Contents available at the publisher website: G A F T I M . C O M

International Journal of Technology, Innovation, and Management (IJTIM)

Journal homepage: https://journals.gaftim.com/index.php/ijtim/index

Beyond Brick and Mortar: Unveiling the Willingness to Adopt E-Banking Services

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A R T I C L E   I N F O

A B S T R A C T

The banking sector is one of the most essential sectors for the Palestinian economy. Therefore, many researchers are examining recent developments in banking services and clients' attitudes toward accepting or rejecting technological developments in these services and their transformation from traditional services to electronic banking services. This research explores the relationship between performance expectancy, effort expectancy, social influence, perceived risk, and consumer attitudes toward accepting and adopting electronic banking services. It also examined the mediating effect of consumers' attitudes on the relationship between the sum of independent and dependent variables.

This study extends the UTAUT framework by implementing it with two additional factors, which are perceived risk as an independent variable and consumer attitude as a mediating variable. We constructed a conceptual model and employed Smart-Pls 3 to conduct structural equation modeling analyses. We implemented a survey-based methodology. A convenience sample technique was followed, and 306 bank customers in Palestine were surveyed using structured questionnaires.

The results indicate that Palestinian consumers' acceptance of using electronic banking services is significantly influenced by their attitude toward these services, their expectations, and the availability of facilitating conditions. Furthermore, consumer attitudes are approved to have a positive mediating effect in these relationships.

1. INTRODUCTION

In decades, there has been a tremendous acceleration in technological advancements and their applications, resulting in the rise of new capabilities across different sectors such as education, healthcare, and banking. The financial industry incorporated technologies by providing most of its services through online channels. The objective was to develop low-cost banking solutions that could attract customers by offering higher value [1,2].

In the 1980s, considerable advancement in computer technology and widespread internet usage established the basis for the beginning of e-banking. In the 2000s, the acceptance of e-banking noticeably increased due to the extensive use of smartphones during the 2000s and 2010s, which led to an increase in mobile banking usage.

The expressions "digital banking" and "e-banking" frequently appear interchangeably. Digital banking includes using digital technologies and electronic devices to interact with customers [3]. Consistent with this concept, the Federal Reserve Board [4] and the International Monetary Fund [5] refer to e-banking as the supply of banking services through digital channels such as the Internet and mobile phones.

The Palestinian banking sector is witnessing the emergence of electronic banking services alongside traditional banking models. At the same time, "Reflect," a joint venture between the Arab

Bank and the Palestinian telecommunications company established in 2023, represents Palestine's first dedicated electronic bank; several existing banks offer electronic services. These services typically include account inquiries and management, bill payments, funds transfers, and credit card or checkbook requests. Subscription to these electronic banking services is generally straightforward, often requiring a visit to a customer's associated bank branch to submit a formal request. Notably, the development of electronic banking services in Palestine constitutes a substantial divergence from the traditional banking methods typically utilized by customers [6].

Palestinian innovation in financial services encounters obstacles to overcome. Israeli restrictions on communication infrastructure hinder financial inclusion and deepen the technological disparity between urban and rural areas. Additionally, unstable Internet and inadequate comprehension of technology in specific areas may limit the broader use of digital banking services. However, these constraints also present opportunities. The occupation's physical barriers and traditional banking's limits create a demand for alternate financial alternatives. Therefore, electronic banks have emerged as a viable option, giving innovative services to a broader public. However, cultural background and personality traits can significantly impact an individual's willingness to use e-banking services. Some readily embrace technological advancements, like e-banking, while others may be hesitant or resistant [7].

The Palestine Monetary Authority (PMA) revealed that 36.4% of adults lack access to financial services. This exclusion stems from limited service availability, particularly in occupation-affected areas, and the perceived complexity of traditional banking procedures. Recognizing this gap, the PMA has prioritized financial technology initiatives to promote financial inclusion and enhance Palestinian economic resilience [8].

Despite pressures from the occupation and broader global trends, the Palestinian banking sector demonstrates strong performance. This success can be attributed to adherence to international banking standards that foster public trust and deposit growth. Furthermore, the PMA actively monitors developments in digital transformation and its impact on the financial sector. Their commitment to regulatory and supervisory upgrades (capital allocation from USD 120 million to USD 200 million) prioritizes depositor protection and alignment with international best practices while facilitating digital transformation within the banking sector. This focus on risk mitigation paves the way for a successful digital transformation [6]

To ensure electronic banking success, more studies are needed to identify variables impacting the adoption of electronic banking services. This knowledge will be vital for designing regulations that promote a robust digital banking sector in Palestine. Therefore, this research investigates the factors affecting e-banking adoption in Palestine, focusing on customer receptiveness and the current level of customer engagement.

The study will apply the Unified Theory of Acceptance and Use of Technology (UTAUT) model to examine the key factors impacting consumer acceptance and adoption of e-banking services. As far as we know, only a limited number of researches investigate the factors that affect client utilization of e-banking services in developing nations, namely in Palestine. Furthermore, a limited number of scholars have investigated the influence of demographic factors on the use of e-banking services [9]. The objective of this study is to fill these knowledge gaps by enhancing our understanding of the variables that impact the adoption of e-banking services in Palestine. This will be achieved by introducing a perceived risk variable into the current Unified Theory of Acceptance and Use of Technology (UTAUT) model. Furthermore, the study examines the moderating effect of demographic variables such as gender, level of education, age, and income in addition to investigating the mediating role of consumer attitude toward using technology in the model, as shown in the study model (Figure 1).

The main objective of the current research is to analyze the factors that motivate or hinder clients of Palestinian conventional banks from adopting modern banking services, including e-banking. Taking into consideration that adapting new services, especially the e-banking service, may be a double-edged sword between ease of use and resistance to technology. The research outcomes can provide significant insights for decision-makers at Palestinian banks, enabling them to

devise realistic strategies that promote and enhance the implementation of e-banking services in Palestine.

2. LITERATURE REVIEW

Most companies have made apparent efforts to move their customers from traditional to electronic services. However, it is no secret or strange to anyone that the usage of e-services in the financial markets poses an additional risk and challenge from other sectors due to the sensitivity and danger of dealing with this sector, especially since the electronic banking system is surrounded by risks in terms of cybercrime and hacking bank accounts from anywhere in the world [10].

Electronic banking is a process that only occurs with obstruction and hurdles. Therefore, much research was written about electronic banking using the UTAUT model to understand and determine the factors that affect technology acceptance. The UTAUT model has captivated researchers' attention. The favorable result of its application has been validated in empirical research [11] in different fields such as healthcare, education, communication, and many other fields [1, 7, 12, 13].

In this study, we will use the UTAUT model for several motives. The UTAUT is a primarily accepted model that seeks to clarify individuals' technology adoption. The model expands several existing models, such as the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), and Theory of Planned Behavior (TPB) [14]. The compilation of the study's findings provides a clear comprehension of the variables that influence the adoption of technology [11].

The primary rationale for utilizing the UTAUT model in this research is its comprehensive coverage of various factors that may hinder the adoption of electronic banking, including performance expectancy, effort expectancy, social influence, and facility conditions. These factors are crucial in understanding people's acceptance and adoption of technology, as stated by Venkatesh, Morris [11]

Furthermore, The UTAUT paradigm has been implemented and verified in numerous disciplines and cultural situations, making it applicable across different sectors under different circumstances, including banking [15], healthcare [16-18], a police service [19], education [20], and e-commerce [21]

like it was used in banking and financial sector [1, 12].

Additionally, numerous prior studies have consistently found significant relationships between the UTAUT constructs and users' intention to use technology and their de facto use way of acting. This indicates that the UTAUT paradigm has demonstrated strong predictive power in understanding individuals' intentions and technology use [18, 22].

Finally, the extra benefit of the UTAUT model may be expanded to incorporate external factors that may impact technological adoption. Researchers have effectively included other characteristics or variables unique to their study environment, such as perceived security, confidence, privacy, flexibility, and financial costs, into the UTAUT model to boost its descriptive power [15, 18, 22].

In technology adoption research, the Unified Theory of Acceptance and Use of Technology (UTAUT) model is a well-known framework [23]. Its widespread appeal is due to its capacity to incorporate and expand upon earlier models, providing a thorough comprehension of the elements affecting user acceptability [11]. TAUT builds upon eight established models, including the Technology Acceptance Model (TAM) [14], the Motivational Model (MM) [24] 2002), and the Social Cognitive Theory (SCT) [25].

TAM, a fundamental model in technology adoption research, emphasizes perceived utility and ease of use as essential factors influencing user acceptability [14]. The UTAUT model also considers the MM's emphasis on behavioral intention [24]. Additionally, UTAUT incorporates SCT variables such as self-efficacy and outcome anticipation, which investigate the user's confidence and anticipated advantages of utilizing the technology [25]. In addition to these foundational models, UTAUT also integrates components from the Theory of Reasoned Action (TRA), Innovation Diffusion Theory (IDT), Model of PC Utilization (MPCU). Combined model of TAM and TPB). The MPCU investigates social impact and work fit as elements that affect technology adoption (Alturas, 2021). DT is centered on concepts such as relative advantage and compatibility, which evaluate the technology's perceived advantages and fit with current procedures. RA and TPB study how attitudes shape user decisions, perceived behavioral control, and

subjective norms (perceived social pressure) [26]. It combined the TAM-TPB model, included within UTAUT, and further explored the interaction between these constructs (Venkatesh et al., 2003). UTAUT offers a strong framework for studying technology adoption by incorporating these numerous views. This extensive approach allows researchers to study many elements affecting how users behave, resulting in a deeper multifaceted understanding of technology adoption.

The UATUA model, which will be used in the study, has been described as the latest theoretical model and is said to have overcome the limitations of previous models. It is a model that examines six expectations of consumer performance, namely, the expectation of the effort exerted by the consumer in using technology, and the social impact has a role on the consumer's intention, facilitating the conditions of using technology, the behavioral intention of the consumer, and the behavior of the user. Four moderate variables affect the main and intent variables in employment: gender, age, experience, and voluntariness [27].

3. THEORETICAL FRAMEWORK

In this part, we will explore the four factors in this study that might affect the behavioral patterns in user acceptance and adoption in Palestine: performance expectancy, effort expectancy, social effect, and facilitating conditions. In addition to consumer attitudes toward technology and perceived risk, we will include a number of demographic variables (age, gender, income, and education).

Consumer Attitudes:

Venkatesh and Bala [28] suggested the idea of performance expectancy, which represents a person's expectation that employing a given technology is going to enhance their achievements, make tasks more manageable, or speed up fulfilling goals. In essence, performance expectancy represents the advantages and benefits that people believe come with adopting technology, where an increase in the usefulness of the technology for consumers results in higher chances of using it.

According to Tomić, Kalinić [22], performance expectancy is frequently regarded as the most crucial element influencing technology adoption. Previous studies have indicated a favorable relationship between technology usage behavior

and performance expectancy [7, 13, 29]. Furthermore, research has connected the intention to adopt digitization with performance expectations. e put out the following hypotheses for our investigation in light of this evidence:

H1: Performance expectancy significantly impacts Palestinian customers' attitudes toward adopting e-banking services.

H7: Performance expectancy significantly impacts Palestinian customers' intentions to adopt e-banking services.

H7.1: Attitudes toward adopting e-banking services mediate the relationship between performance expectancy and intention to use e-banking services.

Effort expectation was described by Venkatesh, Morris [11] as the technology's perceived simplicity and clarity of use. It stands for the comfort and convenience people anticipate when utilizing technology to do a specific task.

Previous studies indicate that effort expectancy and technology acceptance are strongly positively correlated in several different industries [30-32]. Convenience, usability, availability, and accessibility are frequently cited as key factors influencing consumer acceptance in research on mobile payments, health services, and e-commerce [33]. This is in line with the common knowledge that clients are more prone to accept technologies they think might be simple and straightforward to use [29]. Based on this already-established connection, this research puts up the following hypotheses:

H2: Effort expectancy significantly impacts Palestinian customers' attitudes toward adopting e-banking services.

H8: Effort expectancy significantly impacts Palestinian customers' intentions to adopt e-banking services.

H8.1: Attitudes toward adopting e-banking services mediate the relationship between effort expectancy and intention to use e-banking services.

Social influence theory posits that social norms and beliefs shape individuals' technology acceptance. This influence stems from opinions, recommendations, and the social force exerted by friends, family, colleagues, and other significant individuals or groups [11]. Therefore, the social expectancy factor emphasizes the degree to which customers' social circle influences their rate of

technology adoption, either favorably or unfavorably.

Arab culture, especially Palestinian culture, is defined as allocentric. It acknowledges the importance of social contexts in determining whether or not customers will embrace technology. This idea is supported by earlier research, such as the research on the adoption of health records by Holtz and Krein [34], electronic care records by Wills, El-Gayar [35], and technological acceptability in healthcare by Kijsanayotin, Pannarunothai [36] all emphasize the important impact of social influence. These findings inform the following hypotheses:

H3: Social influence significantly impacts Palestinian customers' attitudes toward adopting e-banking services.

H9: Social influence significantly impacts Palestinian customers' intentions to adopt e-banking services.

H9.1: Attitudes toward adopting e-banking services mediate the relationship between social influence and intention to use e-banking services.

This study also investigates the impact of facilitating conditions on Palestinian customers' attitudes toward adopting e-banking services. Facilitating conditions, as described by Venkatesh, Morris [11], relate to the perceived accessibility of technological resources and facilities that enable the utilization of technologies. This includes elements such as providing technical support services, accessibility to infrastructure, and implementation of organizational policies. These factors impact how consumers view the ease of technology use by minimizing or removing any challenges they may encounter [37].

Based on previously conducted studies, the availability of training programs and continuous technical support services substantially affects the willingness to utilize technological devices for electronic banking. Research conducted by Zin, Kim [18] reveals that these support systems are crucial in helping users overcome technical obstacles, leading to a higher percentage of technology adoption. Given this line of thinking, we put up the following hypotheses:

H4: Facilitating conditions significantly impact Palestinian customers' attitudes towards adopting e-banking services.

H10: Facilitating conditions significantly impact Palestinian customers' intentions to adopt e-banking services.

H10.1: Attitudes toward adopting e-banking services mediate the relationship between facilitating conditions and intention to use e-banking services.

Demographic Variables

Various studies, including the one conducted by Savić and Pešterac [38], have shown that the core UTAUT variables significantly impact a user's willingness to use electronic banking technology. However, there are more factors to consider, such as the user's age, gender, income, and education level, which may affect how the UTAUT aspects influence the user's behavior [15]. Therefore, the following hypotheses are suggested:

H12: There is a significant effect of the Palestinian customers' demographic variables (gender, age, education, income) on intentions to adopt e-banking services.

H13: The Palestinian customers' demographic variables (gender, age, education, income) significantly moderated the relationship between customer attitudes and intentions to adopt e-banking services.

- **Study Model**

The study will adopt the application of the Unified Theory of Acceptance and Use of Technology model (UTAUT) questionnaire to describe the behavior of the respondents towards adopting electronic banking services in Palestine. The study's theoretical model is portrayed in Figure 1. The key latent variable will indicate the degree of e-banking service acceptance (AE), and the effect of performance expectancy (PE), effort expectancy (EE), social influence (SE), and facilitating conditions (FC) constructs on the latent variable will be studied. Also, the moderating influence of gender, age, education, and income will be studied.
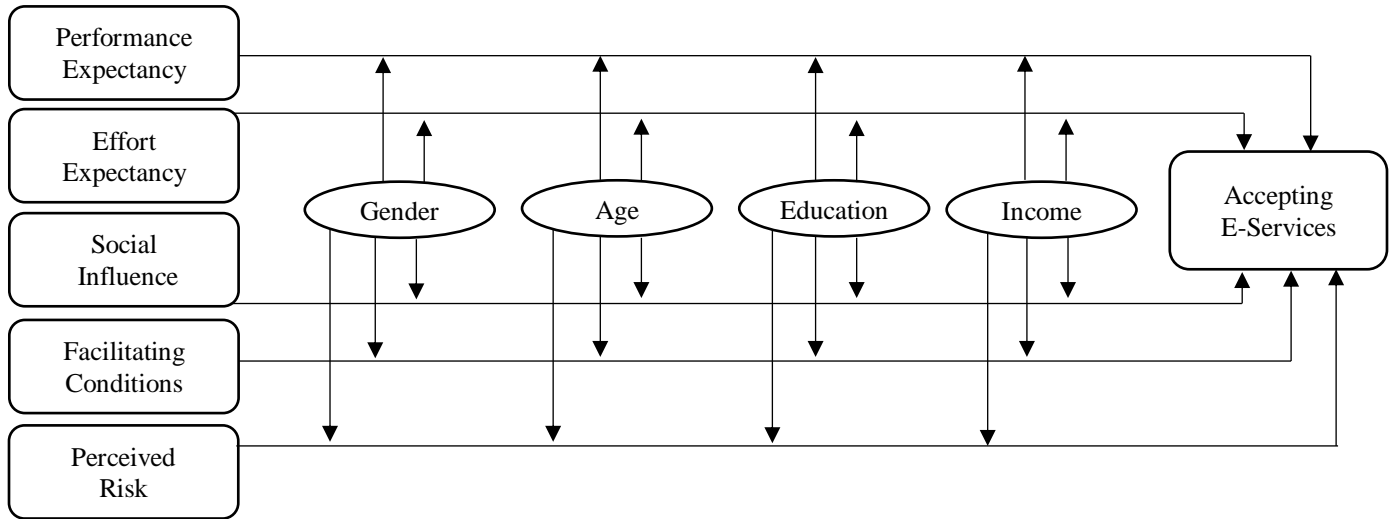
Figure 1: Theoretical Model

4. MATERIALS AND METHODS

Smartphone penetration and financial inclusion ratio are the two primary pillars driving financial technology services. According to the Household Survey on Information and Communications Technology 2019, the customer base for banks in Palestine consists of 50% of adults over the age of 18, and 79.6% of Palestinian households have internet access. 86% of Palestinian homes have one or more smartphones (91% in the West Bank and 78% in Gaza). Furthermore, the survey findings revealed that 75% of Palestinians aged 10 and up had a cell phone (82% in the West Bank and 64% in the Gaza Strip) [39].

There are 13 traditional banks (7 local and 6 foreign) operating in Palestine with 378 branches. Eight out of 13 banks have an online or mobile banking component. These banks are the Bank of Palestine, the Palestine Investment Bank, Islamic International Arab, Palestine Islamic Bank, Al Quds Bank, The National Bank, the Safa Bank, and the Arab Bank [6].

A. Sample and Data Collection

A total of 306 questionnaires were collected from 500 traditional bank customers in Palestine, specifically the West Bank. The questionnaires were disseminated online via several social media channels, including Instagram, Facebook, WhatsApp, Facebook Messenger, and email. Responses were collected for 30 days. This study was restricted to respondents who had accounts in traditional banking. Empirical research used the convenience sampling method.

B. Data and Measurement Items

The study seeks to collect information from Palestinians with bank accounts using survey methods in order to identify the factors that may impact their views regarding the acceptance and use of electronic bank services.

The data for this study were collected using a structured questionnaire that was developed and revised based on previous research. There are three sections to this questionnaire. Table 1 summarizes the demographic data provided by the respondents. The second section contains the variables measured in the study: performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived risk. The final section of the questionnaire contains attitudes toward use and intentions to use. In the second and third parts of the questionnaire, we used a balanced Five-Point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to collect responses from the participants.

AI tools such as ChatGPT were used to detect language errors and mistakes. SPSS software is utilized to conduct descriptive statistics and reliability testing. This study used Smart-PLS 3 for hypothesis testing and to implement a structural equation model (SEM) analysis, including the measurement and structural models. Model fit indices were utilized to determine if the model adequately matched the sample observations.

Table 1: Demographic characteristics (N = 306)

	Frequency	Percent
Gender		

Male	158	51.6%
Female	148	48.4%
Age		
18-28	109	35.6%
29-39	109	35.6%
40-49	59	19.3%
50 and more	29	9.5%
Education		
Community College or under	28	9.2%
Bachelor's Degree	199	65%
Master's or Doctorate Degree	79	25.8%
Income		
Less than 3000	91	29.7%
3001-6000	149	48.7%
6001-9000	36	11.8%
More than 9000	30	9.8%
Usage E-banking		
NO	16	5.2%
Yes	245	80.1%
Not stated	45	14.7%

Sample Descriptive Statistics (Demographic Characteristics)

The final sample comprised 306 completed and usable responses. The majority of respondents (51.6%) were male. More than 70.2% of the respondents were between 18 and 39, while 28.8 % were above 40. For educational status, more than half of the respondents had a bachelor's degree, 65%, 25.8% of the respondents had a master's or doctorate, and only 9.2% of the respondents had a community college or less. Finally, most respondents (48.7%) reported a monthly income between 3001 and 6000 NIS, while 29.7% had an income of 3000 or less, and only 21.6% of respondents' income was more than 6000.

Multiple comparisons for age, education level, and income vs. dependent variable

Table 2 depicts the relationships between the controlling variables age, education level, and income and the study constructs. A one-way ANOVA test was conducted to determine if there are significant variations in customers' perceptions of the variables that influence their adoption of e-banking depending on their demographic data.

The study employed Post hoc comparisons using the Tukey HSD test to examine the statistical differences between groups.

The ANOVA test results are shown in Table 2. The results indicated that younger customers who fall within the 18 and 28 age range have more tools and resources to access the technological infrastructure and utilize e-banking services effectively compared to consumers between the ages of 29 and 39. Additionally, the test indicated that customers with lower educational backgrounds, specifically those with a community college or under, face more challenges using e-banking services than customers with higher education levels, such as master's or doctoral degrees. Likewise, a customer with an income between 6001-9000 faces challenges in using electronic banking services compared to consumers with an income of more than 9000. Higher-income customers may have easy access to resources and technology, resulting in a smoother experience when utilizing e-banking services.

Table (2): Multiple comparisons for Age, Education Level, and Income VS Dependent variable

Dependent variables	Age		Education		Income		Mean Difference (I-J)	Std Error	sig	95%Confidence Interval	
	(I)	**(J)**	**(I)**	**(J)**	**(I)**	**(J)**				Lower bound	Upper Bound
Effort Expectancy			Masters or doctorate More than 9,000	Community college or less 6001-9,000			1.708 2.017	0.694 0.779	0.038 0.049	0.07 0.01	3.34 4.03
Social Influence					More than 9000	6001-9000	**2.017**	**0.779**	**0.49**	**0.1**	**4.03**

Facilitating Conditions	18-28	**39-29**					1.147	**0**.378	0.014	**0.17**	**2.12**

SEM Analysis

Smart-PLS software will terminate the estimation whenever the algorithm's stop condition is met or when the maximum amount of iterations (5000) is achieved, whatever occurs first. To obtain a reliable estimation, we want the method to converge prior to completing the maximum number of iterations [40]. In the present research, the algorithm converged after only seven iterations, suggesting that the sample size is acceptable, with no outliers or excessively similar values in indicators, implying that our estimate is correct.

Measurement Model

In this study, we evaluated the convergent validity of the constructs by investigating the values of the average variance extracted (AVE), Cronbach's Alpha, and composite reliability and examining the indicators' internal consistency using the average inter-item correlation (rho_A). VE values greater than 0.5, Cronbach's Alpha, composite reliability, and Rho_A values greater than 0.700 indicate good convergent validity [41]. Table 3 displays Cronbach's Alpha values for all constructs, which range from 0.809 to 0.900, and composite reliability ranges from 0.847 to 0.923. ll values fall above 0.700 and less than 0.950; therefore, they exceed the recommended threshold, indicating strong internal consistency within the constructs.

To evaluate discriminant validity, we utilized the standard criterion that the average variance extracted (AVE) of any latent variable must transcend its maximum squared correlation with any other latent variable [42-44]. Table 3 demonstrates this technique; the square root of the AVE for each construction is provided along the diagonal. The comparison indicates that all diagonal AVE values are greater than the comparable off-diagonal correlations, hence demonstrating discriminant validity.

Table 3: Descriptive analysis of the constructs.

	AU	EE	FC	IU	PR	PE	SI
Cronbach's Alpha	0.809	0.879	0.809	0.830	0.816	0.900	0.836
Rho_A	0.813	0.882	0.831	0.832	0.825	0.901	0.843
Composite Reliability	0.863	0.912	0.869	0.876	0.872	0.923	0.847
AVE	0.513	0.674	0.575	0.542	0.579	0.666	0.531
Fornell-Larcker							
AU	0.716						
EE	0.544	0.117	0.821				
FC	0.639	0.054	0.685	0.758			
IU	0.693	0.07	0.49	0.584	0.736		
PR	-0.237	-0.05	-0.272	-0.241	-0.211	0.761	
PE	0.584	0.114	0.488	0.568	0.569	-0.273	0.816
SI	-0.094	0.046	-0.056	-0.107	-0.104	0.037	-0.108

Examining convergent and discriminant validity through the study of factor loadings is a supplementary method to the previously addressed metrics. As Voorhees, Brady [43] and Hair, Ringle [42] underline, each indicator should demonstrate a greater loading on its target construct relative to any other component for appropriate convergent validity. Ideally, these loadings should exceed the 0.708 threshold and feature a t-statistic surpassing ±1.96, suggesting significance at the 5% level [41].

The factor loadings and cross-loadings for the multi-item measures used in this investigation are computed and shown in Table 4. A complete assessment of these values finds good evidence for convergent and discriminant validity. While specific loadings may go below the required 0.700 standard, they typically remain over 0.500. Furthermore, their absence does not impose a significant impact on the composite reliability and average variance extracted (AVE) values, as shown by Wong [40] and Hair, Ringle [42]. Therefore, we

keep them in the model. This finding implies that the overall construct assessment retains resilience even if particular indicators might not meet the optimal level of individual significance.

Table 4: Factor cross-loadings.

	(AU)	(EE)	(FC)	(IU)	(PE)	(PR)	(SI)	T Statistics	P Value
AU1	**0.721**	0.358	0.495	0.535	0.424	-0.188	-0.096	16.414	0.000
AU2	**0.777**	0.415	0.486	0.543	0.466	-0.193	-0.037	26.302	0.000
AU3	**0.726**	0.369	0.423	0.478	0.370	-0.184	-0.085	20.441	0.000
AU4	**0.637**	0.367	0.428	0.411	0.396	-0.149	-0.094	11.694	0.000
AU5	**0.713**	0.374	0.407	0.479	0.400	-0.151	-0.051	15.985	0.000
AU6	**0.717**	0.448	0.495	0.518	0.445	-0.147	-0.048	17.515	0.000
EE1	0.469	**0.822**	0.580	0.445	0.376	-0.21	-0.115	34.477	0.000
EE2	0.473	**0.850**	0.616	0.432	0.401	-0.244	-0.038	41.256	0.000
EE3	0.416	**0.848**	0.596	0.378	0.403	-0.207	-0.001	37.313	0.000
EE4	0.379	**0.811**	0.514	0.340	0.393	-0.210	-0.041	29.287	0.000
EE5	0.479	**0.772**	0.494	0.399	0.427	-0.241	-0.026	23.668	0.000
FC1	0.487	0.442	**0.751**	0.444	0.440	-0.141	-0.116	20.697	0.000
FC2	0.560	0.640	**0.878**	0.510	0.462	-0.230	-0.090	64.186	0.000
FC3	0.502	0.527	**0.785**	0.485	0.519	-0.253	-0.089	24.252	0.000
FC4	0.351	0.285	**0.561**	0.296	0.269	-0.083	-0.098	8.169	0.000
FC5	0.496	0.640	**0.779**	0.446	0.430	-0.178	-0.021	18.898	0.000
IU1	0.466	0.383	0.485	**0.647**	0.447	-0.184	-0.013	13.945	0.000
IU2	0.520	0.274	0.377	**0.742**	0.429	-0.023	-0.069	18.439	0.000
IU3	0.562	0.386	0.424	**0.777**	0.470	-0.127	-0.053	22.572	0.000
IU4	0.449	0.352	0.395	**0.728**	0.330	-0.171	-0.157	19.177	0.000
IU5	0.524	0.337	0.416	**0.768**	0.442	-0.179	-0.142	21.304	0.000
IU6	0.531	0.430	0.480	**0.747**	0.384	-0.249	-0.032	22.549	0.000
PE1	0.516	0.448	0.506	0.517	**0.822**	-0.250	-0.080	29.216	0.000
PE2	0.430	0.362	0.405	0.445	**0.816**	-0.222	-0.100	19.791	0.000
PE3	0.489	0.401	0.468	0.464	**0.820**	-0.163	-0.093	25.593	0.000
PE4	0.449	0.388	0.487	0.458	**0.774**	-0.215	-0.086	22.937	0.000
PE5	0.445	0.344	0.427	0.453	**0.816**	-0.228	-0.122	28.306	0.000
PE6	0.521	0.435	0.482	0.446	**0.847**	-0.257	-0.05	36.014	0.000
PR1	-0.195	-0.157	-0.154	-0.204	-0.221	**0.778**	0.064	15.133	0.000
PR2	-0.163	-0.187	-0.159	-0.198	-0.217	**0.818**	0.014	19.962	0.000
PR3	-0.179	-0.217	-0.211	-0.12	-0.181	**0.780**	-0.016	15.997	0.000
PR4	-0.194	-0.195	-0.167	-0.137	-0.210	**0.783**	0.018	15.727	0.000
PR5	-0.167	-0.302	-0.247	-0.128	-0.205	**0.632**	0.056	8.669	0.000
SI1	-0.030	-0.079	-0.048	-0.008	0.003	-0.033	**0.675**	3.099	0.001
SI2	-0.035	-0.014	-0.063	-0.031	-0.028	0.002	**0.696**	3.068	0.001
SI3	-0.047	-0.012	-0.045	-0.066	-0.043	0.027	**0.788**	3.574	0.000
SI4	-0.097	-0.065	-0.116	-0.115	-0.143	0.033	**0.894**	3.066	0.001
SI5	0.040	-0.016	-0.011	0.000	-0.037	-0.087	**0.543**	1.965	0.025

Discriminant validity was further validated by assessing the correlations' heterotrait-monotrait (HTMT) ratio. As displayed in Table 5, the HTMT values varied from 0.061 to 0.841, remaining significantly below the threshold of 0.85 suggested by Hair, Howard [41], Voorhees, Brady [43], and Benitez, Henseler [45]. This discovery further proves the constructs' uniqueness, increasing the measurement model's overall validity.

Table 5: Heterotrait-Monotrait (HTMT) ratio.

	AU	EE	FC	IU	PR	PE
EE	0.639					
FC	0.784	0.795				
IU	0.841	0.569	0.707			
PR	0.291	0.328	0.296	0.254		
PE	0.681	0.546	0.658	0.655	0.317	
SI	0.101	0.061	0.109	0.092	0.073	0.091

Finally, it is necessary to guarantee the absence of multicollinearity. In this condition, independent variables display substantial intercorrelations, severely affecting parameter estimates and standard errors in structural equation modeling (SEM). We employed the variance inflation factor (VIF) as an indicator to address this problem. As a standard role, VIF values below 3.0 frequently reflect a lack of significant multicollinearity [41]. Following this criterion, we investigated the VIF values for all indicators inside the measurement and structural models. None of the VIF values surpassed the specified threshold of 3.0. This suggests that multicollinearity is not a significant issue in the measurement or structural model, verifying the reliability and validity of the parameter estimations achieved in this work.

Structural Equation Model

• **Assess Structural Model Prediction.**

The coefficient of determination is one of the most often adopted metrics for evaluating structural model performance, appointed as R^2. Hair, Howard [41] defines the coefficient of determination as the proportion of variation in a dependent variable that the model's independent variables can explain. Within this study, Table 6 displays R^2 values, giving insights into the predictive potential of the latent variables. The results reveal that the variables (AU, PR, FC, SI, PE, EE, and the sum of demographic factors) explain 54.3% of the variation in the dependent variable, IU. Likewise, the variables (PR, FC, SI, PE, EE) jointly explain 48.4% of the variation in AU.

Table 6: Coefficient of multiple determinations (R^2). Source: Own research.

	Original Sample	T Statistics	P Values
Attitude Toward Use (AU)	0.484	10.181	0.000
Intention to Use (IU)	0.543	10.306	0.000

The model fit indices are shown in Table 7. SRMR of 0.055, SRMS_Theta of 0.099, D_ULS, and D_G indicate an acceptable model fit according to the criteria set by Benitez, Henseler [45], who suggest a satisfactory fit is shown by an SRMR value less than 0.100 and an SRMS_Theta value less than 0.120 and when both D_G and D_ULS values falling within the confidence intervals.

Table 7: Model fit indexes

	D_ULS				D_G				SRMR			
	Original Sample	Sample Mean	95%	99%	Original Sample	Sample Mean	95%	99%	Original Sample	Sample Mean	95%	99%
Saturated Model	2.681	1.951	2.875	4.735	0.883	0.703	0.898	1.112	0.054	0.046	0.056	0.072

Estimated Model	2.707	1.971	2.809	4.655	0.887	0.704	0.882	1.093	0.055	0.046	0.056	0.072

Predictive relevance ($Q^2_{predict}$) is another essential component of structural model assessment. According to Hair, Howard [41], predictive relevance highlights how well the model can predict the indicators linked to each endogenous latent component. Positive $Q^2_{predict}$ values for a given endogenous latent variable imply that the structural model demonstrates the predictive potential for that specific construct.

Referring to Table 8, all $Q^2_{predict}$ values are positive for both the AU and IU endogenous constructs. This means the model displays a moderate predictive significance about these primary latent variables.

Table 8: Model predictive relevance ($Q^2\_predict$).

	RMSE	MAE	$Q^2\_predict$
Attitude Toward Use (AU)	0.743	0.579	0.460
Intention to Use (IU)	0.799	0.586	0.382

- **Hypothesis Testing**

Partial least squares structural equation modeling (PLS-SEM) is a variance-based approach noted for its potential to manage complicated models with restricted sample sizes and non-normal data distributions, making it prominent in various study fields [41, 46]. We use Smart PLS software, which provides a user-friendly interface for doing PLS-SEM analysis, to assess the provided hypotheses in our structural equation model.

As shown in Table 9. Control variables, such as consumers' income level, gender, and educational level, have no significant effect on consumers' intention to use e-banking services (IU). Conversely, age has a positive effect on IU (β = 0.086, p = 0.023)

Moreover, most of the hypotheses are significantly supported. The consumers' performance expectation (PE) shows a significant favorable influence on consumers' (IU) (β =0.184, p = 0.001), whereas consumers' effort expectancy (EE) has a significant positive effect on their IU (β = 0.140, p = 0.018); Also, the effect of facilitating conditions (FC) found to be positively significant on consumers' IU (β = 0.160, p = 0.012). The effect of consumers' attitudes toward using e-banking services (AU) is positively significant on consumers' IU (β = 0.444, p < 0.001). In contrast, social influence (SI) on consumers' consumers' intention to use e-banking services (IU) was found to be insignificant (β = 0.510, p < 0.001).

- **Mediation Effect**

The data analysis conducted in this research assessed the mediating influence of consumer attitude (AU) on the relationship between independent factors and intention to use e-banking services (IU). The results are shown in Table 9. Facilitating Conditions (FC) reveals the largest mediated effect (β = 0.162, p < 0.001), which is followed by Performance Expectancy (PE) (β = 0.133, p < 0.001). Effort Expectancy (EE) indicates a significant although moderate mediated impact (β =0.062, p = 0.023). However, the data analysis demonstrates that consumer attitude has no significant moderating influence on the associations between perceived risk (PR) and intention to use e-banking services (IU) or between Social Influence (SI) and intention to use e-banking services.

Table 9: Effect analysis.

H	Relationships	β	SD	T Statistics	P Values
H 1	Performance Expectancy (PE) -> Attitude Toward Use (AU)	**0.299**	**0.070**	**4.142**	**0.000**
H 2	Effort Expectancy (EE) -> Attitude Toward Use	**0.140**	**0.070**	**2.088**	**0.018**

|					
	(AU)				
H 3	Social Influence (SI) -> Attitude Toward Use (AU)	-0.014	0.060	0.214	0.415
H 4	Facilitating Conditions (FC) -> Attitude Toward Use (AU)	**0.364**	**0.070**	**5.021**	**0.000**
H 5	Perceived Risk (PR) -> Attitude Toward Use (AU)	-0.028	0.040	0.635	0.263
H 6	Attitude Toward Use (AU) -> Intention to Use (IU)	**0.444**	**0.070**	**6.22**	**0.000**
H 7	Performance Expectancy (PE) -> Intention to Use (IU)	**0.184**	**0.060**	**3.274**	**0.001**
H 7.1	Performance Expectancy (PE) -> Attitude Toward Use (AU) -> Intention to Use (IU)	**0.133**	**0.038**	**3.513**	**0.000**
H 8	Effort Expectancy (EE) -> Intention to Use (IU)	0.058	0.070	0.899	0.184
H 8.1	Effort Expectancy (EE) -> Attitude Toward Use (AU) -> Intention to Use (IU)	**0.062**	**0.031**	**1.998**	**0.023**
H 9	Social Influence (SI) -> Intention to Use (IU)	-0.022	0.050	0.475	0.318
H 9.1	Social Influence (SI) -> Attitude Toward Use (AU) -> Intention to Use (IU)	-0.01	0.027	0.223	0.412
H 10	Facilitating Conditions (FC) -> Intention to Use (IU)	**0.160**	**0.070**	**2.261**	**0.012**
H 10.1	Facilitating Conditions (FC) -> Attitude Toward Use (AU) -> Intention to Use (IU)	**0.162**	**0.038**	**4.235**	**0.000**
H 11	Perceived Risk (PR) -> Intention to Use (IU)	0.005	0.050	0.110	0.456
H 11.1	Perceived Risk (PR) -> Attitude Toward Use (AU) -> Intention to Use (IU)	-0.010	0.019	0.650	0.258
H 12	Age -> Intention to Use (IU)	**0.086**	**0.040**	**2.001**	**0.023**
H 12	Gender -> Intention to Use (IU)	0.043	0.040	0.981	0.163
H 12	Education -> Intention to Use (IU)	-0.030	0.040	0.707	0.240
H 12	Income -> Intention to Use (IU)	-0.022	0.050	0.441	0.330
	Moderating effect				
H 13	Gender-Mod -> Intention to Use (IU)	**-0.148**	**0.07**	**2.283**	**0.011**
H 13	Income-Mod -> Intention to Use (IU)	-0.075	0.07	1.091	0.138
H 13	Age-Mod -> Intention to Use (IU)	0.049	0.06	0.88	0.189
H 13	Education-Mod -> Intention to Use (IU)	0.028	0.06	0.476	0.317
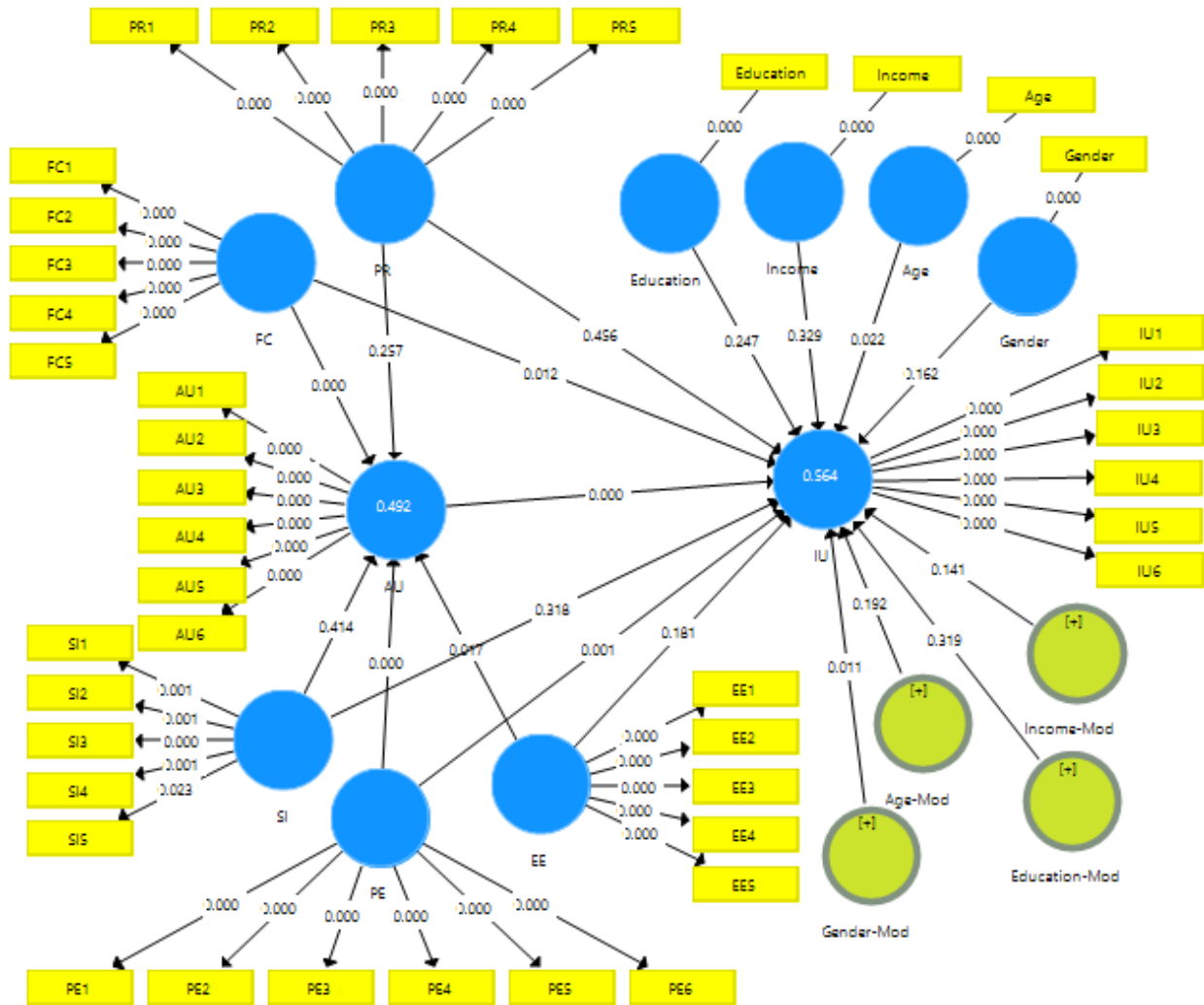
Figure 2: Analysis model.

- **Moderating Effect**

The results demonstrated a substantial moderating influence of gender on the relationship between customers' attitudes toward e-banking service AU and intention to use e-banking services (IU). The beta coefficient (β) is 0.133, and the p-value is less than 0.001. The plot shows a steeper and positive gradient for females compared to males. Thus, this shows that the impact of consumers' attitudes toward using e-banking service AU on intention to use is higher for females than males, as shown in Figure 3.
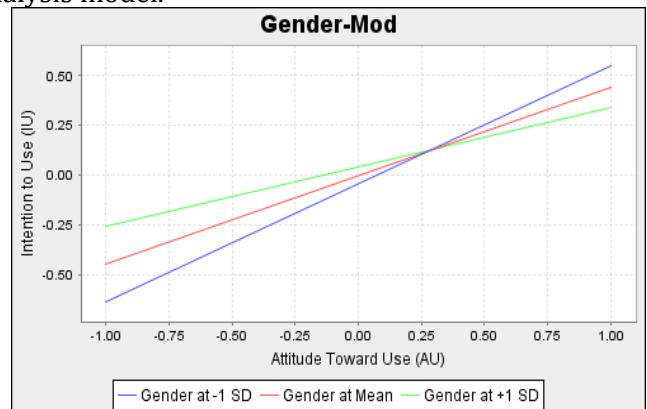
Figure 3: The moderating effect of gender.

- **Importance-Performance Map Analysis**

Importance–Performance Map Analysis (IPMA) is conducted to expand the PLS-SEM results by integrating the performance of each component. For a specific criterion construct, the IPMA contrasts the structural model total impacts

(importance) and the average values of the latent variable scores (performance) to suggest major areas to increase consumers' intention to use e-banking services (IU). To improve the assessed endogenous latent variables' performance level in the future, actions should be adopted with relatively high relevance and relatively low performance [41, 45].

Fig.4 illustrates that the construct total effects of Attitude Toward Use (AU), Performance Expectancy (PE), and Facilitating Conditions (FC) on consumers' intention to use e-banking services

(IU) are 0.461, 0.331, and 0.317, respectively. The performance expectancy has the highest performance 76.9, followed by facilitating conditions 74.7, followed by attitude toward use, and 73.7, which has the highest effect among all other variables. The three of these variables have the highest effect and importance scores, and managers should focus on these factors in relation to other variables that affect IU, which have relatively low impact and performance rates, as shown in Table 10.

Table 10: Performance map.

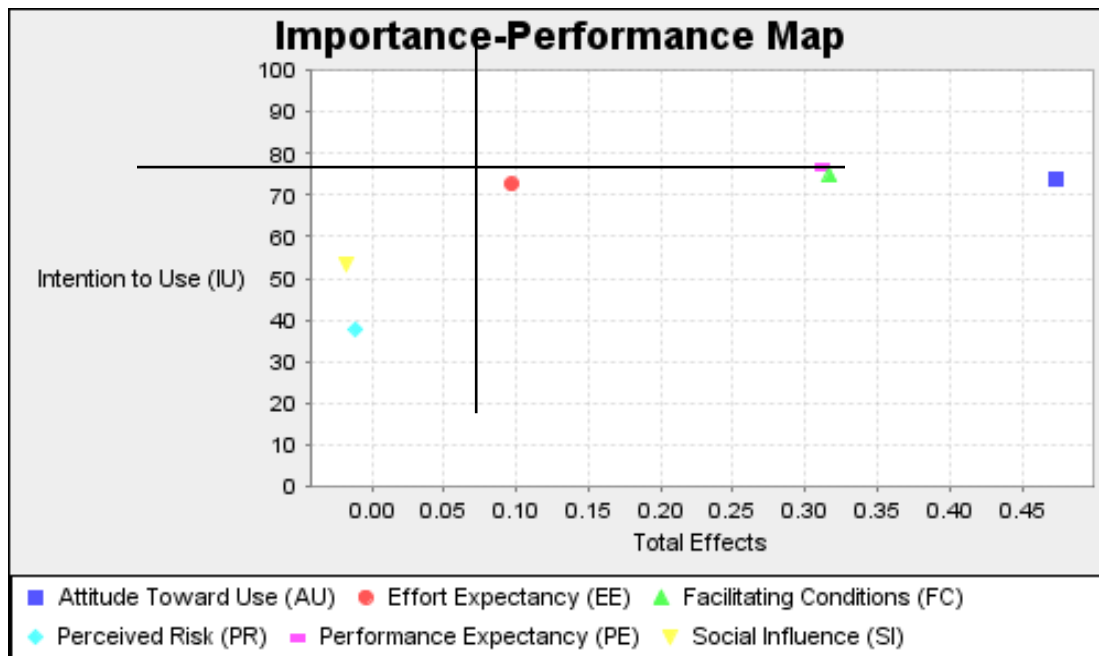| Intention to Use (IU)		
Latent Variables	Performances	Total effect (Importance)
Attitude Toward Use (AU)	73.688	0.461
Performance Expectancy (PE)	76.906	0.331
Facilitating Conditions (FC)	74.709	0.317
Effort Expectancy (EE)	72.659	0.107
Social Influence (SI)	53.705	0.024
Perceived Risk (PR)	37.882	0.014
Mean	**64.925**	**0.209**

Figure 4: Importance – Performance map.

5. RESULTS AND CONCLUSIONS

This study investigates the factors influencing Palestinian adult acceptance and intention to use e-banking. Based on the original construction of UTAUT (performance expectancy (PE), Effort Expectancy (EE), Facilitating Condition (FC), and Social Influence (SI)), our study added Perceived Risk (PR) to the construction and used Attitude to Use (AI) as a mediator. In addition, we expose the control effect of demographic variables (Gender, Age, Educational Level, and income) on the relationships among variables.

This study confirmed that performance expectancy and facilitating conditions had a significant positive effect on the attitude toward and intention to use, and a continuing positive effect was observed when attitude interfered with the relationship as a mediator variable. These findings corroborate prior research that suggests that the usefulness of technology or facilitating technology to use provided by banks' services may affect customers, as in the study of Aviyanti et al. (2021). This implies that support for functions and ease of use should be important aspects of customer service.

Although, the previous studies emphasized the significant positive effect of social influence [10, 47]. And significant negative effect of perceived risk on the attitude toward and intention to use [10, 48]. The effect of social influence on the UTAUT model and the added variable of perceived risk were insignificant in this study. The living circumstances encountered by the Palestinian people, which are defined by issues related to intra-city mobility, can be traced to the limits imposed by the occupation. Nevertheless, the utilization of electronic banking services by Palestinian citizens offers them the convenience of conducting banking transactions quickly and easily through the utilization of banking applications, making the potential social ramifications and associated risks not important in the Palestinian situation.

The results show a significant effect of effort expectancy on attitude toward use and intention to use when using attitude toward use as mediators. However, the effort expectancy of a technology application has an insignificant effect on the intention to use it directly in this study. It is in line with research conducted by Indriyarti, Christian [49]. This direct influence may be attributed to the characteristics of the sample, where a majority of respondents were young individuals between 18 and 38 who were highly aware and extensively engaged in using technological information.

As we mentioned, this study provides factors regarding e-banking customers that can help the banking institution improve the e-banking system to satisfy the needs of different customers. The results clearly show that Palestinian customers are more likely to use e-banking if they perceive the technology as helpful and provides facility conditions. Therefore, the banks must make their e-services more beneficial for their specific needs. The services should also be simplistic and used to facilitate e-banking usage.

In addition, Palestinian banks are responsible for notifying customers about the advantages of their e-services and providing them with facilities for their use. This helps them move existing customers from traditional banks to e-banking, therefore motivating the process of financial inclusion. Furthermore, Palestinian banks do not need to spend more on risks or social impacts and the expected effort in e-banking services.

- *Research Limitation*

Due to the challenging circumstances of inter-city mobility and reaching all segments of society in Palestine, researchers were constrained to collect data using convenience sampling methods and utilize questionnaires exclusively. Consequently, the distribution of respondents in this study is not evenly spread across regions in Palestine, limiting the sample's representativeness within the overall population. In future studies, we hope that the conditions in Palestine will be better, allowing for implementing a stratified sampling method to ensure a more representative sample.

REFERENCES

1. Afshan, S., et al., Internet banking in Pakistan: An extended technology acceptance perspective. 2018. 27(3): p. 383-410.
2. Chofa, S., N. Cooharojananone, and S. Phimoltares. The new screen design for the internet banking websites in Thailand (case study: university student). in 2012 Ninth International Conference on Computer Science and Software Engineering (JCSSE). 2012. IEEE.
3. Nguyen, T.T., et al., Determinants of digital banking services in Vietnam: Applying utaut2 model. 2020. 10(6): p. 680.
4. Federal Reserve Board, The E-Banking Report: The Risks and Opportunities of Internet Financial Services. 2001.
5. International Monetary Fund, E-Banking: Challenges and Opportunities. 2003.
6. Palestine Monetary Authority, Annual Report 2022. 2022, Palestine Monetary Authority: Internet. p. 118.
7. Chang, S.-J., et al., Using FAHP and CBR to evaluate the intention of adoption of internet banking service: The example of web ATM. 2020. 39(3): p. 2869-2879.
8. Palestine Monetary Authority, Financial Inclusion Diagnostic Report – A Summary. 2023: p. 37.
9. Ali, J.J.T.J.o.D.A., Factors Affecting the Adoption of Digital Banking Services in India: Evidence from World Bank's Global Findex Survey. 2023. 57(2): p. 341-353.
10. Putra, A.H., et al., Factors Affecting Intention to Use on the Digital Banking Services Offered by Digital Banks in Indonesia. 2023.
11. Venkatesh, V., et al., User acceptance of information technology: Toward a unified view. 2003: p. 425-478.
12. Akbar, N.J., et al., Examining the factors influencing adoption of e-banking services in Chennai City. 2020. 15: p. 181-192.
13. Alduais, F. and M.O.J.E. Al-Smadi, Intention to Use E-Payments from the Perspective of the Unified Theory of Acceptance and Use of Technology (UTAUT): Evidence from Yemen. 2022. 10(10): p. 259.
14. Çelik, Z. and A.J.Ö.D. Uslu, A BIBLIOMETRIC ANALYSIS OF THE LITERATURE ON THE ORIGINS OF THE TECHNOLOGY ACCEPTANCE MODEL (TAM) AND A MARKETING-SIDED APPROACH TO TAM. 2022.
15. Lichtenstein, S. and K.J.J.o.e.c.r. Williamson, Understanding consumer adoption of internet banking: an interpretive study in the Australian banking context. 2006. 7(2): p. 50.
16. Hennington, A. and B.D.J.C.o.t.A.f.I.S. Janz, Information systems and healthcare XVI: physician adoption of electronic medical records: applying the UTAUT model in a healthcare context. 2007. 19(1): p. 5.
17. Holden, R.J., B.-T.J.B. Karsh, and I. Technology, A theoretical model of health information technology usage behaviour with implications for patient safety. 2009. 28(1): p. 21-38.
18. Zin, K.S.L.T., et al., A Study on Technology Acceptance of Digital Healthcare among Older Korean Adults Using Extended Tam (Extended Technology Acceptance Model). 2023. 13(2): p. 42.
19. Collerette, P., P. Legris, and M.J.J.o.C.M. Manghi, A successful IT change in a police service. 2006. 6(2): p. 159-179.
20. Akhtar, N. and K.F.J.J.o.M.S. Khawaja, Investigating Mobile Learning Acceptance in Pakistan: The Moderating Effect of Discomfort and Insecurity in Unified Theory of Acceptance and Use of Technology. 2018. 12(1).
21. Pavlou, P.A., H. Liang, and Y.J.M.q. Xue, Understanding and mitigating uncertainty in online exchange relationships: A principal-agent perspective. 2007: p. 105-136.
22. Tomić, N., Z. Kalinić, and V.J.P.E.J. Todorović, Using the UTAUT model to analyze user intention to accept electronic payment systems in Serbia. 2023. 22(2): p. 251-270.
23. Teo, T. and J.J.I.L.E. Noyes, Explaining the intention to use technology among pre-service teachers: a multi-group analysis of the Unified Theory of Acceptance and Use of Technology. 2014. 22(1): p. 51-66.
24. Ajzen, I.J.J.o.a.s.p., Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. 2002. 32(4): p. 665-683.
25. Rana, N.P. and Y.K.J.G.I.Q. Dwivedi, Citizen's adoption of an e-government system: Validating extended social cognitive theory (SCT). 2015. 32(2): p. 172-181.
26. Alturas, B.J.R.A.i.T.A.M. and Theories, Models of acceptance and use of technology research trends: Literature review and exploratory bibliometric study. 2021: p. 13-28.
27. Rastogi, G., H. Verma, and R.J.S.J.o.M. Sushil, Determining factors influencing cloud services adoption in India. 2018. 13(2): p. 335-352.
28. Venkatesh, V. and H.J.D.s. Bala, Technology acceptance model 3 and a research agenda on interventions. 2008. 39(2): p. 273-315.
29. Kwarteng, M., et al., Extending the UTAUT model to understand the barriers towards SME digitalization in the Czech Republic. 2022. 17(2): p. 403-424.
30. Alshehri, M., et al., The Effects of Website Quality on Adoption of E-Government Service: AnEmpirical Study Applying UTAUT Model Using SEM. 2012.
31. Sheng, Z., et al., A compact and low-loss MMI coupler fabricated with CMOS technology. 2012. 4(6): p. 2272-2277.
32. Sun, Y., et al., Understanding the acceptance of mobile health services: a comparison and integration of alternative models. 2013. 14(2): p. 183.
33. Tetteh, J.E.J.J.o.I.C., Electronic banking service quality: Perception of customers in the Greater Accra region of Ghana. 2022. 21(1): p. 104-131.
34. Holtz, B. and S.J.J.o.T.i.H.S. Krein, Understanding nurse perceptions of a newly implemented electronic medical record system. 2011. 29(4): p. 247-262.
35. Wills, M.J., O.F. El-Gayar, and D. Bennett, Examining healthcare professionals' acceptance of electronic medical records using UTAUT. 2008.
36. Kijsanayotin, B., S. Pannarunothai, and S.M.J.I.j.o.m.i. Speedie, Factors influencing health information technology adoption in Thailand's community health centers: Applying the UTAUT model. 2009. 78(6): p. 404-416.
37. Meuter, M.L., et al., The influence of technology anxiety on consumer use and experiences with self-service technologies. 2003. 56(11): p. 899-906.

38. Savić, J. and A.J.T.E.j.o.a.e. Pešterac, Antecedents of mobile banking: UTAUT model. 2019. 16(1).

39. Palestinian Central Bureau of Statistics, Household Survey on Information and Communications Technology, 2019. 2020: Ramallah - Palestine.

40. Wong, K.K.-K., Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. Marketing Bulletin, 2013. 24(1): p. 1-32.

41. Hair, J.F., M.C. Howard, and C. Nitzl, Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. Journal of Business Research, 2020. 109: p. 101-110.

42. Hair, J.F., C.M. Ringle, and M. Sarstedt, PLS-SEM: Indeed a Silver Bullet. Journal of Marketing Theory and Practice, 2011. 19(2): p. 139-152.

43. Voorhees, C.M., et al., Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. Journal of the Academy of Marketing Science, 2016. 44(1): p. 119-134.

44. Sarstedt, M. and J.-H. Cheah, Partial least squares structural equation modeling using SmartPLS: a software review. Journal of Marketing Analytics, 2019. 7(3): p. 196-202.

45. Benitez, J., et al., How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. Information & Management, 2019.

46. Sarstedt, M., C.M. Ringle, and J.F. Hair, Partial least squares structural equation modeling. Handbook of market research, 2017: p. 1-40.

47. Aviyanti, R.D., et al., Analysis of acceptance of accounting information system implementation based on electronic payment using the UTAUT model. 2021. 29(2): p. 119-149.

48. Lee, J.-M., B. Lee, and J.-Y.J.I.J.o.E.C.S. Rha, Determinants of mobile payment usage and the moderating effect of gender: Extending the UTAUT model with privacy risk. 2019. 10(1): p. 43-64.

49. Indriyarti, E.R., et al., Digital bank channel distribution: Predictors of usage attitudes in Jakarta's gen Z. 2023. 21(2): p. 21-34.