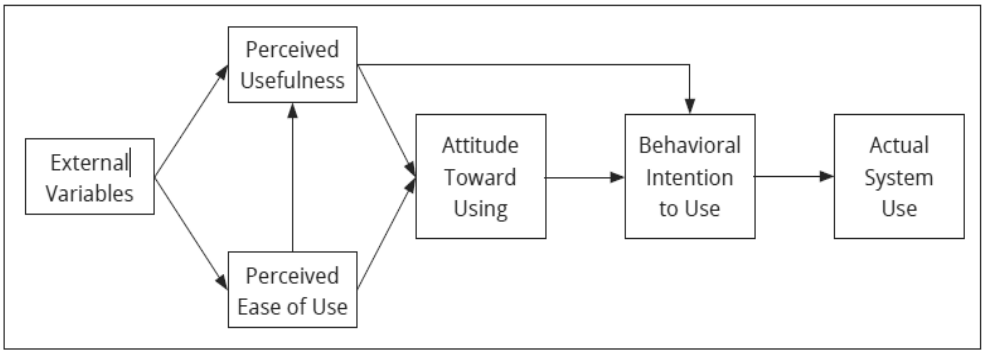
Various studies have already been conducted in sociology, psychology, and information system research to look for the factors that impact an individual's ICT adoption behaviour (Xie et al., 2021). In the last decades, several theoretical strategies have been employed with a specific focus on the research of technology adoption. This regarding the adoption of technologies related to online payments and financial transactions is mostly based on contextual factors like interpersonal influence, risk, and trust (Al Nawayseh, 2020; Xie et al., 2021). However, the majority of past studies that analyzed the acceptance of internet banking systems and technologies have mainly focused on technological aspects and overlooked the social elements (Senyo, Osabutey, 2020).

The Technology Acceptance Model (TAM) was thoroughly applied in the study on the adoption of mobile services, as the use of behavioural theories and the extended valence platform remains limited (Al Nawayseh, 2020; Senyo, Osabutey, 2020). The original Unified Theory of Acceptance and Use of Technology (UTAUT) model posited four major measurements as determinants of use intention and behaviour, such as performance expectations, effort expectancy, interpersonal influence, and assisting conditions (Rahi et al., 2019). The particular extended valence platform, on the other hand, revealed that the intention of consumers to utilize technology is influenced by their perception of advantages, risks, and trust (Mer, Virdi, 2021). Within this regard, the UTAUT model combined with the extended valence construction is deemed to become more suitable for fintech software

programs as mobile financial adoption to provide more insights into other contextual elements, such as risk and trust at the same time (Al Nawayseh, 2020). Customers' usage level of online technologies regarding payment can be seen as a form of technology used to a certain extent. Consequently, this study seeks to present an online financial service adoption framework by merging financial service consumption attributes, like perceived usefulness and perceived ease-of-use, with additional contextual aspects from the prolonged valence framework, such as trust and risk. The relationships in this study model are highlighted in the following sections, as shown in Figure 1.

Figure 1

Technology Acceptance Model-TAM



Source: adapted from Davis, 1989.

A glance at the websites of these banks shows that eight of them offer online services, whereas only one is yet in the preparation phase. However, according to their announcement, they are preparing to launch online services soon. According to the CBRK (2014), internet banking in Kosovo for the first time was introduced by two of the largest banks in the country, ProCredit Bank and Raiffeisen Bank, in mid-2006. Thus, the adoption of those services by its customers can be considered slow and unsatisfactory (Kaur et al., 2021). The hesitation is assumed to result, as online banking is new for the region. This is due to the lack of experience in certain demographic groups. In addition, the major reason may be the level of customer awareness in this particular region. Technology Acceptance Model (TAM) − developed by Davis (1989), can be considered as the most used model regarding Internet Banking adoption (Adogan, Van Hove, 2017).

2.5. Perceived Usefulness (PU)

The particular perceived usefulness (PU) refers to the belief of buyers about Internet financial transactions that this service should enhance their financial fulfilment and transactions experience (Mer, Virdi, 2021). PU examines the potential level for a technological mechanism or process to be useful and accepted by an individual (Mer, Virdi, 2021). The particular literature has recommended that PU can become a crucial factor in shaping a person's behaviour to adopt technological services. PU is found to be an important variable in generating a person's mindset in the direction of a particular technology to simply accept

(Yousuf, Shanyu, 2021). Prior studies supported the important role of PU in speeding up an individual's determination and propensity to adopt internet finance (Yousuf, Shanyu, 2021).

2.6. Perceived Ease-of-Use (PEU)

Perceived Ease-of-Use (PEU) identifies a person's understanding of technical service that the technical service is user-friendly, straightforward, and effortless and helps to describe a person's feeling towards the easiness of any given technology (AL-Zubi, 2021). Customers understand online banking and other cashless services to be more reliable if the service's technological system is often simpler for the service users. Various research mentioned that a higher level of PEU will lead to more willingness and readiness for the acceptance of online banking and other cashless payment services (AL-Zubi, 2021).

Many have highlighted that demographic factors have a direct impact on the level of adoption of new technology, in this regard online banking (Weligodapola et al., 2020). According to most of these studies, there is a significant link between technology adoption and demographic factors. According to Rogers (2003), typical adopters of new technologies, especially when it implies more sophisticated IT technology, are identified as young individuals who have good communication skills. As internet banking requires specific knowledge of technology from its users, typical adopters are mostly young, well-educated people, and they have a good income. In this regard, the main factors that are considered in this study are as follows: gender, age, educational level, profession, and income level. In this regard, hypotheses are developed and tested through the research model as in Figure 2.

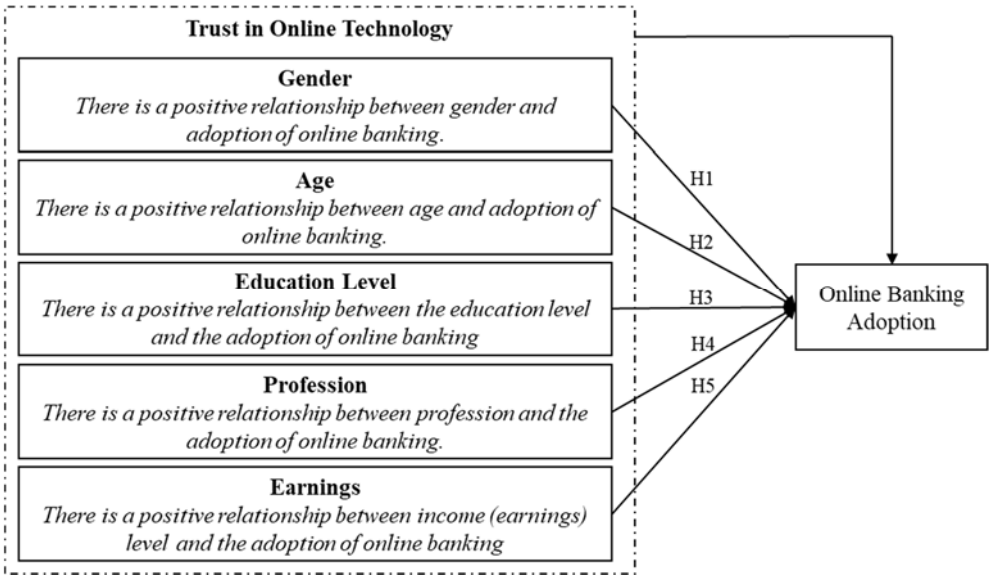
3. Methodology

The research provides a descriptive elaboration and analysis of factors that determine the level of the usage of banking services through the internet in Kosovo. Once the type and purpose of the research are specified, the appropriate method (approach) was selected to be implemented. As the type of research and its methods are determined, the next step is to determine and develop a suitable investigation approach (regarding the data collection). Given this, the data were gathered through a questionnaire used for the survey and which best meets the needs of researchers.

The questionnaire consisted of closed-end questions and was administered by an interviewer. A cross-sectional study design was used to assemble the data required for this study. As a result, the data were collected at a given point in time for the entire sample. Since the focus of the research is to identify and measure the impact of demographic factors that affect the level of usage of banking services through the internet by individual clients, the target population consisted of all citizens living and possessing an account in Kosovo. An analysis was carried out on customers by all banks from the whole territory of the Republic of Kosovo. Thus, the results are more accurate and can be generalizable to the targeted population.

Figure 2

Research model



Source: compiled by the authors.

3.1. Sampling Procedure and Sample Size

Good Sampling is considered when the member of the population has the same opportunity to be elected. It should be impartial and sufficient in size so that the results are reliable (Gravetter, Forzano, 2015). For this study, the researchers have implemented the probability samples (randomly selected), which were stratified by seven regions throughout Kosovo (Iliyasu, Etikan, 2021). Stratification was based on the size of the population within each region. To determine the right size of the sample, it is required that the analysis should be dynamic and not only produce mathematical calculations and data. The main factors determining the sample size are the level of confidence and the error margin (confidence interval) (Fisher, 2007; Nanjundeswaraswamy, Divakar, 2021). The researchers in this study targeted a 95% confidence level and a margin of error of 5%.

Mathematical calculations show that for a population of 100.000+, the sample size should be at least 384 individuals. However, to surge the accuracy of the outcomes, the sample size was increased to 510 respondents, as the allowed and predicted margin of error would be lower than 5%. In cases where respondents refused to participate in the research and for all uncompleted questionnaires, the researchers have replaced them with new questionaries' and have sent them to the new respondent. This process was done to preserve a sample of 510 respondents. In total, 600 questionnaires were issued; 510 of them have been completed and are valid; 37 are damaged or not fully completed, thus not valid; and 53 were returned without or not completed information.

4. Results

Intending to meet the objectives and hypothesis testing, two different groups with different habits regarding the usage of internet banking services were part of the survey (users and non-users). In total, 510 valid responses were returned from 600 questionnaires that were issued by researchers in the field.

Table 1 illustrates both the frequency and percentage of target groups (users and non-users). It reveals that the dominant groups are non-users with 82.7%, while users of internet banking services account for only 17.3% of the responses received. As a developing country, similar to other developing countries, Kosovo is facing a transition from a post-conflict situation where technology was considered a luxury; now, the implementation of technologies is mainly accepted by the younger generation.

Table 1

Internet banking usage

Variable	Description	All respondents	
		f.	%
Internet banking usage	Internet banking user	88	17.30%
	Non- internet banking user	422	82.70%

Source: compiled and calculated by the authors.

Table 2 shows that 52.2% of respondents were male, whereas the female respondent rate was 47.8%. In addition, table 2 presents gender distribution through the use of internet banking. It can be noticed that males constitute 63.6% of users, while the remaining constitute women (or 36.4%). In addition, the non-user values are almost equal to 50.2% male and 49.8% female.

Table 2

Gender and usage of internet banking

Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		f.	%	f.	%	f.	%
Gender	Female	244	47.80%	32	36.40%	212	50.20%
	Male	266	52.20%	56	63.60%	210	49.80%

Source: compiled and calculated by the authors.

Table 3 shows that the age of the respondents is presented in several groups, the 18-30 age group, which is represented by 54.1%, and the 31-40 age group, which represents 24.5%. On the other hand, the group between 31-40 years is the dominant group of users, followed by the younger group between 18-30 years. In the non-user group, the age group with more weight is 18-30 with 57.8%from the total number of respondents, followed by the age group of 31-40 years with 21.3%. Yet, the comparison of data within each group is presented in Figure 3, where the results are focused on presenting the data that concerns each group.

In direct compression of the users and non-users of internet banking services within the same group (Figure 3), it is evident that age is a significant factor regarding the level of internet banking and online payment usage. Even if expected that the level of internet users in group 18-30 would be higher (11.59% users and non-users with 88.41%), it was revealed that the

majority of respondents are students and the main reason given for avoiding ng internet banking was the high price that is charged for those services by banks, and also, they are not the family heads and as such, they do not have to carry out payments regarding the household payments.

Table 3

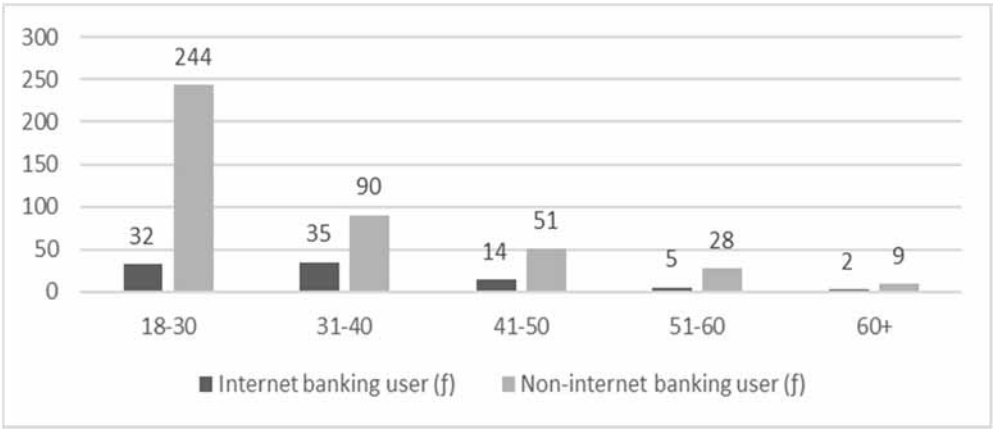
Age and usage of internet banking

Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		f.	%	f.	%	f.	%
Age	18-30	276	54.10%	32	36.30%	244	57.80%
	31-40	125	24.50%	35	39.70%	90	21.30%
	41-50	65	12.70%	14	15.90%	51	12.10%
	51-60	33	6.50%	5	5.60%	28	6.60%
	60+	11	2.20%	2	2.20%	9	2.10%

Source: compiled and calculated by the authors.

Figure 3

Age and usage of internet banking (group comparison)



Source: compiled and calculated by the authors.

Table 4 displays the level of acceptance and usage of internet banking based on the educational level and compares it with the entire number of respondents. Data confirms that respondents with high-school education level are the largest group of respondents with 53.8%. The largest group of internet banking users are respondents who have bachelor's degrees with 51.1%, while the largest part of non-users fits the respondent group that has completed secondary school (high school) (59.7%), and 25.1% of non-users have university degrees. Although it is outnumbered, interesting is the result of respondents with primary education, which was revealed to be 100 % non-users of banking services through the internet. The comparison of data within each group is presented in Figure 4, where the results are focused on presenting the data that concerns each group.

Table 4

Education and internet banking usage

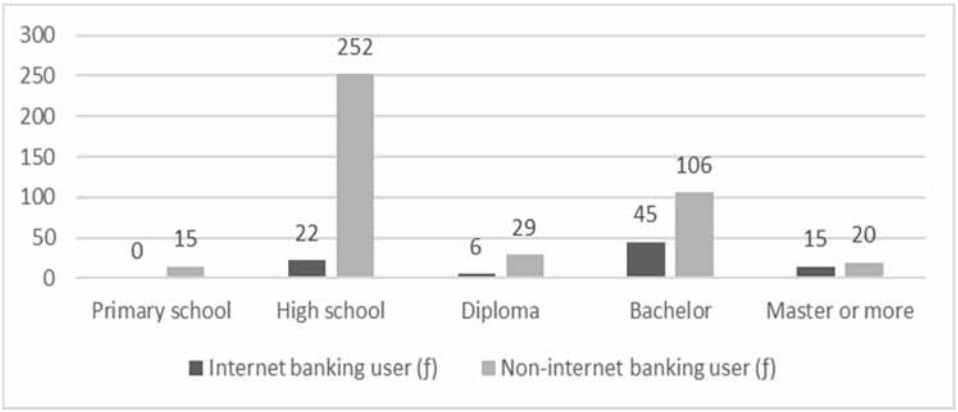
Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		f.	%	f.	%	f.	%
Education	Primary school	15	2.90%	0	0.00%	15	3.60%
	High school	274	53.80%	22	25.00%	252	59.70%
	Diploma	35	6.90%	6	6.80%	29	6.90%
	Bachelor	151	29.60%	45	51.10%	106	25.10%
	Master or more	35	6.80%	15	17.00%	20	4.70%

Source: compiled and calculated by the authors.

When comparing respondents (individuals) within the same group (Figure 4), it is evident that education has a strong correlation with the level of usage of internet banking services; hence, the higher the educational level, the higher the usage level of internet banking and payment systems. The primary school group has confirmed that they do not need any online banking systems (with 100% non-users) as they either earn less or there is there no need for any online transactions for them.

Figure 4

Education and internet banking usage (group comparison)



Source: compiled and calculated by the authors.

Whereas, the group with Masters (or higher) degree group is confident that internet banking and online payments are the best way to deal with any kind of payments representing 42.86% that use and 57.14% that do not use internet banking and online payment systems.

Table 5 also shows the distribution of occupations in two research groups (users and non-users). It is evident that students are the main group of respondents with 29.2%, whereas self-employed and professionals participate with 19.4% and 19.8%, respectively. As can be seen in Table 5, the majority of internet banking users are in the self-employed group with 38.6%, meaning that they tend to make any payments from mobile devices and spend less time with physical payments. For them, time is more valuable compared to the cost that banks are charging for internet banking services.

Table 5

Occupation and internet banking usage

Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		f.	%	f.	%	f.	%
Occupation	Unemployed	52	10.20%	0	0.00%	52	12.30%
	Retired	8	1.60%	0	0.00%	8	1.90%
	Student	149	29.20%	13	14.80%	136	32.20%
	Laborer	44	8.60%	0	0.00%	44	10.40%
	Government	57	11.20%	9	10.20%	48	11.40%
	Professional	101	19.80%	32	36.40%	69	16.40%
	Self-employed	99	19.40%	34	38.60%	65	15.40%

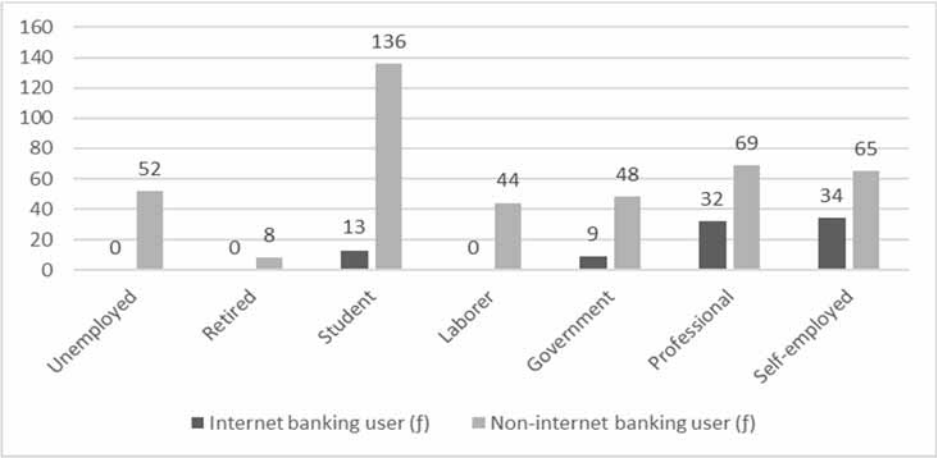
Source: compiled and calculated by the authors.

Another element that characterizes the correlation between occupation and internet banking usage is the fact that the unemployed and retired hesitate to make any payments through the internet. Many reasons are usually impacting the level of internet banking usage for these two categories, yet they still differ in several aspects. Unemployed individuals usually avoid having an internet banking system as it is convoyed with additional cost, which is unbearable for them. Furthermore, even if they have any income (i.e. through relatives, any spontaneous jobs), they are not able to deposit the money legally in the banking account, thus, they send it in cash.

On the other side, the similarity between retired persons and unemployed is the additional cost that they avoid and which is charged by banks if internet banking is required. Yet, the difference lies in the ability to use the internet system and the knowledge needed for that, which is new for the majority of retired individuals, especially in developing countries. The comparison of data within each group is presented in Figure 5, where the results are focused on presenting the data that concerns each group.

Figure 5

Occupation and internet banking usage (group comparison)



Source: compiled and calculated by the authors.

Table 6 shows that respondents with no income are the largest group with 35.4% of respondents, as the majority of them are still students and are not fully engaged in permanent employment. The group with the highest income is the largest group that uses the internet and online banking payment system, with 43.2%. Another important group is the one that consists of respondents that earn between 250-450 Euro (monthly wages), which makes 26.1% which is rather a low-level user of internet banking. The comparison of data within each group is presented in Figure 5, where the results are focused on presenting the data that concerns each group.

Table 6

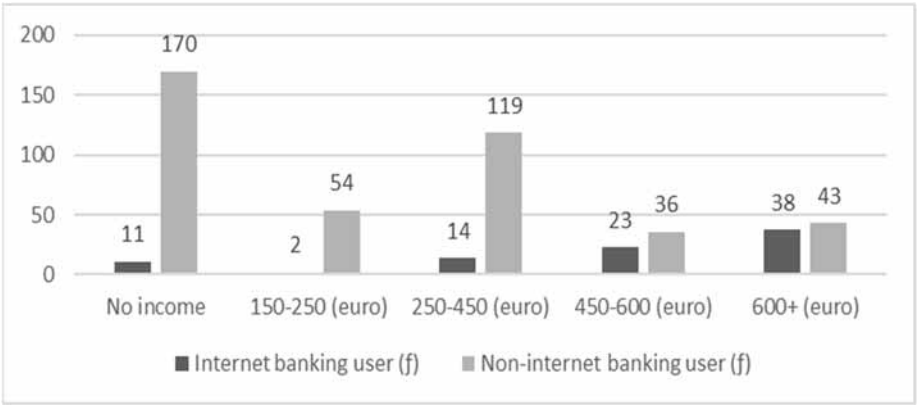
Monthly income and internet banking usage

Variable	Description	All respondents		Internet banking user		Non-internet banking user	
		f.	%	f.	%	f.	%
Monthly income	No income	181	35.40%	11	12.50%	170	40.30%
	150-250 (euro)	56	11.00%	2	2.30%	54	12.80%
	250-450 (euro)	133	26.10%	14	15.90%	119	28.20%
	450-600 (euro)	59	11.50%	23	26.10%	36	8.50%
	600+ (euro)	81	16.00%	38	43.20%	43	10.20%

Source: compiled and calculated by the authors.

Figure 5

Monthly income and internet banking usage (group comparison)



Source: compiled and calculated by the authors.

The most evident indicator for using internet banking and online payment tools and systems is the level of income. As shown in Figure 5, the largest percentage of individuals that use internet banking within the same income level is within the 600+ Euro group, representing 46.9% that regularly the internet banking and payment services. Followed by the 450-600 Euro group, which confirmed that 38.98% use internet banking. In compassion, the no-income group (with only 6.08% responding as users and 93.9% as non-users) and 150-250 Euro group (where 3.57% are users and 96.43% responded as non-users) have shown no significant intention to use internet banking is very low.

To determine whether a connection between demographic factors and the use of banking services based and offered through online platforms (internet) exists, the researchers implemented the Chi-Square test. The details of this test are presented in Table 7.

Table 7

Chi-Square Tests

Variable	Value	Df	Asymp.sig. (2-sided)
Gender	5.616	1	0.018
Age	17.247	4	0.002
Education	52.179	4	0
Occupation	64.341	6	0

Source: compiled and calculated by the authors.

5. Discussion and Limitations

5.1. Discussion and hypothesis analysis

To create more reliable data, the researchers employed three statistical tests to test the five hypotheses raised. The data from these tests are presented in table 8, presenting the status of hypotheses scattered throughout three statistical tests used for testing hypotheses. Although confirmed, it was not proven that the second hypothesis was related to gender.

In the first row of Table 7, we can see the Chi-Square testing (X2 = 5616, df = 1, and Sig. 0.018) confirming the correlation between Gender and the level of use of online banking services. Outcomes make available proof of strong evidence of the relationship between age and usage of online banking (X2 = 17,247, df = 4 and Sig. 0.002). The correlation between education and the level of online banking adaptation is strong (X2 = 52,179, df = 4, and Sig. 0). Data for Occupation of the individuals part of this research (X2 = 64,341, df = 6, and Sig. 0) confirms that there is strong evidence that there is a link between age and the use of the internet banking. The last data presented in Table 7 presents the linkage between the level of income and the level of usage of online banking services (X2 = 96,813, df = 4, and Sig. 0).

The research has confirmed that there is a correlation between gender and the level of usage of online banking services in Kosovo, which is rather a weak level of correlation. Hence, H1 is supported. These findings are consistent with the findings of other previous research conducted by other researchers. Hence, the previous studies have proven that males are keener to use internet banking compared to females and confirmed that gender is a significant factor that impacts internet banking adoption.

H2 tests the correlation between age and the usage of online banking services level. Table 7 shows that this was confirmed in Chi-Square Test. According to collected data, there is a trend that proves that as the age increases up to a certain level, at the same time, the possibility of using internet banking slightly increases. The main reason for this phenomenon is that the rate of unemployment among young people is high. The previous research considered in this paper, suggests that age is a very important factor.

H3 states that “There is a positive relationship between the education level and the adoption of online banking services”. Table 7 shows that this was a confirmed Chi-Square Test. This

means that Kosovo's level of education is related to the banking services that are offered and available online.

The H4 is also confirmed to have a strong correlation and that the profession of individuals is associated with the usage level of online banking services and platforms available in Kosovo, which was confirmed by the Chi-Square Test in Table 7. These findings are consistent with previous findings (Karjaluoto, 2002; Wan et al., 2005), which declared that the adoption of internet banking tends to be higher among individuals that have senior and middle-level occupations. However, it is lower for those individuals who belong to professions with a lower level of occupation. Furthermore, they claim that professionals, students, and the self-employed were the largest groups in adopting the use of internet banking services.

The collected data indicates that income level is positively correlated with the tendency to use online banking in Kosovo (H5 was confirmed by Chi-Square Test). These results are consistent with findings made in earlier research made by different authors (Wan et al., 2005), which is confirmed also in this paper.

5.2. Limitations and future research

Although the contribution of this research study can be considered and delivers insights to interested stakeholders, some limits should be considered in further research. The data form for this particular study is developed based on a cross-sectional research design; a longitudinal investigation is essential to illuminate the effects that may be as only a temporal change due to the situation with pandemics and the lack of information regarding the duration of the pandemic situation. In this regard, to have more reliable conclusions, wider research would be helpful to clarify if the change is only in specific regions or countries, or if it seems to be a future trend that will also be normal behaviour for the future, if example by carrying additional research or comparing research results from studies carried in and across various countries with differing economic development and different culture background.

In this regard, the research results may be valid for the given region (in this case, for countries in the SEE region, in specific in the Balkans), and the sample size cannot be considered valid for a generalization of customer behaviour toward the adoption of online banking services. In this regard, for future research projects on this topic, a more significant number of respondents ought to be included and the study should cover a wider geographical area by including other countries and regions. Another issue that is seen as a limitation is the fact that the analysis has mainly focused on the functional characteristics of technology adoption, which may develop reports on the perceived ease and usefulness but may have avoided other important elements which may be related to emotional and other cultural background factors (Zhang et al. 2018). As noted by Singh and Srivastava (2020), information is considered one of the most important determinants that affected the level of online service usage. Hence, a lack of appropriate information, lowers the trust of customers in online services, especially when it deals with access to their finance (Singh, Srivastava, 2020). Another element that should be considered to create more reliable data is the integration of peripheral variables

related to value co-creation, such as the confidence in the bank system and the legislative infrastructure within the region where banks offer their services (Mostafa, 2020).

Mostly, people are acting and reacting to a newly created situation and the real level of adoption can be measured only after the pandemics are over, if it is over at all. There are several regions that researchers were not able to get information, if example from people that live in parts that are hard to reach. An additional lack of confidence in giving objective information is evident due to the cultural background of the local population. Some of the information that may be crucial for any conclusion is related to the legislative side of the process (government regulation) and the readiness of Banks (private institutions) and other financial service providers to make investments in a developing region, that is yet facing difficulties to cope with other economies.

6. Conclusions

Internet banking enables the improvement of the banking industry through new services, in specific in developing countries. In addition, at this stage of economic difficulties that developing countries are facing, technological improvement and within this, the application of online services is considered the major facilitator of the overall development of the banking industry, upon which the entire future banking services are to be created and directed. Even if it provides benefits to banks and their clients, using internet banking services in Kosovo remains unsatisfactory. Kosovo is believed to be the country with the smallest level of usage of online banking products and amenities in the region. However, it is well below even when compared with other developing countries outside the Balkan Peninsula. However, more and more people are beginning to understand its advantages and have begun to adopt and accept online banking services and products.

The study can also be used in the region where other countries have the same characteristics and market regulations. In achieving this, the study discussed the effect of these factors: age, gender, education level, occupation, and income level; and consequently, it elaborated on each of them. These factors were tested empirically, which resulted in relatively high importance and a high impact on the level of usage of internet banking by customers in Kosovo.

Most of the conclusions of this research are consistent with similar studies regarding online banking (Alhassany, Faisal, 2018; Nazaritehrani, Mashali, 2020; Agyei et al., 2021). In this study, age was not found to have a linear correlation with the level of usage of online banking services; rather, this relationship is nonlinear and will be explained in other studies with alternative statistical methods. In addition, according to the results, gender does not appear to be a factor that strongly affects the level of practice of internet banking. Grounded on empirical assumptions, all demographic factors analyzed in this paper, except age, have a clear statistical significance in the use of internet banking. Through this study, banks may clarify their ideas regarding internet banking; and thus, better apprehend the needs and concerns of clients.

References

Agyei, J., Sun, S., Penney, E. K., Abrokwah, E., Boadi, e. K., Fiifi, D. (2021). Internet Banking Services User Adoption in Ghana: An Empirical Study. – Journal of African Business, pp. 1-18. DOI: 10.1080/15228916.2021.1904756.

Ahmad, S., Bhatti, S., Hwang, Y. (2020). E-service quality and actual use of e-banking: Explanation through the Technology Acceptance Model. – Information Development, 36(4), pp. 503-519. doi:10.1177/0266666919871611.

Al Nawayseh, M. K. (2020). Fintech in COVID-19 and beyond: what factors are affecting customers' choice of fintech applications?. – Journal of Open Innovation: Technol Mark Complex 6(4), pp. 1-15. https://doi.org/10.3390/joitmc6040153.

Alhassany, H., Faisal, F. (2018). Factors influencing the internet banking adoption decision in North Cyprus: an evidence from the partial least square approach of the structural equation modeling. – Financ Innov, 4, p. 29. https://doi.org/10.1186/s40854-018-0111-3.

AL-Zubi, K. (2021). The effect of web-related features on intention to use online banking of ATM users. – International Journal of Data and Network Science, 5(4), pp. 629-640. http://dx.doi.org/10.5267/j.ijdns.2021.8.004.

Aydogan, S., Van Hove, L. (2017). Determinants of internet banking usage: survey evidence for Belgium. Accountancy & Bedrijfskunde, 26, pp. 19-36.

Bin Haji Saman, M. A. (2018). Factors that Influence the Adoptions of Internet Banking Among Customers. – American Finance & Banking Review, 3(1), pp. 35-41. https://doi.org/10.46281/amfbr.v3i1.218.

Cabanillas, F., Marinkovic, V., De Luna, I. R., Kalinic Z. (2018). Predicting the determinants of mobile payment acceptance: A hybrid SEM-neural network approach. – Technological Forecasting and Social Change,129, pp. 117-130. https://doi.org/10.1016/j.techfore.2017.12.015.

Cao, Q., Niu, X. (2019). Integrating context-awareness and UTAUT to explain Alipay user adoption. – International Journal of Industrial Ergonomics, 69, pp. 9-13. https://doi.org/10.1016/j.ergon.2018.09.004.

Carranza, R., Díaz, E., Sánchez-Camacho, C., Martín-Consuegra, D. (2021). e-Banking Adoption: An Opportunity for Customer Value Co-creation. – Front. Psychol. 11, pp. 1-10. https://doi.org/10.3389/fpsyg. 2020.621248.

CBRK (2006). CBAK, Bulletin no 4. AQBK, Prishtina.

CBRK (2014). Raporti I Stabilitetit Financiar Nr. 4. Prishtina: Kosovo.

Consoli, D. (2003). The evolution of retail banking services in United Kingdom: a retrospective analysis. – Centre for research innovation and competition, University of Manchester, 13, pp. 8-9. [online] Available at: https://www.academia.edu/312112/The_Evolution_of_Retail_Banking_Services_In_United_Kingdom_a_Retrospective_Analysis.

Deilami, Z., Balooti, E., Darvand, R. (2018). Value-Driven Internet Shopping: The Mental Accounting Theory Perspective (case study: Diji Kala). – Management Accounting, 11(39), pp. 49-65. https://doi.org/10.1002/mar.20317.

Fisher, C. (2007). Researching and Writing a Dissertation: A Guidebook for Business Students. Pearson Education.

Ghasemi, Z., Kermani, M. A., Allahviranloo, T. (2021). Exploring the Main Effect of e-Banking on the Banking Industry Concentration Degree on Predicting the Future of the Banking Industry: A Case Study. – Advances in Fuzzy Systems, 2021, pp. 1-14. https://doi.org/10.1155/2021/8856990.

Gong, X., Zhang, K. Z., Chen, C., Cheung, C. M., Lee, M. K. (2020). What drives trust transfer from web to mobile payment services? The dual effects of perceived entitativity. – Information & Management, 57,103250. https://doi.org/10.1016/j.im.2019.103250.

Gravetter, F., Forzano, L. (2015). Research Methods for the Behavioral Sciences. – Journal of Management Information Systems, 9(1), pp. 93-111.

Ha, V. (2020). Enhancing the e-commerce application in SMEs. – Management Science Letters, 10(12), pp. 2821-2828. http://dx.doi.org/10.5267/j.msl.2020.4.027.

Habib, S., Hamadneh, N. N. (2021). Impact of Perceived Risk on Consumers Technology Acceptance in Online Grocery Adoption amid COVID-19 Pandemic. – Sustainability, 13(18), p. 10221. https://doi.org/10.3390/su131810221.

Iliyasu, R., Etikan, I. (2021). Comparison of quota sampling and stratified random sampling. – Biometrics & Biostatistics International Journal, 10(1), pp. 24-27. https://doi.org/10.15406/bbij.2021.10.00326.

Karjaluoto, H. (2002). Electronic Banking in Finland: Consumer Beliefs, Attitudes, Intentions, and Behaviors, Jyväskylä: University of Jyväskylä.

Karsen, M., Chandra, Y. U., Hanny, H. (2019). Technological factors of mobile payment: a systematic literature review. – Procedia Computer Science, 157, pp. 489-98. https://doi.org/10.1016/j.procs.2019.09.004.

Kasilingam, D., Krishna, R. (2022). Understanding the adoption and willingness to pay for internet of things (IOT) services. – International Journal of Consumer Studies, 46(12), pp. 102-131. https://doi.org/10.1111/ijcs.12648.

Kaur, S.J., Ali, L., Hassan, M.K., Al-Emran, M. (2021). Adoption of digital banking channels in an emerging economy: exploring the role of in-branch efforts. – Journal of Financial Services Marketing, 26, pp. 107–121. https://doi.org/10.1057/s41264-020-00082-w.

Kitsios, F., Giatsidis, I., Kamariotou, M. (2021). Digital Transformation and Strategy in the Banking Sector: Evaluating the Acceptance Rate of E-Services. – Journal of Open Innovtion, 7(7), pp. 1-14. https://doi.org/10.3390/joitmc7030204.

Lin, W. R., Wang, Y. H., Hung Y. M. (2020). Analyzing the factors influencing adoption intention of internet banking: Applying DEMATEL-ANP-SEM approach. PLoS ONE, 15(2), e0227852. https://doi.org/10.1371/journal.pone.0227852.

Manzoor, F., Wei, L.,, Siraj, M. (2021). Small and medium-sized enterprises and economic growth in Pakistan: An ARDL bounds cointegration approach. – Heliyon, 7(2), e06340. https://doi.org/10.1016/j.heliyon.2021.e06340.

Marakarkandy, B., Yajnik, N., Dasgupta, C. (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). – Journal of Enterprise Information Management, 30(2), pp. 263-294. https://doi.org/10.1108/JEIM-10-2015-0094.

Mer, A., Virdi, A. S. (2021). Modeling Millennials' Adoption Intentions of E-banking: Extending UTAUT with Perceived Risk and Trust. – FIIB Business Review, https://doi.org/10.1177/23197145211052614.

Mistrena, L. (2021). Behavioural evolution of consumers of banking services in the COVID-19 pandemic situation. – Journal of Corporate Governance, Insurance, and Risk Management (JCGIRM), 8(1), pp. 84-100. https://doi.org/10.51410/jcgirm.8.1.6.

Mostafa, R. B. (2020). Mobile banking service quality: a new avenue for customer value co-creation. – International Journal of Bank Marketing. 38, pp. 1107–1132. https://doi.org/10.1108/IJBM-11-2019-0421.

Nanjundeswaraswamy, T. S., Divakar, S. (2021). Determination of sample size and sampling methods in applied research. – Proceedings on Engineering Sciences, 3(1), pp. 25-32, doi: 10.24874/PES03.01.003.

Nazaritehrani, A., Mashali, B. (2020). Development of E-banking channels and market share in developing countries. – Financial Innovation, 6(12), pp. 1-19 https://doi.org/10.1186/s40854-020-0171-z.

OECD (2019). Kosovo: Small Business Act profile, in SME Policy Index: Western Balkans and Turkey 2019: Assessing the Implementation of the Small Business Act for Europe, OECD Publishing, Paris. https://doi.org/10.1787/dd53f292-en.

Oertzen, A.-S., Odekerken-Schröder, G. (2019). Achieving continued usage in online banking: a post-adoption study. – International Journal of Bank Marketing, 37(6), pp. 1394-1418. https://doi.org/10.1108/IJBM-09-2018-0239.

Ozatac, N., Saner, T., Sen, Z. S, (2016). Customer satisfaction in the banking sector: the case of North Cyprus. – Procedia Econ Finance 39, pp. 870-878. https://doi.org/10.1016/S2212-5671(16)30247-7.

Park, J., Ahn, J., Thavisay, T., Ren, T. (2019). Examining the role of anxiety and social influence in multi-benefits of mobile payment service. – Journal of Retailing and Consumer Services, 47(C), pp. 140-149. http://dx.doi.org/10.1016/j.jretconser.2018.11.015.

Rahi, S., Othman Mansour, M. M., Alghizzawi, M., Alnaser, F. M. (2019). Integration of UTAUT model in internet banking adoption context: The mediating role of performance expectancy and effort expectancy. – Journal of Research in Interactive Marketing, 13(3), pp. 411-435. https://doi.org/10.1108/JRIM-02-2018-0032.

Rahman, F. B. A., Hanafiah, M. H. M., Zahari, M. S. M., Jipiu, L. B. (2021). Systematic Literature Review on The Evolution of Technology Acceptance and Usage Model used in Consumer Behavioural Study. – International Journal of Academic Research in Business and Social Sciences, 11(13), pp. 272-298. http://dx.doi.org/10.6007/IJARBSS/v11-i13/8548.

Rogers, E. (2003). Diffusion of innovations. New York: Free Press.

Sahi, A. M., Khalid, H., Abbas, A. F., Khatib, S. F. A. (2021). The Evolving Research of Customer Adoption of Digital Payment: Learning from Content and Statistical Analysis of the Literature. – J. Open Innov. Technol. Mark. Complex, 7(230), pp. 1-24. https://doi.org/10.3390/ joitmc7040230.

Senyo, P. K., Osabutey, E. L. C. (2020). Unearthing antecedents to financial inclusion through FinTech innovations. – Technovation, 98, 102155. https://doi.org/10.1016/j.technovation.2020.102155.

Singh, S., Srivastava, R. K. (2020). Understanding the intention to use mobile banking by existing online banking customers: an empirical study. – Journal of Financial Services Marketing, 25, pp. 86–96. https://doi.org/10.1057/s41264-020-00074-w.

Sloboda, L., Dunas, N., Limański, A. (2018). Contemporary challenges and risks of retail banking development in Ukraine. – Banks and Bank Systems, 13(1), pp. 88-97. https://doi.org/10.21511/bbs.13(1).2018.09.

Tang, B., Bragazzi, N. L., Li, Q., Tang, S., Xiao, Y., Wu J. (2020). An updated estimation of the risk of transmission of the novel coronavirus (2019-nCov). – Infect. Dis. Model, 5, pp. 248-255. https://doi.org/10.1016/j.idm.2020.02.001.

Weligodapola, H. W. M. C., Lokeshwara, A. A., Prashanthy, K., Sooriyakumaran, S., Rubika, S., Lakmali, G. T. H. D. (2020). A Study on Customer Perception towards E-banking: With Special Reference to Urban and Rural Districts in Sri Lanka. – International Journal of Academic Research in Business and Social Sciences, 10(10), pp. 682-698. http://dx.doi.org/10.6007/IJARBSS/v10-i10/7766.

WGPR (2022). The Global Payments Report 2021. FIS – Worldpay. [online] Available at: https://worldpay.globalpaymentsreport.com/.

WHO (COVID-19). Advice for the Public. [online] Available at:: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public.

Xie J, Ye L, Huang W, Ye M (2021) Understanding FinTech platform adoption: impacts of perceived value and perceived risk. – Journal of Theoretical and Applied Electronic Commerce Research, 16(5), pp. 1893-1911. https://doi.org/10.3390/jtaer16050106.

Yousuf, A. I., Shanyu, L. (2021). Examining the Factors Impact People's Intention to Adoption of E-Banking in Mogadishu-Somalia. – American Journal of Industrial and Business Management, 11, pp. 1218-1236. https://doi.org/10.4236/ajibm.2021.1112073.

Zhang, T., Lu, C., Kizildag, M. (2018). Banking "on-the-go": examining customers" adoption of mobile banking services. – International Journal of Quality and Service Sciences, 10(3), pp. 279–295. https://doi.org/10.1108/IJQSS-07-2017-0067.

Zhao, Y., Bacao, F. (2021). How Does the Pandemic Facilitate Mobile Payment? An Investigation on Users' Perspective under the COVID-19 Pandemic. – International Journal of Environmental Research and Public Health, 18(3), 1016. https://doi.org/10.3390/ijerph18031016.

Zhou, M, Kan, M. Y. (2021). The varying impacts of COVID-19 and its related measures in the UK: A year in review. – PLoS ONE, 16(9): e0257286. https://doi.org/10.1371/journal.pone.0257286.