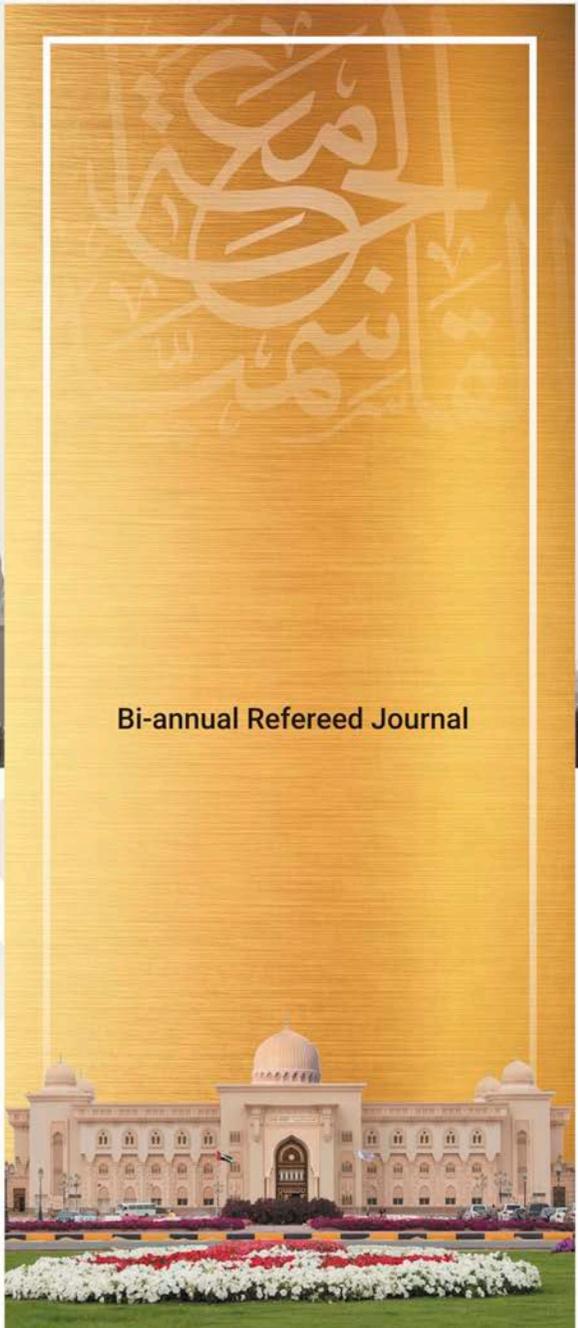


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استكشاف العوامل التي تؤثر على النية في استخدام المحافظ الإلكترونية
لعمليات الدفع في فلسطين

EXPLORING FACTORS INFLUENCING THE INTENTION
OF USING ELECTRONIC WALLETS FOR TRANSACTION
PAYMENTS IN PALESTINE¹

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الملخص

تستكشف هذه الدراسة اعتماد المحافظ الإلكترونية في فلسطين، وذلك باستخدام التحليل العاملي التوكيدي (CFA) ونمذجة المعادلات الهيكلية (SEM). يقيم الإطار الشامل ثمانية عوامل رئيسية: النية السلوكية، وسهولة الاستخدام المدركة، والفائدة المدركة، والتأثير الاجتماعي، وظروف التسهيل، ومخاوف الخصوصية، وخصائص الابتكار، من خلال تحليل بيانات 312 مشاركاً. يسلط البحث الضوء على الدور الحاسم لسهولة الاستخدام المدركة في التأثير على النية السلوكية، مع التركيز على واجهات سهلة الاستخدام. كما أن التأثير الاجتماعي، والفائدة المدركة، وخصائص الابتكار تشكل أيضاً، بشكل كبير، شكل اعتماد المحفظة الإلكترونية. إن التحقق الصارم من خلال تحميلات العوامل ومؤشرات جودة الملاءمة يعزز من صحة نموذج القياس المستخدم. توفر الدراسة رؤى قابلة للتنفيذ لأصحاب المصلحة، وتتناول عوامل مثل سهولة الاستخدام والتأثير الاجتماعي. ومع الاعتراف بقيود ومحددات الدراسة، فإن الباحثين يقترحون سبلاً للبحث المستقبلي وإدراك الطبيعة الديناميكية لاعتماد التكنولوجيا في هذا المشهد المتطور.

Abstract

This study explores e-wallet adoption in Palestine, employing Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). The comprehensive framework assesses eight key factors: behavioral intention, perceived ease of use, perceived usefulness, social influence, facilitating conditions, privacy concerns, and innovation characteristics. Analyzing data from 312 participants, the research highlights the critical role of perceived ease of use in influencing behavioral intention, emphasizing user-friendly interfaces. Social influence, perceived usefulness, and innovation characteristics also significantly shape e-wallet adoption. Rigorous validation through factor loadings and goodness-of-fit indices strengthens the measurement model's validity. The study provides actionable insights for stakeholders, addressing factors like ease of use and social influence. Acknowledging limitations, it suggests avenues for future

research, recognizing the dynamic nature of technology adoption in this evolving landscape.

الكلمات الدالة: المحافظ الإلكترونية، الدفع الرقمي، تبني التكنولوجيا، التكنولوجيا المالية، فلسطين.

Keywords: E-Wallets, Digital Payment, Technology Adoption, Financial Technology, Palestine.

1.0 Introduction

The integration of digital technologies into financial systems has become a hallmark of the contemporary global economy, transforming the way individuals engage with financial services. Among the myriad of digital financial tools, electronic wallets (e-wallets) have emerged as a prominent and convenient means of conducting financial transactions. This paper delves into the specific context of Palestine, exploring the behavioral intentions that drive individuals toward the adoption and utilization of e-wallets in the region.

In recent years, advancements in technology have brought about significant changes in the financial ecosystem globally, and understanding the dynamics of e-wallet adoption in Palestine holds particular significance in the context of enhancing financial inclusion, promoting economic growth, and navigating the challenges posed by the region's geopolitical realities (Altarturi & Othman, 2021). As traditional banking services face limitations and disparities, e-wallets offer a promising avenue to bridge the gaps in financial services, especially for those residing in remote areas or facing barriers to traditional banking. Moreover, studying the behavioral intentions behind e-wallet adoption in Palestine contributes valuable insights to the broader discourse on digital financial inclusion (Alomary, AlShrouf, & Ajouz, 2023).

In the context of Palestine, a region marked by complex geopolitical realities, unique socio-economic and the absence of a sovereign national currency due to occupation, the adoption of digital financial technologies, particularly electronic wallets (e-Wallets),

becomes a critical focal point for analysis. The multifaceted challenges arising from the occupation have profound implications for financial infrastructure and accessibility. Against this backdrop, there is a notable research gap concerning the nuanced determinants that shape the behavioral intentions of Palestinians toward the adoption and utilization of e-wallets, which serve as innovative financial tools in the absence of a traditional banking infrastructure (Ajouz & Abuamria, 2021).

The occupation not only restricts physical movement and access to conventional financial services but also amplifies the urgency of exploring alternative avenues for financial transactions. This study seeks to address the complexities introduced by the geopolitical situation in Palestine and the absence of a national currency, aiming to unravel the factors influencing the adoption of e-wallets. Furthermore, it endeavors to delve into the unique challenges and opportunities that arise in a socio-political context where financial autonomy is constrained, thereby contributing to the development of strategies that can navigate and ameliorate these distinctive obstacles (Altarturi, Altarturi, & Othman, 2021).

By probing the behavioral intentions within this distinctive framework, the research aspires to provide not only academic insights but also practical implications for policymakers, financial institutions, and technology developers. Understanding the dynamics of e-wallet adoption in Palestine is crucial not just for academic discourse but for shaping interventions that address the specific needs of a population navigating financial landscapes under the constraints of occupation and the absence of a sovereign currency.

Therefore, this research aims to address the gap by pursuing the analysis of the factors influencing the behavioral intention of individuals in Palestine towards adopting e-Wallets for transaction payments and providing recommendations for policymakers, financial institutions, and technology developers to enhance the adoption and effective utilization of e-Wallets in Palestine.

2.0 Literature Review

The literature on financial inclusion in developing contexts underscores the transformative impact of digital financial services,

particularly e-wallets, in addressing barriers to traditional banking systems (Altarturi & Ajouz, 2021; Ajouz, Abdullah, & Kassim, 2019; Alzubaidi & Abdullah, 2017; Altarturi & Abduh, 2016). Within the unique socio-economic landscape of Palestine, characterized by geopolitical challenges and constraints on economic opportunities, the role of e-wallets becomes even more pronounced as a catalyst for financial inclusion and economic empowerment (Alshammari, Altarturi, & Alokla, 2021).

The intricate geopolitical realities of Palestine exert a profound influence on financial behaviors within the region. Occupation-related restrictions impose limitations on physical movement and impede access to conventional banking services. E-Wallets, with their inherent capacity for remote and digital transactions, emerge as adaptive and resilient solutions to effectively navigate these constraints (Elagraa, Jamal, & Elkhafif, 2015).

Moreover, existing research has demonstrated that the adoption of e-wallets can contribute to enhancing financial literacy and promoting a more inclusive financial ecosystem. By offering accessible and user-friendly interfaces, e-wallets have the potential to bridge the gap between underserved populations and formal financial services (Bayram, Olasubomi, & Thartori, 2021).

In addition to overcoming spatial and accessibility challenges, e-wallets also hold promise in fostering entrepreneurship and supporting micro, small, and medium-sized enterprises in Palestine. Their flexibility in facilitating online payments and transactions not only expands the scope of financial services but also stimulates economic activities in the face of broader economic challenges (Sayed Ahmed & Abu Sharar, 2019).

The literature underscores the need for continued research to understand the nuanced dynamics of e-wallet adoption in specific geopolitical contexts, such as Palestine. Exploring user perceptions, assessing the impact on financial behaviors, and delving into the potential socio-economic ramifications are critical areas that warrant further investigation (Altarturi, 2021).

As the financial landscape continues to evolve in Palestine, insights gleaned from this expanding body of literature will inform policymakers, financial institutions, and technology developers in

crafting targeted strategies to maximize the positive impact of e-wallets on financial inclusion, economic empowerment, and overall socio-economic development.

3.0 Theoretical Framework and Hypothesis Development

The theoretical framework for understanding the behavioral intention of using e-wallets in Palestine draws upon several established models and theories in the field of technology adoption and innovation. The integration of these frameworks aims to provide a comprehensive lens through which to analyze the unique socio-economic and geopolitical context of Palestine. The primary theoretical underpinnings include the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), the Contextual Integrity theory, and the Innovation Diffusion Theory.

The technology acceptance model (TAM), as conceived by Davis (1989), provides a foundational understanding of user acceptance of technology. In the case of e-wallets in Palestine, the model posits that users' perceived ease of use and perceived usefulness significantly influence their behavioral intention to adopt the technology. Given the challenges posed by the geopolitical situation and the absence of a national currency, individuals in Palestine may prioritize ease of use and perceived benefits in their decision-making regarding e-wallet adoption. User interfaces that are intuitive and transactions perceived as straightforward are likely to garner higher acceptance, aligning with the principles of TAM (Venkatraman, Cheung, Lee, Davis, & Venkatesh, 2018).

The unified theory of acceptance and use of technology (UTAUT) framework, developed by Venkatesh et al. (2003), extends the TAM by incorporating additional factors such as social influence and facilitating conditions. In Palestine, where societal norms and infrastructure availability play critical roles, UTAUT becomes particularly relevant. The social influence of family, friends, and societal expectations may weigh heavily on individuals' decisions to adopt e-wallets. Moreover, the facilitating conditions, encompassing the availability of necessary resources and infrastructure, are pivotal in a region marked by unique challenges arising from the geopolitical situation (Maruping, Bala, Venkatesh, & Brown, 2017).

Nissenbaum's (2004) Contextual Integrity theory introduces an essential dimension by focusing on how privacy concerns and social norms within specific contexts impact users' decisions regarding technology adoption. In the Palestinian context, where privacy concerns are heightened due to geopolitical circumstances, understanding, and addressing these concerns become crucial for the successful adoption of e-Wallets. The preservation of informational norms within the Palestinian society, even in a digital landscape, needs careful consideration to align with the principles of Contextual Integrity (Nissenbaum, 2019).

Rogers' (1961) Innovation Diffusion Theory emphasizes the characteristics of an innovation as determinants of its adoption rate. In the case of e-wallets in Palestine, factors such as relative advantage, compatibility with existing practices, complexity, trialability, and observability collectively influence the intention to adopt. Given the lack of traditional banking infrastructure, the relative advantage of e-wallets, their compatibility with prevalent financial practices, and the ease of trialability may prove crucial in encouraging adoption. Observability, or the visibility of successful e-wallet usage, may serve as a persuasive factor in driving adoption within the community (García-Avilés, 2020).

The integration of these theories and models creates a comprehensive framework that recognizes the interplay of technological and contextual factors influencing the behavioral intention of e-wallet adoption in Palestine. Our choice of theoretical underpinnings is anchored in the need for a comprehensive understanding within the unique socio-economic and geopolitical context of Palestine. TAM provides insights into individual perceptions, UTAUT extends the analysis to social and environmental factors, Contextual Integrity theory addresses privacy concerns, and Innovation Diffusion Theory encapsulates the innovation's inherent characteristics. By integrating these theories and models, our study ensures a nuanced exploration of individual perceptions, social and environmental factors, providing a holistic lens for understanding e-wallet adoption in Palestine. This strategic alignment enhances methodological rigor and theoretical grounding, contributing to the overall depth and reliability of our research findings.

3.1 Constructs Development

Each construct is meticulously chosen to align with the theoretical frameworks and ensure a robust investigation of e-wallet adoption in Palestine.

Behavioral Intention (BI): The inclusion of BI aligns with TAM and UTAUT, reflecting the acknowledged influence of perceived ease of use, perceived usefulness, and social factors on users' intentions to adopt e-wallets. By exploring users' intentions, we gain insights into the likelihood of e-wallet adoption (Venkatesh, Morris, Davis, & Davis, 2003; Davis, 1989).

Perceived Ease of Use (PEOU): PEOU is a crucial construct drawn from TAM, emphasizing the significance of users' perceptions of ease in navigating and utilizing e-wallet features. This aligns with the technology adoption literature, highlighting the importance of user-friendly interfaces (Davis, 1989).

Perceived Usefulness (PU): The inclusion of PU is rooted in TAM, recognizing the impact of users' beliefs about the usefulness of e-wallets on their adoption decisions. This construct provides insights into the practical benefits users perceive in adopting e-wallets (Davis, 1989).

Social Influence (SI): SI is included from UTAUT, acknowledging the influence of social factors such as family, friends, and societal expectations on users' intentions to adopt e-wallets. This construct reflects the social dimensions inherent in technology adoption (Venkatesh, Morris, Davis, & Davis, 2003).

Facilitating Conditions (FC): FC, informed by UTAUT, is included to assess the availability of necessary resources and infrastructure, crucial in a context marked by unique challenges. This construct recognizes the importance of external factors in facilitating or hindering e-wallet adoption (Venkatesh, Morris, Davis, & Davis, 2003).

Privacy Concerns (PC): PC is drawn from the Contextual Integrity theory, emphasizing the heightened privacy concerns in the Palestinian context (Nissenbaum, 2004). Understanding users' apprehensions

about privacy is integral to addressing barriers to e-wallet adoption in this specific geopolitical landscape.

Innovation Characteristics (IC): The inclusion of IC, specifically Relative Advantage and Complexity, is rooted in Innovation Diffusion Theory. These constructs explore how users perceive the advantages and complexity of e-wallets compared to traditional methods, providing insights into the characteristics that influence adoption decisions (Rogers, 1961).

3.2 Hypothesis Development

H1 Perceived Ease of Use (PEOU) positively influences the Behavioral Intention (BI) to use e-wallets in Palestine. Drawing this from the TAM, it is hypothesized that individuals in Palestine who perceive e-wallets as easy to use are more likely to express an intention to adopt and use them for financial transactions.

H2 Perceived Usefulness (PU) positively influences the Behavioral Intention (BI) to use e-wallets in Palestine. Depicting this from the TAM, it is hypothesized that individuals who perceive e-wallets as useful in facilitating financial transactions are more likely to express an intention to adopt and use them.

H3 Social Influence (SI) positively influences the Behavioral Intention (BI) to use e-wallets in Palestine. Building on the UTAUT, this hypothesis posits that the social influence of family, friends, or societal expectations will positively impact the intention of individuals in Palestine to adopt e-wallets.

H4 Facilitating Conditions (FC) positively influence the Behavioral Intention (BI) to use e-wallets in Palestine. Consistent with the UTAUT, it is hypothesized that the availability of facilitating conditions, such as access to necessary infrastructure and resources, positively influences the intention to use e-wallets in Palestine.

H5 Privacy Concerns (PC) negatively influence the Behavioral Intention (BI) to use e-wallets in Palestine. Drawing this from Contextual Integrity theory, it is hypothesized that individuals in Palestine who have heightened concerns about the privacy

implications of using e-wallets will express a lower intention to adopt and use them.

H6 Innovation Characteristics (ICs) (Relative Advantage, Complexity) collectively influence Behavioral Intention (BI) to use e-wallets in Palestine. Building this on Innovation Diffusion Theory, it is hypothesized that the characteristics of e-wallets as perceived by users will collectively influence their intention to adopt and use these digital financial tools in Palestine.

The proposed theoretical framework provides a roadmap for empirical investigations into e-wallet adoption in Palestine. The proposed theoretical framework explores the relative contributions of perceived ease of use, perceived usefulness, social influence, facilitating conditions, privacy concerns, and innovation characteristics to the behavioral intention to use e-wallets. Policymakers, financial institutions, and technology developers can leverage these insights to tailor interventions that align with the unique needs and challenges of the Palestinian population.

4.0 Methodology

The methodology employed in this study is designed to rigorously investigate the behavioral intention of individuals in Palestine regarding the adoption and use of e-wallets. The research aims to leverage quantitative data, to capture the multifaceted dimensions of e-wallet adoption in a context marked by geopolitical complexities and the absence of a sovereign national currency.

4.1 Sampling and Data Collection

Given the practical challenges associated with accessing a diverse and representative sample in a region marked by geopolitical complexities, convenient sampling will be considered. Participants will be selected based on their accessibility and willingness to participate, such as those available in specific geographic locations or community events. The determination of an appropriate sample size is a critical aspect of research design, influencing the reliability and generalizability of study findings. In the context of studying the behavioral intention of using e-wallets in Palestine, where convenience sampling is

considered, careful attention to sample size becomes paramount. Hair (2009) reported that a sample size of at least two hundred and not above four hundred would be a safer method.

Recognizing the convenience-oriented nature of the sampling method, data collection locations were flexible to adapt to the dynamics of participants' daily lives. This included visiting public spaces, markets, educational institutions, and community gatherings. Trained enumerators were stationed at convenient locations to administer the survey in person. They were available to help, clarify questions, and ensure the accurate completion of the questionnaire. Enumerators entered responses directly into electronic devices to facilitate real-time data capture. This approach minimizes errors associated with manual data entry and enhances the efficiency of the data collection process.

4.2 Survey Development

The development of a well-structured questionnaire is critical for capturing the intricacies of individuals' behavioral intention to adopt and use e-wallets in Palestine. Drawing from established models such as the TAM, the UTAUT, the Contextual Integrity theory., and the Innovation Diffusion Theory, the questionnaire aims to elicit responses that contribute to a comprehensive understanding of the factors influencing e-wallet adoption in this unique context.

Below are the items for each of the identified constructs based on technology adoption factors (constructs from TAM and UTAUT), privacy concerns, and innovation characteristics. The survey instrument and questionnaire items were developed and structured in alignment with the theoretical frameworks provided by the relevant theories and models. (Nissenbaum, 2004; Venkatesh, Morris, Davis, & Davis, 2003; Davis, 1989; Rogers, 1961):

Behavioral Intention (BI):

1. I intend to use e-wallets for financial transactions as often as needed.
2. Assuming I have access to e-wallets, I intend to use them for financial transactions.
3. Given that I may have access to e-wallets, I predict that I will use them for financial transactions.

4. I will strongly recommend others to use e-wallets for financial transactions.

Perceived Ease of Use (PEOU):

1. Using e-wallets for financial transactions is easy for me.
2. I find it simple to navigate through the features of e-wallets.
3. Learning to use e-wallets would be easy for me.
4. I believe that using e-wallets is clear and straightforward.

Perceived Usefulness (PU):

1. Using e-wallets enhances my control over financial transactions.
2. I believe that using e-wallets would save me time.
3. E-Wallets make it easier for me to manage my finances.
4. I perceive e-wallets as beneficial for my financial activities.

Social Influence (SI):

1. My family encourages me to use e-wallets for financial transactions.
2. Friends who use e-wallets positively influenced my decision to adopt them.
3. Societal expectations push me towards using e-wallets.
4. Recommendations from family and friends significantly impact my intention to use e-wallets.

Facilitating Conditions (FC):

1. I have easy access to the internet for e-wallet usage.
2. The infrastructure required for e-wallets is readily available in my area.
3. I have the necessary devices (smartphones, computers) to use e-wallets.
4. Financial institutions in my area support the use of e-wallets.

Privacy Concerns (PC):

1. I am concerned about the security of my personal information when using e-wallets.
2. I worry that using e-wallets may expose my financial transactions to unauthorized parties.
3. Privacy issues make me hesitant about adopting e-wallets.

4. I am cautious about potential breaches of privacy when using e-wallets.

Innovation Characteristics (IC):

Relative Advantage:

1. E-Wallets offer advantages over traditional banking methods in terms of convenience.
2. E-Wallets are more efficient than other financial tools.
3. E-Wallets provide superior features compared to traditional banking.

Complexity:

1. Using e-wallets requires much effort on my part.
2. I find it challenging to understand how to use e-wallets.
3. I perceive using e-wallets as a complex process.

The constructs and questions in our survey are carefully chosen to align with well-established theoretical frameworks, namely the Technology Acceptance Model (TAM) (Davis, 1989), Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003), Contextual Integrity theory (Nissenbaum, 2004), and Innovation Diffusion Theory (Rogers, 1961) for constructing a comprehensive questionnaire that captures quantitative insights into the behavioral intention of using e-wallets in Palestine.

4.3 Quantitative Data Analysis

Statistical software (R) was used to analyze quantitative data. This study applies a full-fledged structural equation modeling approach to analyze the hypothesized conceptual model. Over recent years structural equation modeling has emerged as a powerful, rigorous, versatile, and comprehensive approach to data analyses in academic research, particularly in social sciences.

5.0 Results and Discussion

5.1 Descriptive Statistics

In the present analysis, the total count of valid responses considered for the study is 312 after the exclusion of outliers. Table presents the descriptive statistics for the observed variables included in the study. The mean, median, maximum, minimum, and standard deviation for

each variable were computed, offering an initial overview of the data. Additionally, Tsble 1 provides skewness, kurtosis, Kaiser-Meyer-Olkin (KMO) factor adequacy, and factor loadings of each variable.

Table 1: Descriptive Statistics, KMO, and Factor Loadings of Each Variable

Factors	Mean	SD	Mdn	Min	Max	Skew	Kurt	SE	KMO	FL
BI1	3.6	1.09	4	2	5	-0.13	-1.28	0.06	0.87	0.88
BI2	3.52	1.32	4	1	5	-0.53	-0.79	0.07	0.83	0.89
BI3	3.54	1.27	4	1	5	-0.49	-0.8	0.07	0.82	0.88
BI4	3.47	1.24	4	1	5	-0.52	-0.66	0.07	0.86	0.88
PEOU1	3.07	1.42	3	1	5	-0.08	-1.35	0.08	0.85	0.88
PEOU2	3.08	1.45	3	1	5	-0.08	-1.39	0.08	0.86	0.89
PEOU3	3.04	1.46	3	1	5	-0.09	-1.39	0.08	0.85	0.91
PEOU4	3.06	1.41	3	1	5	-0.09	-1.34	0.08	0.85	0.90
PU1	3.99	0.8	4	3	5	0.02	-1.43	0.05	0.80	0.75
PU2	4.02	0.81	4	3	5	-0.03	-1.49	0.05	0.81	0.71
PU3	4.01	0.81	4	3	5	-0.02	-1.48	0.05	0.84	0.71
PU4	4.04	0.82	4	3	5	-0.07	-1.53	0.05	0.81	0.76
SI1	3.97	0.85	4	3	5	0.05	-1.61	0.05	0.84	0.79
SI2	3.97	0.85	4	3	5	0.05	-1.61	0.05	0.82	0.80
SI3	3.95	0.83	4	3	5	0.1	-1.54	0.05	0.87	0.72
SI4	3.94	0.83	4	3	5	0.11	-1.53	0.05	0.79	0.80
FC1	3.47	1.11	3	2	5	0.09	-1.34	0.06	0.83	0.90
FC2	3.33	1.27	3	1	5	-0.33	-0.85	0.07	0.84	0.89
FC3	3.33	1.31	3	1	5	-0.34	-0.91	0.07	0.86	0.90
FC4	3.37	1.29	3	1	5	-0.3	-0.92	0.07	0.86	0.91
PC1	3.05	1.42	3	1	5	-0.04	-1.3	0.08	0.87	0.90
PC2	3.04	1.36	3	1	5	-0.04	-1.22	0.08	0.87	0.90
PC3	3.09	1.46	3	1	5	-0.03	-1.36	0.08	0.85	0.90
PC4	3.03	1.42	3	1	5	-0.04	-1.3	0.08	0.84	0.91
RA1	3.47	1.1	3	2	5	0.02	-1.33	0.06	0.72	0.91
RA2	3.4	1.31	3	1	5	-0.35	-0.99	0.07	0.77	0.89

RA3	3.35	1.35	3	1	5	-0.39	-0.99	0.08	0.72	0.91
C1	3.52	1.11	4	2	5	-0.03	-1.36	0.06	0.74	0.90
C2	3.41	1.32	4	1	5	-0.41	-0.92	0.07	0.76	0.90
C3	3.42	1.31	4	1	5	-0.4	-0.92	0.07	0.77	0.88

Note: SD: Standard deviation; Mdn.: Median; Kut, Kurtosis; SE: Standard error; KMO: Kaiser-Meyer-Olkin; FL: Principal standardized loadings (pattern matrix) based upon correlation matrix

Source: (Authors)

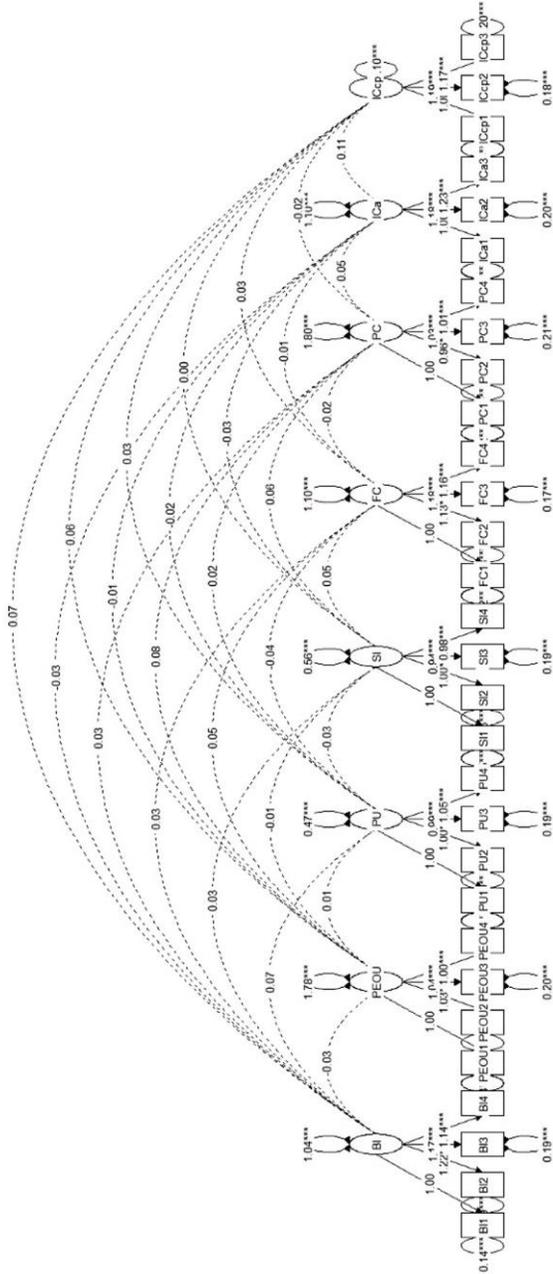
Table 1 displays the descriptive statistics for variables (factors) corresponding to the constructs. Each construct is assessed through four distinct variables, except relative advantage and complexity of innovation characteristics were assessed through three variables in each construct. Utilizing a five-point Likert scale, ranging from strongly disagree (one) to strongly agree (five), all distinct variables gauge the degree of behavioral intention. The data normality statistics for the construct items fall within acceptable thresholds, with skewness values ranging between -1 and $+1$, and kurtosis values being less than $+3$. The KMO measure ranges from 0.72 to 0.87, these higher values, indicate the data is adequate and good for factor analysis. Alongside the KMO test, Bartlett's test is highly significant where the p-value is less than 1%, which means rejecting the null hypothesis, i.e., there is no correlation between variables, which means the R-matrix is not equal to the identify matrix which means there is a correlation between variables and therefore factor analysis is appropriate. The rotated pattern matrix, specifically the loadings obtained from exploratory factor analysis between components and their latent constructs, reveals strong loadings of the components on their respective latent constructs. These loadings ranged from 0.71 to 0.91.

5.2 Confirmatory Factor Analysis (CFA)

Typically, structural equation modeling is carried out through a sequential two-step procedure, involving confirmatory factor analysis (CFA) followed by path analysis. CFA assesses the convergent-discriminant validity of latent factors, while path analysis categorizes the direct and indirect impacts of each latent factor in the model (Byrne, 2001). The validity of confirmatory factor analysis is

evaluated through a two-step process: examining goodness-of-fit indices and assessing composite reliability and validity (Hair, 2009). Figure 1 shows the initial measurement model validated by CFA. As depicted in Figure 1, the measurement model comprises eight constructs: behavioral intention (BI), perceived ease of use (PEOU), perceived usefulness (PU), social influence (SI), facilitating conditions (FC), privacy concerns (PC), and innovation characteristics (IC) of relative advantage (RA) and of complexity (C). The measurement of these eight constructs involved a total of thirty indicators, which were identified through Exploratory Factor Analysis (EFA). A comprehensive listing of the CFA latent variable, covariance, and variance of all eight constructs along with their respective indicators are presented in Table 2, Table 3, and Table 4.

Figure 1: Confirmatory Factor Analysis



Source: Authors

Table 2: Confirmatory Factor Analysis: Latent Variables

	Estimate	Std. Err	z-value	P(> z)	Std. lv	Std. all
BI =~						
BI1	1.000				1.018	0.939
BI2	1.217	0.036	33.609	0.000	1.239	0.943
BI3	1.174	0.036	32.997	0.000	1.195	0.939
BI4	1.143	0.035	32.883	0.000	1.164	0.938
PEOU =~						
PEOU1	1.000				1.334	0.939
PEOU2	1.028	0.03	34.221	0.000	1.371	0.945
PEOU3	1.041	0.03	35.198	0.000	1.388	0.952
PEOU4	1.002	0.029	34.55	0.000	1.337	0.948
PU =~						
PU1	1.000				0.683	0.86
PU2	0.996	0.054	18.413	0.000	0.681	0.838
PU3	0.992	0.054	18.433	0.000	0.678	0.838
PU4	1.046	0.054	19.462	0.000	0.715	0.868
SI =~						
SI1	1.000				0.749	0.886
SI2	1.001	0.045	22.288	0.000	0.749	0.887
SI3	0.939	0.046	20.436	0.000	0.703	0.849
SI4	0.982	0.044	22.539	0.000	0.735	0.892
FC =~						
FC1	1.000				1.049	0.949
FC2	1.135	0.032	35.257	0.000	1.191	0.942
FC3	1.185	0.032	36.617	0.000	1.243	0.95
FC4	1.161	0.032	36.489	0.000	1.219	0.949
PC =~						
PC1	1.000				1.341	0.943
PC2	0.958	0.027	35.293	0.000	1.284	0.947
PC3	1.034	0.029	35.724	0.000	1.386	0.95
PC4	1.011	0.028	36.773	0.000	1.356	0.956

	Estimate	Std. Err	z-value	P(> z)	Std. lv	Std. all
RA ≈						
RA1	1.000				1.047	0.952
RA2	1.179	0.034	34.792	0.000	1.235	0.941
RA3	1.227	0.034	36.031	0.000	1.285	0.95
C ≈						
C1	1.000				1.048	0.943
C2	1.189	0.035	34.028	0.000	1.246	0.948
C3	1.173	0.036	33.025	0.000	1.229	0.94

Source: Authors

Table 3: Confirmatory Factor Analysis: Covariances

	Estimate	Std. Err	z-value	P(> z)	Std. lv	Std. all
BI ≈						
PEOU	-0.025	0.079	-0.32	0.749	-0.019	-0.019
PU	0.075	0.042	1.777	0.076	0.108	0.108
SI	0.028	0.045	0.615	0.539	0.037	0.037
FC	0.028	0.062	0.455	0.649	0.027	0.027
PC	0.032	0.08	0.404	0.686	0.024	0.024
RA	-0.025	0.063	-0.406	0.685	-0.024	-0.024
C	0.070	0.063	1.121	0.262	0.066	0.066
PEOU ≈						
PU	0.012	0.055	0.227	0.821	0.014	0.014
SI	-0.015	0.059	-0.247	0.805	-0.015	-0.015
FC	0.051	0.082	0.631	0.528	0.037	0.037
PC	0.079	0.104	0.758	0.448	0.044	0.044
RA	-0.009	0.082	-0.106	0.916	-0.006	-0.006
C	0.058	0.082	0.707	0.479	0.041	0.041
PU ≈						
SI	-0.034	0.031	-1.096	0.273	-0.067	-0.067
FC	-0.036	0.043	-0.843	0.399	-0.051	-0.051

PC	0.019	0.055	0.348	0.728	0.021	0.021
RA	-0.016	0.043	-0.382	0.703	-0.023	-0.023
C	0.032	0.043	0.731	0.465	0.044	0.044
SI ~						
FC	0.051	0.047	1.083	0.279	0.065	0.065
PC	0.058	0.06	0.964	0.335	0.057	0.057
RA	-0.030	0.047	-0.636	0.525	-0.038	-0.038
C	0.003	0.047	0.065	0.948	0.004	0.004
FC ~						
PC	-0.021	0.082	-0.251	0.802	-0.015	-0.015
RA	-0.012	0.064	-0.187	0.852	-0.011	-0.011
C	0.029	0.064	0.452	0.652	0.026	0.026
PC ~						
RA	0.055	0.082	0.665	0.506	0.039	0.039
C	-0.021	0.082	-0.257	0.797	-0.015	-0.015
RA ~						
C	0.113	0.065	1.746	0.081	0.103	0.103

Source: Authors

Table 4: Confirmatory Factor Analysis: Variances

	Estimate	Std. Err	z-value	P(> z)	Std. lv	Std. all
B11	0.140	0.015	9.305	0.000	0.140	0.119
B12	0.190	0.021	8.999	0.000	0.190	0.110
B13	0.191	0.021	9.276	0.000	0.191	0.118
B14	0.184	0.020	9.324	0.000	0.184	0.120
PEOU1	0.239	0.025	9.661	0.000	0.239	0.118
PEOU2	0.223	0.024	9.278	0.000	0.223	0.106
PEOU3	0.200	0.023	8.816	0.000	0.200	0.094
PEOU4	0.203	0.022	9.131	0.000	0.203	0.102
PU1	0.165	0.018	8.995	0.000	0.165	0.261
PU2	0.197	0.020	9.604	0.000	0.197	0.298
PU3	0.194	0.02	9.589	0.000	0.194	0.297

PU4	0.167	0.019	8.719	0.000	0.167	0.247
SI1	0.153	0.017	9.017	0.000	0.153	0.215
SI2	0.152	0.017	8.991	0.000	0.152	0.213
SI3	0.192	0.019	10.076	0.000	0.192	0.279
SI4	0.139	0.016	8.792	0.000	0.139	0.204
FC1	0.122	0.013	9.144	0.000	0.122	0.100
FC2	0.180	0.019	9.571	0.000	0.180	0.113
FC3	0.168	0.019	9.064	0.000	0.168	0.098
FC4	0.164	0.018	9.117	0.000	0.164	0.099
PC1	0.223	0.023	9.621	0.000	0.223	0.110
PC2	0.189	0.020	9.370	0.000	0.189	0.103
PC3	0.208	0.023	9.192	0.000	0.208	0.098
PC4	0.174	0.020	8.702	0.000	0.174	0.086
IC-RA1	0.114	0.015	7.484	0.000	0.114	0.094
IC-RA2	0.196	0.023	8.476	0.000	0.196	0.114
IC-RA3	0.180	0.023	7.708	0.000	0.18	0.098
IC-C1	0.137	0.017	7.974	0.000	0.137	0.111
IC-C2	0.176	0.023	7.492	0.000	0.176	0.102
IC-C3	0.200	0.024	8.227	0.000	0.200	0.117
BI	1.037	0.094	11.018	0.000	1.000	1.000
PEOU	1.778	0.161	11.038	0.000	1.000	1.000
PU	0.467	0.050	9.255	0.000	1.000	1.000
SI	0.561	0.057	9.829	0.000	1.000	1.000
FC	1.101	0.098	11.248	0.000	1.000	1.000
PC	1.797	0.161	11.133	0.000	1.000	1.000
IC-RA	1.097	0.097	11.274	0.000	1.000	1.000
IC-C	1.099	0.099	11.070	0.000	1.000	1.000

Source: (Authors)

The CFA results, shown in Table 5, confirm the fit of the hypothesized measurement model. Standardized factor loadings for each indicator on its respective latent construct exceeded the conventional threshold of 0.70, indicating compelling evidence of convergent validity. Furthermore, the model fit indices, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error

of Approximation (RMSEA), all fell within acceptable ranges, supporting the model's overall goodness of fit.

Table 5: Goodness-of-Fit Indices of Confirmatory Factor Analysis (CFA)

Measure Indices	Fit Indices	Results
Test User Model:	Test statistic	415.332
	Degrees of freedom	377
	P-value (Chi-square)	0.085
Model Test Baseline Model:	Test statistic	11249.28
	Degrees of freedom	435
	P-value	0.000
User Model versus Baseline Model:	Comparative Fit Index (CFI)	0.996
	Tucker-Lewis Index (TLI)	0.996
Loglikelihood and Information Criteria	Akaike (AIC)	18553.89
	Bayesian (BIC)	18883.28
	Sample-size-adjusted Bayesian (SABIC)	18604.17
Root Mean Square Error of Approximation	RMSEA	0.018
	SRMR	0.024

Source: (Authors)

The robust standardized factor loadings observed in the CFA confirm the reliability and validity of the measurement model. High factor loadings indicate that the chosen indicators effectively measure their respective latent constructs. The correlations between latent variables further support the discriminant validity of the measurement model, suggesting that the constructs are distinct from one another.

5.3 Structural Equation Modeling (SEM)

The SEM analysis extended the measurement model to include the structural paths among latent variables. As presented in Table 6, the relationships between all latent factors, except for privacy concerns, and behavioral intention, were found to be statistically significant. The

standardized coefficients provide insights into the strength and direction of these relationships.

Table 6: Regression Estimates for Latent Factors

BI~	Estimate	Std. Err	z-value	P(> z)	Std. lv	Std. all
PEOU	0.289	0.044	0.422	0.003	0.024	-0.024
PU	0.161	0.090	1.799	0.032	0.108	0.108
SI	0.280	0.081	0.658	0.011	0.039	0.039
FC	0.153	0.056	0.494	0.011	0.029	0.029
PC	0.017	0.044	0.389	0.697	0.023	0.023
RA	0.126	0.057	0.464	0.042	0.027	0.027
C	0.163	0.057	1.097	0.012	0.064	0.064

Source: Authors

The findings from the SEM analysis shed light on the factors influencing the behavioral intention of using e-wallets in Palestine. Perceived ease of use emerged as a significant predictor, highlighting the importance of user-friendly interfaces in promoting e-wallet adoption. Additionally, the impact of social factors on behavioral intention underscores the role of social influence in shaping individuals' perceptions of the utility of e-wallets. Privacy concerns show that individuals in Palestine do not have concerns about the privacy implications of using e-wallets and it will not affect their intention to adopt and use them.

5.0 Conclusion

In concluding, this study delved into the behavioral intention of using e-wallets in Palestine, aiming to unravel the intricate interplay of factors influencing adoption. The comprehensive analysis, encompassing Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM), yielded significant insights into the determinants of e-wallet usage.

The measurement model, composed of eight key factors including behavioral intention, perceived ease of use, perceived usefulness, social influence, facilitating conditions, privacy concerns,

and innovation characteristics of relative advantage and complexity, were rigorously validated through factor loadings and goodness-of-fit indices. The findings highlight the nuanced relationships between these factors, shedding light on the multifaceted nature of e-wallet adoption.

Notably, perceived ease of use and social influence emerged as pivotal factors influencing behavioral intention, emphasizing the importance of user-friendly interfaces in fostering positive attitudes toward e-wallets. Complexity, perceived usefulness, facilitating condition, and relative advantages, in this order, also played substantial roles, underscoring the significance of social networks and the perceived utility of e-wallets in shaping individuals' intentions.

The outcomes of this study provide actionable insights for policymakers, financial institutions, and technology developers seeking to promote e-wallet adoption in Palestine. By addressing the identified factors—facilitating ease of use, harnessing social influence, and emphasizing innovation characteristics and perceived usefulness—stakeholders can formulate targeted strategies to enhance the adoption of digital payment solutions.

However, it is crucial to acknowledge the study's limitations, including the cross-sectional nature of the data and the potential influence of cultural and contextual factors specific to Palestine. Future research endeavors should explore these aspects further, employing longitudinal designs and cultural sensitivity to enrich our understanding of e-wallet adoption dynamics.

In conclusion, this study contributes to the burgeoning literature on technology adoption by unraveling the intricacies of e-wallet usage in the unique context of Palestine. As digital financial ecosystems continue to evolve, the findings herein provide a foundation for informed decision-making and strategic interventions to propel e-wallet adoption forward in the region.

References

- Ajouz, M., & Abuamria, F. (2021). Does Mobile Payment Promote Financial Inclusion Among Palestinians Women: A Quantitative Approach Through Structural Equation Modeling. *Journal of Islamic Finance*, 10(2), 67-78.

- Ajouz, M., Abdullah, A., & Kassim, S. (2019). Developing a Sharī'ah-compliant precious metal-backed cryptocurrency. *Journal of King Abdulaziz University: Islamic Economics*, 33(1), 3-20.
- Alomary, L., AlShrouf, H., & Ajouz, M. (2023). Factors Influencing Female Student Participation in Student Council Elections at Palestinian Universities: An Application of the Theory of Planned Behavior. *The Journal of Palestine Ahliya University for Research and Studies*, 2(1), 28-59.
- Alshammari, A. A., Altarturi, B. H., & Alokla, J. (2021). Systematic Review on Takaful and Retakaful Windows: A Regulatory Development Perspective. *Journal of Business School*.
- Altarturi, B. H. (2021). *A complementary currency system in Palestine: concept, implementation issues and challenges*. Kuala Lumpur: IIUM Institute of Islamic Banking and Finance, International Islamic University Malaysia.
- Altarturi, B. H., & Abduh, M. (2016). Stock markets and economic growth: a comparative analysis between Islamic and conventional markets in Malaysia. *Middle East Journal of Management*, 3(1), 34-48.
- Altarturi, B. H., & Ajouz, M. A. (2021). Review of knowledge framework and conceptual structure of Islamic Banking. *Al Qasimia University Journal of Islamic Economics*, 1(2), 116-143.
- Altarturi, B. H., & Othman, A. H. (2021). Behavioral intention of using a complementary currency in Palestine. In *The Importance of New Technologies and Entrepreneurship in Business Development: In The Context of Economic Diversity in Developing Countries: The Impact of New Technologies and Entrepreneurship on Business Development* (pp. 1084-1107). Springer International Publishing.
- Altarturi, B. H., Altarturi, H. H., & Othman, A. H. (2021). Applications of financial technology in Islamic finance: A systematic bibliometric review. *Artificial Intelligence And Islamic Finance*, 138-161.
- Alzubaidi, I. B., & Abdullah, A. (2017). Developing a digital currency from an Islamic perspective: the case of blockchain technology. *International Business Research*, 10(11), 79-87.

- Bayram, K., Olasubomi, S. S., & Thartori, V. (2021). The Level of Financial Literacy among Muslim Millennial Students. *Al Qasimia University Journal of Islamic Economics*, 1(2), 102-115.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1), 55-86.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- Elagraa, M., Jamal, R., & Elkhafif, M. A. (2015). *Trade Facilitation in the Occupied Palestinian Territory: Restrictions and Limitations*. UN.
- García-Avilés, J. A. (2020). Diffusion of innovation. *The International Encyclopedia of Media Psychology*, 1-8.
- Hair, J. F. (2009). *Multivariate data analysis*.
- Maruping, L. M., Bala, H., Venkatesh, V., & Brown, S. A. (2017). Going beyond intention: Integrating behavioral expectation into the unified theory of acceptance and use of technology. *Journal of the Association for Information Science and Technology*, 68(3), 623-637.
- Nissenbaum, H. (2004). Privacy as contextual integrity. *Wash. L. Rev.*, 79, 119.
- Nissenbaum, H. (2019). Contextual integrity up and down the data food chain. *Theoretical Inquiries in Law*, 20(1), 221-256.
- Rogers, E. M. (1961). *Bibliography on the Diffusion of Innovations*.
- Rogers, E. M. (1961). *Bibliography on the Diffusion of Innovations*.
- Sayed Ahmed, N., & Abu Sharar, A. (2019). The relationship between corporate social responsibility and financial performance: evidence from the Palestinian banking industry. *International Journal of Business, Economics and Law*, 18(5), 341-346.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478.
- Venkatraman, S., Cheung, C. M., Lee, Z. W., Davis, F. D., & Venkatesh, V. (2018). The “Darth” side of technology use: An inductively derived typology of cyberdeviance. *Journal of Management Information Systems*, 35(4), 1060-1091.