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Understanding E-payment acceptance in Algeria: An extended UTAUT approach with trust as mediator and security as moderator

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Abstract: The acceptance of electronic payment (e-payment) systems is crucial for advancing digital transformation and financial inclusion, especially in emerging countries like Algeria. However, the acceptance level remains very low. This study aims to examine the dual influence of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) on customers' acceptance of e-payment services in Algeria. It also investigates the mediating role of Trust and the moderating role of Security within an extended Unified Theory of Acceptance and Use of Technology (UTAUT) framework. A quantitative method was adopted, using a structured questionnaire to collect data from a representative sample of Algerian e-payment users. The study utilized Structural Equation Modeling (SEM) PLS 4.0 to examine mediating and moderating relationships among the study variables. The results show that PEOU and PU have a significant influence on customers' acceptance of e-payment systems. Both relationships are mediated by Trust, illustrating the importance of trust in the acceptance of any technology. Moreover, the Security factor has no moderating effect. This study highlights the importance of developing security levels and building trust to boost e-payment acceptance in Algeria. The findings offer practical guidelines for policymakers and banks to enhance electronic payment methods.

Keywords: *Algeria, E-payment acceptance, Perceived ease of use, Perceived usefulness, Security, Trust, UTAUT.*

1. Introduction

The landscape of international financial transactions has seen a significant shift towards digitization in recent years. This trend has also been adopted by Algeria, a nation that is very interested in technical advancement. E-payment systems, which include a broad variety of digital financial activities, have grown in popularity as a practical and effective substitute for conventional cash-based transactions. Like in other nations, Algeria's extensive adoption of electronic payment systems depends on the crucial factors of perceived security and utility [1]. In 2009, Algeria launched its new CIB card e-payments technology, enabling customers to make their first electronic bill payments each month. During the first quarter of 2010, over 621 ATMs and 2,750 sales outlets were operational and 656,833 CIB cards were distributed nationwide. Consequently, just 253586 CIB cards were used to make payments in 2015. Therefore, the issue shows that Algerian consumers' banks do not accept electronic payments [2].

According to the statistics presented by Bounefla [2] the Algerian bank clients have restricted access to electronic payment services including credit cards, debit cards, and online payments. In addition to that, digital financial services adoption, especially e-payment technologies, has emerged as a key component of contemporary banking. Nevertheless, despite the quick development of financial technology, e-payment solutions are still not widely accepted in Algeria [3]. Within the framework of the extended Unified Theory of Acceptance and Use of Technology (UTAUT), this study examines the dual influence of perceived usefulness (PU) and perceived ease of use (PEU) on clients' acceptance of e-payment services, highlighting the moderating role of security and the mediating role of trust [4]. Therefore, it is necessary to overcome deeply rooted habits and anxieties in order to transition from a

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financial system that is mostly dependent on cash to one that uses digital transactions. Like customers in other markets, Algerian consumers are looking for solid guarantees about the security, privacy, and general dependability of digital payment systems during this shift. In order to gain the trust and confidence of customers, suppliers must improve the perceived usefulness and ease of use of e-payment services as well as put strong security measures in place.

This study builds on the UTAUT model by incorporating trust as a mediator, acknowledging its crucial role in promoting consumer confidence in the adoption of e-payments. According to Gefen, et al. [5] trust serves as a link between PU, PEU, and customers' willingness to participate in online financial transactions. Security is added as a moderator, affecting the strength of these interactions, given Algeria's uncertainty over the security of e-payments. Customers' opinions on the use of e-payments are greatly influenced by security issues, including data protection, fraud prevention, and cybersecurity risks [6]. This study offers important insights into the particular obstacles and facilitators influencing the broad adoption of e-payment systems by analyzing these elements in the Algerian context.

Therefore, the goal of this paper is to enhance earlier research by introducing a framework that consists of multiple elements that facilitate a better understanding of acceptance with respect to electronic payments. Additionally, it proposes a comprehensive framework that uses the Unified Theory of Acceptance and Use of Technology (UTAUT) to incorporate the interplay between customer acceptance of electronic payment systems and perceived usefulness, perceived ease of use, trust, and security.

2. Literature Review

2.1. Electronic Payment System

The Federal Reserve Bank began using telegraphs for money transfers in the United States in 1918, marking the beginning of the history of electronic payments, or e-payments. Electronic fund transfers were not often used prior to the Automated Clearing House (ACH) being established in 1972. By offering an alternative to conventional check-based transactions, the ACH system greatly increased the efficiency of payments [7].

An essential component of electronic payments, the credit card industry began in 1914 when hotels, shopping malls, oil companies, and Western Union began issuing cards for consumer transactions. Credit card use increased throughout the ensuing decades, especially in the retail and transportation industries [8]. Before being completely digitalized in the 1990s, credit card transactions were conducted on paper. This led to the widespread use of credit and debit cards for international financial transactions [8, 9].

Compared to traditional payment methods, electronic payment systems (EPS) have undergone tremendous evolution. The main difference is that EPS is digital, meaning that transactions take place online. E-payment is defined as "fulfilling a monetary obligation through electronic instruments such as electronic checks and magnetic cards, including debit and credit cards" under the Egyptian electronic exchange law [1]. Efficient local and international financial transactions are made possible by EPS for banks, businesses, and people. EPS is currently a crucial part of contemporary banking systems due to the growing digitization of financial services [10].

Therefore, electronic payment systems are essential for improving customer experience, expanding financial inclusion, and modernizing banking services.

2.2. Development of E-Payment in Algeria

Algeria's banking system has experienced numerous changes, including colonialism, nationalization, sovereignty, restriction, socialization, and liberalization. There are 20 banks in the banking sector at the moment, including 12 private and 8 state-owned banks [11].

Three significant organizations—AEBF, SATIM, and GIE—provide the majority of Algeria's electronic payment services, and they are essential to updating the country's banking system [3]. The nation's first automated teller machine (ATM)-based interbank withdrawal took place in 1977. Point of

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Sale (POS) terminals were used for interbank payments beginning in 2005. Online payments were introduced in 2016 [12]. Despite these developments, Algeria's use of electronic payments is still somewhat low when compared to international norms [3].

2.3. Determinants of Electronic Payment Acceptance

Several factors influence the acceptance of electronic payment systems. Understanding these factors is essential for assessing customer attitudes and behaviors toward digital transactions. The following sections discuss key determinants, introduce trust as a mediating factor, and security as a moderating factor in electronic payment adoption.

2.3.1. Perceived Usefulness

Davis [13] defines perceived usefulness as the degree to which an individual believes that using a suitable system improves their job performance. In turn, a system with high perceived usefulness has a user who believes in a positive use-performance relationship. So, Perceived usefulness is crucial to UTAUT theory. Perceived usefulness has been utilised for estimating several elements, including word processing and spreadsheet system uptake, user intentions, telecommuting technologies, online and wireless site usability, and system usage over time. Davis, et al. [14] established the accuracy and reliability of perceived usefulness as an indicator of the intention to use technological innovations. According to Afshan and Sharif [15] the individuals will adopt a particular technology if they perceive it as useful in performing a daily task and will not adopt it in case it does not result any improvement in these tasks. Similarly, Hassan, et al. [16] observed that perceived usefulness is positively related to the adoption and acceptance of e-payment services and that it is an important factor in shaping customer perceptions of the value and benefits of electronic payment services. Thus, it indicates that perceived usefulness is a key determinant of customer acceptance of the electronic payment services.

H_1: Perceived usefulness positively influences the acceptance of electronic payment systems.

2.3.2. Perceived Ease of Use

A key concept in Davis [13] Technology Acceptance Model (TAM) is Perceived Ease of Use (PEOU), which postulates that people are more likely to embrace a technology if they think it requires little effort to use. PEOU is especially significant in digital banking, where it affects consumers' perceptions, trust, and willingness to utilize online financial services [17]. It also plays a crucial role in determining users' behavioral intentions and actual system usage [18]. A system that users find easy to use has a positive impact on their experience, lowers their cognitive burden, and is more likely to be adopted [5].

The impact of PEOU is supported by empirical research in a number of areas, including facilitating the adoption of digital banking by making the interface more accessible [19] encouraging less tech-savvy users to use mobile banking [20] and enhancing trust in online payment and e-commerce systems by streamlining navigation and lowering transaction complexity [21]. By improving the perception of Sharia-compliant financial products, PEOU in Islamic banking helps clients feel more at ease using digital Islamic finance solutions [22].

Additionally, trust plays a crucial mediating role between PEOU and the acceptance of digital banking as user confidence in the dependability and security of an easy-to-use system is increased [17]. Simplifying digital banking interfaces and enhancing user experience can reduce these obstacles and increase acceptance rates in Algeria, where digital banking acceptance is still low due to security concerns, inadequate IT infrastructure, and a lack of awareness [23]. With substantial empirical support highlighting its function in influencing perceptions, boosting trust, and ultimately propelling technology adoption, PEOU is an important factor in the acceptance of digital banking overall, impacting user trust and lowering perceived risk [13, 18, 24].

H_2: Perceived ease of use positively influences the acceptance of electronic payment systems.

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2.3.3. Trust as a Mediator

The widespread acceptance of electronic payment (e-payment) systems is largely dependent on trust since it boosts consumers' confidence in making digital transactions by lowering perceived risk and uncertainty [21]. Customers of banks are encouraged to use digital payments because trust removes uncertainty [25]. According to a number of studies, trust is essential to the broad use of e-payment systems [5]. Users who have doubts about the security, dependability, and integrity of digital payment platforms are less inclined to utilise them since financial transactions contain sensitive data [5, 24, 26]. Since trust reduces worries about fraud, illegal access, and privacy violations—all of which are significant obstacles to digital financial transactions—it has a significant impact on users' willingness to adopt e-payment systems, according to a number of studies [27].

Kanojia and Lal [28] discovered that trust is crucial to consumers' adoption of digital payment systems, emphasising that users are reluctant to utilise e-payment platforms if they have doubts about its operational dependability and security. In the adoption phase, trust is also acknowledged as a mediator that bridges the gap between users' acceptance of e-payment services and important technological aspects like perceived utility (PU) and perceived ease of use (PEU) [29].

According to the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM), trust increases users' perception of the system's advantages and increases their likelihood that e-payment services will be helpful and simple to use, both of which increase users' intention to adopt [30]. According to the perceived risk-trust model, consumers may concentrate on the practical benefits of an e-payment system when they have confidence in it, as their worries about security and privacy are lessened [31].

Additionally, research demonstrates that trust has a positive impact on behavioural intention in a variety of digital financial services, such as e-wallets [32] fintech applications [33] and mobile banking [24]. This supports the idea that trust is a crucial factor in determining the adoption of new technologies. Financial institutions and service providers may boost user confidence in digital payment platforms and increase acceptance rates and adoption by cultivating trust.

Therefore, this study hypothesizes that trust positively influences the acceptance of e-payment systems (H1) and mediates the relationship between perceived usefulness and acceptance (H2), reinforcing its critical role in shaping user behavior toward digital financial services.

H_3: Trust positively influences the acceptance of electronic payment systems.

H_4: Trust mediates the relationship between perceived usefulness and the acceptance of electronic payment systems.

H_5: Trust mediates the relationship between perceived ease of use and the acceptance of electronic payment systems.

2.3.4. Security as a Moderator

The adoption of electronic payment (e-payment) systems is heavily influenced by security, since users may be discouraged from adopting digital transactions due to worries about fraud, data breaches, and unauthorised access [19, 24].

One of the most important issues with electronic payments is security. Users may be deterred from embracing digital transactions by security threats including fraud and data breaches Martins, et al. [19]. Tsiakis and Sthephanides [34] found that perceived security has a direct impact on consumer trust and the perceived utility of e-payment platforms, which in turn affects adoption.

In addition to lowering perceived risk, security features like encryption, multi-factor authentication, and fraud detection significantly increase user confidence and acceptance by bolstering trust in digital financial services [35]. Theoretically, the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM) both highlight how outside variables like security increase a technology's perceived advantages [30].

By enhancing trust when users believe the system is extremely secure, security moderates the relationship between trust and acceptance of e-payments and increases adoption intentions [36]. By

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strengthening users' perceptions of the system's benefits and dependability, security also moderates the relationship between perceived usefulness and acceptance, reducing worries that might otherwise restrict adoption [24, 29, 31]. Stronger security perceptions, according to empirical data, enable users to concentrate on the practical benefits of e-payment systems, increasing their propensity to trade online [32, 37].

Therefore, this study hypothesizes that security positively moderates both the relationship between trust and e-payment acceptance (H6) and the relationship between perceived usefulness and acceptance (H7), reinforcing their impact on user adoption.

H_6: Security moderates the relationship between trust and the acceptance of electronic payment systems, such that higher security strengthens this relationship.

H_7: Security moderates the relationship between perceived usefulness and the acceptance of electronic payment systems, such that higher security strengthens this relationship.

2.4. Conceptual Framework

The conceptual framework integrates trust as a mediating factor between perceived usefulness, perceived ease of use, and e-payment adoption, with security acting as a moderator.

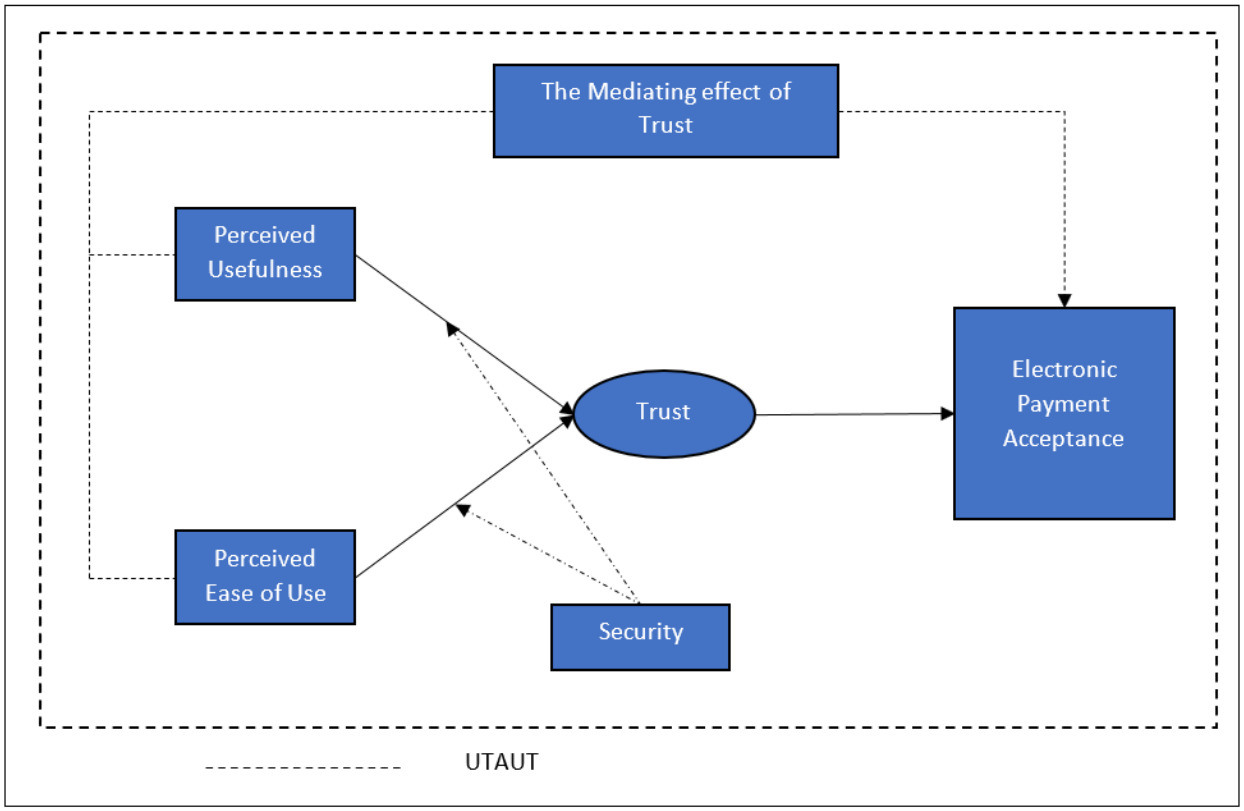

Figure 1.
The research conceptual framework developed by the Authors.

2.5. Proposed Hypotheses

- H1: Perceived usefulness positively influences the acceptance of electronic payment systems.
- H1': Perceived usefulness positively influences the acceptance of electronic payment systems.
- H2: Perceived ease of use positively influences the acceptance of electronic payment systems.
- H2': Perceived ease of use positively influences the acceptance of electronic payment systems.

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- H3: Trust positively influences the acceptance of electronic payment systems.
- H3': Trust mediates the relationship between perceived usefulness and the acceptance of electronic payment systems.
- H3": Trust mediates the relationship between perceived ease of use and the acceptance of electronic payment systems.
- H4': Security moderates the relationship between trust and the acceptance of electronic payment systems, such that higher security strengthens this relationship.
- H4": Security moderates the relationship between perceived usefulness and the acceptance of electronic payment systems, such that higher security strengthens this relationship.

This framework suggests that trust reduces uncertainty and enhances the effect of perceived usefulness and ease of use on e-payment acceptance, while security strengthens these relationships. Further empirical research is required to validate these relationships in the Algerian context.

3. Research Methodology

3.1. Data Collection and Sample Design

Data for this study was gathered via an online survey. The questionnaire was distributed from July to December 2024 to clients in Algeria who had used an e-payment method to perform transactions. As a result, 180 responses to the questionnaire were qualified for statistical examination. Convenience sampling is used to obtain data via the online form. In order to get more data about the advantages of making an electronic payment, structured interviews were also conducted with a number of respondents. The author initially translated each item on the questionnaire into Arabic before translating it into English to ensure consistency.

3.2. Data Analysis Method

The partial least square structural equation modelling (PLS-SEM) was employed to assess complicated cause-effect connection models with latent variables [38]. Contrasting covariance-based approaches to structural equation modelling are suitable to evaluate higher order constructs and complex conceptual model with mediation effects [39]. Since the study sample size surpassed 100 (n = 180), the PLS-SEM technique via Smart-PLS was appropriate for this study to examine the causal–effect relationships proposed in this study model [40].

4. Results and Findings

4.1. Data Analysis

4.1.1. Demographic Characteristics

Table 1 represents the demographic profiles of the respondents in this study. It appears that there were more male (62.8%) than female (37.2%) among the responders. The respondents were mostly between the ages of 21 and 30 (67.8%), followed by those between the ages of 31 and 40 (27.3%) and those under 21 (5%). The majority of responders (37.2%) work for themselves, followed by company employees (25%), and retirees (19.4%). Students and government employees had the lowest rates, at 11.7% and 6.1%, respectively.

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Table 1.
Demographic Information.

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
MALE	113	62.8	62.8	62.8
FEMALE	67	37.2	37.2	37.2
Total	180	100	100	
Age.	Frequency	Percent	Valid Percent	Cumulative Percent
Under 21	9	5	5	5
21-30	122	67.8	67.8	72.8
31-40	49	27.3	27.2	100
Total	180	100	100	
Occupation	Frequency	Percent	Valid Percent	Cumulative Percent
Student	11	6.1	6.1	6.1
Government employee	21	11.7	11.6	17.8
Company employee	45	25	25	42.8
Self-employment	68	37.8	37.8	80.6
Retiree	35	19.4	19.4	100
Total	180	100		

The examination of these demographic factors serves as a fundamental basis for scholarly investigation into the use of electronic payment methods. Further investigation is warranted to examine the possible impact of gender, age, and employment on trust, perceived usefulness concerns, and acceptability levels pertaining to e-payment systems. This line of inquiry has the potential to unveil distinct patterns of adoption and preferences within various demographic cohorts. Gaining a comprehensive understanding of these relationships is crucial in order to develop precise strategies aimed at promoting the adoption of e-payment systems and assuring the provision of inclusive financial technology solutions in Algeria.

4.1.2. Validity and Reliability

The first step in SEM is to assess the measurement model, which includes the evaluation of construct reliability, indicator reliability, convergent validity, and discriminant validity of the outlined constructs. Construct reliability was determined using composite reliability (CR) and Cronbach's alpha (CA). The criterion is that the CR value should exceed 0.07 to indicate adequate reliability of the construct [41]. The measurement model results, as tabulated in Table 2, showed that the CR values obtained for this present were greater than 0.07, thus confirming adequate construct reliability.

Next, indicator reliability was assessed through CA, in which the CA values must be higher than 0.06. As a result, the CA for all factors in this study was acceptable. Convergent validity of constructs was determined using average variance extracted (AVE), which should exceed 0.50 [42]. Since the result revealed that all constructs had substantial AVE, the convergent validity of constructs for this study was verified. The values of CA, CR, and AVE are depicted in Table 2.

Table 2.
Validity and Reliability.

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	VIF
EPA	0.762	0.778	0.840	0.515	
PEOU	0.786	0.808	0.854	0.545	1.835
PU	0.800	0.804	0.863	0.558	3.136
SE	0.683	0.683	0.794	0.659	1.080
TR	0.767	0.767	0.851	0.590	3.446
SE x PU					1.412
SE x PEOU					1.399

Note: PU: perceived usefulness; PE: perceived ease of use; TR: trust; SE: security; EPA: electronic payment acceptance. Source: Author's data analysis.

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The assessment of the measurement model included the evaluation of discriminant validity of the constructs based on one method: Fornell and Lacker criterion [41, 43]. The Fornell and Larcker [42] criterion is used to assess the discriminant validity by comparing the square root of AVE extracted from each construct with the correlation among constructs. Next, the cross-loading method suggests that the outer loading of the construct should exceed the corresponding construct loading to signify adequate discriminant validity of the construction.

The results of Fornell and Larcker [42] is presented in Table 3. According to Kline, et al. [44] values above 0.85 indicate adequate discriminant validity of the measurement. Therefore, this study confirmed the discriminant validity of the constructs as all loadings of the constructs were higher than the other constructs. Finally, discriminant validity is checked with the Fornell–Lacker criterion, which revealed strong links among the constructs.

Table 3.
Discriminant validity Fornell and Larcker criteria.

	EPA	PEOU	PU	SE	TR
EPA	0.717				
PEOU	0.511	0.738			
PU	0.834	0.607	0.747		
SE	-0.102	-0.024	-0.075	0.812	
TR	0.738	0.658	0.817	-0.062	0.768

Note: PU: perceived usefulness; PE: perceived ease of use; TR: trust; SE: security; EPA: electronic payment acceptance. Source: Author's data analysis.

4.2. Path Analysis

The structural model results shown in Table 4 reveal that the causal relationship between perceived usefulness and the acceptance of digital banking was statically significant. Similarly, the relationship between perceived ease of use and the/ acceptance of digital banking was also significant.

Table 4.
Path coefficient.

	Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
PU -> EPA	H1	0.706	0.689	0.088	7.994	0.000	Accept
PU -> TR	H1'	0.660	0.654	0.060	11.039	0.000	Accept
PEOU -> EPA	H2	-0.042	-0.030	0.052	0.813	0.416	Accept
PEOU -> TR	H2'	0.258	0.264	0.061	4.212	0.000	Accept
TR -> EPA	H3	0.187	0.191	0.091	2.068	0.039	Accept
SE -> EPA	H4	-0.035	-0.043	0.045	0.771	0.441	Reject
SE x PU -> EPA	H4'	0.037	0.009	0.080	0.467	0.640	Reject
SE x PEOU -> EPA	H4"	-0.001	0.011	0.060	0.021	0.983	Reject

Note: PU: perceived usefulness; PE: perceived ease of use; TR: trust; SE: security; EPA: electronic payment acceptance. Source: Author's data analysis.

4.2.1. Mediation

In this study, trust displayed a mediating effect on the relationship between perceived usefulness and the acceptance of E-payment; the coefficient of perceived usefulness toward the acceptance of E-payment was 0.000, with a p-value = 0.054. Next, regarding the mediating effect of trust on the association between perceived ease of use and the acceptance of E-payment, the coefficient of perceived ease of use on the acceptance of E-payment was 0.416 with a p-value = 0.047.
The mediation results are presented in Table 5.

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Table 5.
Mediation effect.

	Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
PU -> TR -> EPA	H3'	0.124	0.127	0.064	1.931	0.054	Accept
PEOU -> TR -> EPA	H3"	0.048	0.049	0.024	1.990	0.047	Accept

Note: PU: perceived usefulness; PE: perceived ease of use; EPA: electronic payment acceptance. Source: Author's data analysis.

4.2.2. Moderation

The moderation effect security was assessed on the relationships of perceived usefulness, perceived ease of use with the acceptance of E-payment. As a result, the security factor failed to moderate the relationships between perceived usefulness, perceived ease of use and the acceptance of E-payment with p values greater than = 0.05.

Regarding the relationship between perceived usefulness and the acceptance of E-payment, the coefficient of perceived usefulness toward the acceptance of E-payment was 0.037 with a p-value = 0.640. In regard to the relationship between perceived ease of use and the acceptance of E-payment, the coefficient of perceived ease of use toward the acceptance of E-payment was -0.001
with a p-value = 0.983. The moderation results are presented in Table 6.

Table 6.
Moderating effect.

	Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
SE x PU -> EPA	H4'	0.037	0.009	0.080	0.467	0.640	No moderation
SE x PEOU -> EPA	H4"	-0.001	0.011	0.060	0.021	0.983	No moderation

Note: PU: perceived usefulness; PE: perceived ease of use; SE: security; EPA: electronic payment acceptance. Source: Author's data analysis.

5. Discussion

This study explored the factors that affected the acceptance of e-payments through trust and one moderating factor (security).

Firstly, this study shown that perceived usefulness had a significant impact on the acceptance of electronic payment systems. It also verified the significantly positive effect displayed by perceived usefulness upon Trust (H1, H1'). This study finding supports the previous studies like Shaikh, et al. [45] which stated that the clients' trust mediates the correlation between perceived usefulness and acceptance intention of the mobile payment systems. Similarly, Hassan and Raza [46] mentioned that the customers trust through perceived usefulness impact positively on the electronic payment systems. As a consequence, customers might consider electronic payment methods as a practical and wise option for future purchases. Therefore, to emphasize the value of

e-payment systems, it is crucial to give customers comprehensive information on electronic content in particular.

Secondly, the study illustrated that perceived ease of use had an significant effect on the acceptance of electronic payment systems. It also depicted that perceived ease of use had a positive effect on the acceptance of electronic payment systems through trust (H2, H2'). This study supports [32] which stated that the clients who find the electronic payment easy to use their trust level will be higher which led to a secure and reliable systems. This study is further supported by Amin [47] who said that easiness of use boost trust by reducing the electronic payments risk and complexity.

The study results found out that trust had a positive and significant effect on the acceptance of e-payments (H3). It also revealed that trust factor had a mediation effect (H3', H3"). (See Table 5). This study supports the findings of Kim, et al. [26] said that trust has a significant impact on the adoption and acceptance of the mobile payment systems this was due to the users' preferences of a trustable platform. Similar to that, Hoffmann, et al. [48] found that trust is a key component that influences the sustained usage of e-payments, highlighting the necessity of safe authentication techniques to preserve user trust. On the other hand, the study findings showed that Security had no significant effect on the acceptance of the electronic payment system (H4). It also depicted that Security had no moderation effect (H4', H4"). (See Table 6).

6. Conclusions

The study illustrated that both factors perceived usefulness and perceived ease of use had a significant impact on the acceptance of e-payment systems. It further revealed that trust mediates the effect of perceived usefulness, perceived ease of use on the acceptance of e-payment systems. In addition to that, the study discovered that security factor was found to have no moderating effect on this study from the perspective offered by the UTAUT. This study's novelty contributes to the existing literature. Firstly, it extends the UTAUT model by explaining the effects that various predictors have on the customers' acceptance of the digital banking services.

This study offers a significant theoretical contribution to the UTAUT in particular, and to the banking theories in general, from exploring the acceptance of e-payment systems to perform cheaper, faster, easier, and safer transactions among the bank's clients under the extended scope of the theory through the inclusion of the mediating effect of trust on the correlations of perceived usefulness, perceived ease of use with the acceptance of e-payments systems. Furthermore, this study contributes to the theory domain by providing empirical evidence of the relationships of perceived usefulness and perceived ease of use with the customer's acceptance of the e-payments to explain the potential of young customers' behavior, while using trust a mediator.

Lastly, this study addressed the scarcity of studies that focused on the acceptance e-payments. This study, hence, enriches the existing literature, particularly in the context of the developing countries.

The study outcomes may serve as a guideline to managers from emerging countries to devise effective strategies for the development and acceptance of e-payments by cooperating with banks or other online platform providers. Moreover, companies across the developing countries should determine customers' intentions toward, and their use of, e-payments systems.

Essentially, this study investigates consumers' acceptance of e-payments, so as to make transactions cheaper, easier, faster, and safer.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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