The Role of Trust in Mediating the Impact of Electronic Word of Mouth and Security on Cryptocurrency Purchase Decisions

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ABSTRACT

This study investigated the role of trust (TR) in mediating the impact of electronic word of mouth (EW) and security (SE) on cryptocurrency purchase decisions (PD). A cross-sectional survey design was employed, and data were collected through 330 distributed questionnaires, of which 320 valid responses were retained after validation steps that included confirming prior cryptocurrency usage. The sample consisted of active cryptocurrency users in Indonesia, aiming to explore the relationships between EW, SE, attitudes (AT), perceived behavioral control (PB), TR, and PD. Structural equation modeling was used to analyze the data and test the hypothesized relationships. The findings highlighted that TR significantly mediated the effects of both EW and SE on PD, underscoring TR as a crucial factor in the cryptocurrency market. Additionally, the study revealed that PB played a significant role, particularly in mediating the relationship between SE and PD, suggesting that consumers' confidence in managing transactions greatly influences their purchasing behavior. The results contribute to the literature by validating an integrated model that combines key factors influencing cryptocurrency PD and extending the Theory of Planned Behavior by incorporating EW and SE as antecedents. The study provides practical implications for cryptocurrency platforms and marketers, emphasizing the need for robust security measures, positive EW management, and user-friendly interfaces to foster TR and enhance consumer engagement in the cryptocurrency market.

Keywords cryptocurrency; trust; electronic Word of Mouth; security; purchase decisions

INTRODUCTION

Cryptocurrencies have emerged as a significant innovation in the global financial landscape, attracting substantial interest from investors, businesses, and consumers alike. Since the inception of Bitcoin in 2009, the cryptocurrency market has expanded rapidly, with thousands of digital currencies now in circulation. This growth has been driven by the promise of decentralized finance, where transactions can be conducted without the need for traditional banking institutions. The appeal of cryptocurrencies lies in their potential for high returns, as well as their capacity to disrupt existing financial systems. However, the volatility of these digital assets, coupled with regulatory uncertainties, has posed challenges for widespread adoption. Digital communication, mainly through social media platforms, has played a pivotal role in the adoption and spread of cryptocurrencies. Online platforms, social media, and forums have become essential tools for disseminating information, opinions, and experiences about cryptocurrencies, significantly influencing the decision-

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making processes of potential investors. Influencers and public figures, such as Elon Musk, have demonstrated the power of EW in shaping market perceptions and individual adoption decisions, as their online statements can impact cryptocurrency prices [1], [2]. The decentralized and often anonymous nature of online communication, however, can also lead to the spread of misinformation and exaggerated claims, complicating the decision-making process for potential investors. In this context, security concerns have become increasingly prominent, as individuals seek assurance that their investments will be protected from fraud, theft, and cyberattacks. Social factors, including subjective norms and global attention, are critical determinants of cryptocurrency adoption, underscoring the importance of community engagement and social influence in shaping investor behavior [3], [4], [5]. The active participation of cryptocurrency investors in online forums fosters a sense of trust and community, which is essential for adoption [6], [7]. Studies indicate that interactions within these digital spaces can lead to significant behavioral intentions toward cryptocurrency investment, reinforcing the idea that digital communication channels are vital for disseminating information and building TR among potential users [8], [9]. Thus, the interplay between digital communication and social dynamics is crucial in understanding the rapid adoption of cryptocurrencies in contemporary financial markets.

Given the complexities surrounding cryptocurrency investments, understanding the factors that influence PD is crucial. Previous research has identified several key factors that shape consumer behavior in this domain, including TR, AT, PB, EW, and SE. TR has emerged as a central factor, mediating the relationship between other variables and the final PD. For many potential investors, the perceived trustworthiness of a cryptocurrency platform or transaction significantly influences their willingness to engage in the market. TR can be influenced by a variety of factors, including the transparency of the platform, the reputation of the currency, and the experiences shared by other users. AT are shaped by a combination of personal beliefs and external factors, such as EW, and these AT significantly impact PD. Research shows that positive AT can substantially increase behavioral intentions to adopt cryptocurrencies, with studies indicating that a one-unit increase in attitude correlates with a 74% rise in adoption intention [8]. Additionally, the interplay of moral values and external influences, including EW, shapes perceptions of cryptocurrencies, affecting their legitimacy and acceptance [10]. Social media usage further enhances individuals' intentions to adopt cryptocurrencies by influencing AT and subjective norms [11]. The credibility and quality of information shared through EW are particularly critical, as they directly impact investment decisions and the broader adoption of cryptocurrencies [12].

The synthesis of personal beliefs and external influences plays a pivotal role in shaping consumer AT and subsequent PD regarding cryptocurrencies. Positive AT increase the likelihood of purchasing cryptocurrencies, whereas negative perceptions can deter potential investors. PB, or an individual’s perception of their ability to successfully navigate the cryptocurrency market, also plays a crucial role in PD. When individuals believe they can manage cryptocurrency investments, they are more inclined to proceed with a purchase. Conversely, SE concerns, including the risks of cyber threats, can deter investment, as individuals weigh these risks against the perceived benefits of engaging in the cryptocurrency market. Understanding the complex interactions between AT,

PB, and SE concerns is essential for developing strategies that encourage more informed and confident investment decisions in the cryptocurrency market. Previous research in the field of cryptocurrency adoption has extensively explored individual factors such as TR, SE, and EW. These studies have highlighted the significant roles that each of these variables plays in shaping consumer behavior. TR has been shown to be a critical component in the adoption of new financial technologies, particularly in environments where the perceived risk is high, such as in the cryptocurrency market. Similarly, SE has been identified as a fundamental concern for users, as the threat of cyberattacks and fraud can deter individuals from engaging in cryptocurrency transactions. EW, facilitated by digital communication channels, has also been recognized as a powerful influence on consumer decisions, as it helps shape perceptions and build confidence in these emerging technologies. However, despite the wealth of knowledge surrounding these individual factors, there remains a significant gap in the literature regarding how these variables interact with each other to influence cryptocurrency PD. Existing studies have essentially treated TR, SE, and EW as isolated factors, without considering the potential synergies or conflicts that arise when these elements are integrated into a cohesive model. Furthermore, there is limited empirical evidence on how these factors collectively impact the decision- making process in the context of cryptocurrency. A comprehensive, integrated model that captures the complex interplay between TR, SE, EW, and other relevant variables such as AT and PB is necessary for the existing body of research.

This research aimed to address the identified gap by developing and validating an integrated model that comprehensively examines the factors influencing cryptocurrency PD. The primary objective was to understand how TR mediates the impact of EW and SE on consumer behavior, thereby providing a more holistic view of the decision-making process in the cryptocurrency market. The study sought to explore the direct and indirect effects of critical variables, including EW, SE, AT, PB, and TR, on the likelihood of purchasing cryptocurrency. The study specifically focused on the relationships between these variables to determine how they influence one another and, ultimately, how they contribute to the decision to engage in cryptocurrency transactions. By integrating these factors into a single model, the research provided insights into the mechanisms through which EW and SE shape consumer TR, and how this TR, in turn, affects purchase intentions. The findings aimed to contribute to the development of more effective strategies for enhancing consumer confidence and encouraging broader adoption of cryptocurrencies. To guide the investigation, the research was structured around several key questions. The central research question asked, "What are the effects of EW, SE, AT, PB, and TR on cryptocurrency PD?" This question was further broken down into specific sub-questions to explore the individual and combined effects of these variables. The study aimed to identify the direct impact of EW and SE on TR and AT, as well as the mediating role of TR in the relationship between these factors and PD.

Literature Review

Influencing Cryptocurrency Decisions Through Electronic Word of Mouth

Electronic Word of Mouth (EW) has emerged as a significant factor influencing consumer AT, TR, and PD in the digital marketplace. The proliferation of social media and online platforms transformed how consumers shared and received information, making EW a pivotal element in shaping their perceptions and behaviors. EW refers to the informal communication among consumers regarding the products or services of an organization, often through online reviews, social media posts, and other digital communication channels. This form of communication became increasingly important as it allowed consumers to share their experiences and opinions with a broad audience, thereby influencing the AT and behaviors of other potential buyers. Previous research extensively explored the impact of EW on consumer AT. For instance, [13] found that consumer engagement in EW significantly correlated with their purchase intentions, with an explained variance of 45.5% in purchase intention attributed to EW engagement. This finding suggested that positive EW could enhance consumers' perceptions of a brand, leading to more favorable AT that increase the likelihood of a purchase. Similarly, [14] highlighted that the sentiment of EW played a crucial role in shaping brand TR. Their research demonstrated that brand TR acted as a mediator between EW sentiment and purchase intention, indicating that positive EW not only improved consumer AT but also enhanced TR, which in turn influenced purchasing decisions.

The relationship between EW and TR was further emphasized in studies that examined how EW could either build or erode TR in a brand. For example, [14] noted that negative EW could significantly damage brand TR, providing risk cues that deterred potential buyers. This finding underscored the importance of managing EW effectively to maintain a positive brand image and sustain consumer TR. Furthermore, [15] emphasized that EW revolutionized consumer decision-making by providing valuable information that shaped both TR and purchase intentions. They identified three core dimensions of EW—information quality, usefulness, and argument quality—that significantly affected consumer TR and, consequently, their purchasing behavior. Additionally, the impact of EW on PD was not only direct but also mediated by other factors such as brand image and TR. Study by [16] demonstrated that EW significantly influenced purchasing decisions through its effect on brand TR and brand image. This finding suggested that EW strategies that effectively enhanced brand TR and image could lead to increased purchase intentions and long-term brand loyalty. Moreover, the context in which EW was communicated also played a crucial role in its effectiveness. Study by [17] found that the quantity and timeliness of EW information significantly impacted consumer TR, which in turn influenced purchase intentions. This indicated that both the content and the context of EW were essential in shaping consumer behavior.

Securing Trust: The Impact of Security Measures

Security (SE) in the context of online transactions, particularly within the cryptocurrency market, has emerged as a critical factor influencing consumer behavior. Given the inherent risks and the decentralized nature of digital currencies, the perception of SE directly impacts consumer confidence. SE measures are essential in protecting users from potential threats such as hacking, fraud, and unauthorized access to their digital assets. These concerns are particularly acute in the cryptocurrency market, where the absence of traditional regulatory frameworks often leaves consumers vulnerable to various

risks. Therefore, understanding how SE influences TR and perceived control is vital for promoting broader adoption of cryptocurrencies. Research has consistently shown that SE measures play a pivotal role in building consumer TR in cryptocurrency platforms. Research by [7] highlighted that perceived risk negatively affects TR, suggesting that as consumers become more aware of the risks associated with digital currencies, their TR in these platforms diminishes. This finding underscores the importance of robust SE protocols to mitigate perceived risks and enhance user confidence. When consumers believe that a platform has implemented effective SE measures to protect their transactions and personal information, their TR in the platform increases, making them more likely to engage in cryptocurrency transactions. The study by [18] further emphasized the TR issues exacerbated by the lack of regulatory oversight in cryptocurrency trading platforms. The absence of governmental support or institutional backing can significantly weaken consumer TR, highlighting the need for enhanced SE measures and regulatory compliance to improve consumer confidence.

In addition to TR, SE also influences PB, which is another crucial determinant of consumer AT. Study by [5] found that perceived government control moderates the relationship between SE perceptions and consumer behavior. When consumers feel that they have control over their transactions and that adequate SE measures are in place, their confidence in using cryptocurrencies is strengthened. This sense of control is essential in mitigating the perceived risks associated with digital currencies, as it reassures consumers that they can manage and protect their assets effectively. Moreover, the usability of cryptocurrency wallets, as discussed by [19], is closely linked to SE perceptions. Poor usability and a lack of understanding of how cryptocurrencies function can lead to SE breaches, which, in turn, undermine consumer TR. Therefore, designing user-friendly interfaces with integrated SE features is crucial for enhancing perceived control and fostering TR among users. The relationship between SE measures, TR, and perceived control is further reinforced by the findings of [20], which indicated that perceived SE positively influences consumers' willingness to purchase cryptocurrencies. This study underscored the significance of SE perceptions in shaping consumer behavior, suggesting that when consumers feel secure, their intention to engage in cryptocurrency transactions increases. The interplay between SE and TR, as well as the role of perceived control, illustrates the complex dynamics at play in the decision-making process of cryptocurrency users. By ensuring robust SE measures, cryptocurrency platforms can not only build TR and enhance perceived control but also encourage more widespread adoption of digital currencies.

Attitudes Towards Digital Currencies

Attitudes (AT), defined as consumers’ overall evaluations of a product or service, play a critical role in shaping purchase intentions, particularly in the context of cryptocurrencies. In the realm of digital currencies, AT encompass consumers' perceptions, feelings, and predispositions towards the technology, influenced by various psychological and contextual factors. These AT serve as a lens through which consumers assess the value and risks associated with cryptocurrencies, ultimately determining their willingness to engage in transactions or investments. Given the relatively nascent and volatile nature of cryptocurrencies, understanding the formation and impact of consumer AT is

crucial for stakeholders seeking to promote adoption and usage. The relationship between consumer AT and purchase intentions in the cryptocurrency market has been extensively studied, revealing that favorable AT significantly increase the likelihood of engaging in cryptocurrency transactions. For instance, [21] found that consumer innovativeness positively influenced the intention to use cryptocurrencies, with AT acting as a critical mediator in this relationship. Their study suggested that consumers who exhibited a cheerful disposition towards innovation and technology were more likely to develop favorable AT, thereby increasing their intention to adopt these digital assets. This finding highlighted the importance of fostering positive AT through targeted marketing strategies that emphasize the innovative aspects of cryptocurrencies.

Moreover, consumer AT have been shown to mediate the effects of other influential factors such as subjective norms and perceived self-efficacy on purchase intentions. Study by [22] demonstrated that while subjective norms and self-efficacy directly impacted the intention to invest in cryptocurrencies, their effects were significantly enhanced when consumers held positive AT. This indicates that cultivating positive AT among consumers can amplify the influence of social and psychological factors, leading to higher investment intentions. The research underscored the need for educational initiatives and clear communication strategies that can shape consumer AT positively, thereby encouraging broader adoption of cryptocurrencies. Further research has also emphasized the interconnectedness between AT and PB in shaping purchase intentions. Study by [23] aligned their findings with the Theory of Planned Behavior (TPB), showing that when consumers felt confident in their ability to navigate the complexities of cryptocurrency transactions, their positive AT were more likely to translate into actual purchase intentions. This interplay between AT and PB suggested that enhancing consumers' confidence in using cryptocurrencies—through user-friendly platforms and comprehensive support—could strengthen their favorable AT and increase their propensity to invest.

Additionally, AT are often influenced by broader financial perceptions, as evidenced by [24], who revealed that AT towards money significantly impacted behavioral intentions to use Bitcoin. This research indicated that consumers' broader views on financial management and investment strategies could shape their AT, thus influencing their behavioral intentions. For marketers, this highlights the importance of addressing the financial literacy and investment AT of potential cryptocurrency users to foster more positive perceptions and encourage adoption. However, not all studies have found AT to be a solid mediating factor. Research by [25] discovered that while AT positively influenced the intention to use cryptocurrency, they did not mediate the relationship between perceived risk and behavioral intention. This finding suggested that despite holding positive AT, consumers might still be deterred by perceived risks, underscoring the importance of directly addressing these risks in marketing and communication efforts. Therefore, while positive AT are crucial, they must be supported by strategies that mitigate perceived risks to convert favorable AT into purchase intentions fully.

Perceived Behavioral Control in Crypto Transactions

Perceived Behavioral Control (PB) refers to an individual's perception of the

ease or difficulty of performing a particular behavior, influenced by their past experiences and anticipated obstacles. In the context of online purchasing, PB represents how capable consumers feel about navigating and completing transactions on digital platforms. This construct, rooted in the TPB, is pivotal in understanding consumer intentions and actions, particularly in the rapidly evolving landscape of e-commerce. The perception of control can encompass a range of factors, including the ease of using a website, the clarity of payment processes, and confidence in managing potential risks associated with online shopping. Numerous studies have underscored the significance of PB in shaping consumer behavior online. Study by [26] demonstrated that PB directly influenced consumers' intentions to engage in online shopping. Their research indicated that when consumers perceived they had control over various aspects of the online shopping process—such as navigating the site, understanding payment methods, and handling delivery options—they were more inclined to make purchases. This finding aligned with the principles of the TPB, which posited that a higher level of perceived control correlates with stronger intentions to perform the behavior, in this case, making online purchases. The study highlighted the importance of creating a seamless and user-friendly shopping experience to enhance consumers' perceived control and drive their purchasing decisions. Further research has explored the interplay between PB and other psychological factors in the context of online shopping. Research by [27] found that PB, along with positive AT towards online shopping, significantly influenced Generation Y's intention to repurchase clothing online. Their study suggested that PB acted as a mediating factor between shopping orientation and purchase intentions, implying that consumers who felt competent and confident in their online shopping abilities were more likely to engage in repeat purchases. This reinforced the idea that enhancing consumers' perceived control over the shopping process could lead to higher levels of customer loyalty and repeat business in the e-commerce sector.

However, the influence of PB on consumer behavior is only sometimes consistent across different contexts. Research by [28] reported that during the COVID-19 pandemic, while AT and subjective norms positively affected consumers' intentions to switch to online shopping, PB did not have a significant impact. This finding suggested that in situations where online shopping became more of a necessity rather than a choice, consumers might rely more on their existing AT and social influences than on their perceived control over the process. This underscores the complexity of PB's role in consumer decision-making, which can vary depending on external circumstances and the degree of consumer necessity. Research by [29] further emphasized the importance of PB in explaining online shopping behaviors during the COVID-19 outbreak. Their research highlighted that consumers' perceptions of control over their online shopping experiences were crucial for understanding their engagement with e-commerce platforms. The study suggested that enhancing the usability of online platforms and providing clear, accessible information could significantly improve consumers' perceived control, thereby fostering greater engagement and satisfaction with the online shopping experience. Moreover, [30] reinforced the significance of PB in shaping consumers' purchase intentions in online shopping. Their research found that PB, alongside AT and subjective norms, played a vital role in influencing consumers' decisions to purchase online. This suggested that efforts to enhance consumers' perceived control—

through better design, clearer instructions, and more reliable support systems—could lead to more favorable purchasing outcomes. The cumulative findings from these studies underscore the critical role of PB in driving online consumer behavior and the necessity for online retailers to prioritize strategies that enhance consumer control and confidence.

Trust as a Bridge Between Perception and Action

Trust (TR) was defined as the belief in the reliability and integrity of a cryptocurrency platform or transaction. In the context of cryptocurrency transactions, TR is crucial due to the inherent risks and uncertainties associated with digital currencies. TR influences whether consumers feel confident in the SE of their transactions and the credibility of the information they receive, particularly from sources like EW. As cryptocurrencies operate in a largely decentralized and unregulated environment, the perception of TR becomes even more critical for users who must rely on the platform's integrity and the SE measures in place to protect their assets and personal information. Several studies have highlighted the role of TR as a mediator in the relationship between SE, EW, and PD. Research by [31] emphasized that SE measures significantly influence consumer TR in online platforms. They found that when consumers perceived a platform as secure, their TR in that platform increased, making them more likely to rely on EW and proceed with their PD. The study indicated that EW could reduce uncertainty and enhance purchase confidence by providing evaluations from experienced customers, thereby fostering TR. This underscores the importance of robust SE protocols in building TR, which in turn enhances the effectiveness of EW in influencing purchase intentions.

The mediating role of TR in the EW process has been further explored in the literature. Research by [32] noted that TR is a crucial factor in EW, as it affects consumers' willingness to accept and act upon the information provided. Their research suggested that when consumers TR the EW they encounter, they are more likely to adopt the recommendations and make purchasing decisions based on that information. This relationship highlights the critical interplay between SE, TR, and EW, where TR not only enhances the credibility of EW but also directly influences consumer behavior. Further studies supported the notion that TR mediates the relationship between EW and purchase intentions. Study by [33] demonstrated that when consumers perceived EW reviews as credible, they were more inclined to adopt the information and make PD. This finding suggests that the effectiveness of EW in driving purchase intentions is heavily dependent on the trustworthiness of the source and the SE of the platform. Research by [34] also found that EW engagement significantly influenced consumers' purchase intentions in social commerce, with TR acting as a mediating factor. Their study suggested that active engagement with EW could enhance TR in the information provided, thereby increasing the likelihood of making a purchase.

The credibility of EW, influenced by SE measures, was found to impact online consumer PD significantly. Study by [35] indicated that when consumers perceived EW as credible, they were more likely to TR the information and make purchasing decisions based on it. This further reinforced the idea that TR mediates the relationship between SE, EW, and purchase intentions. Research

by [36] supported these findings, revealing that consumers who engaged in EW were more likely to make PD compared to those who did not. Their research suggested that EW could enhance TR and perceived control, ultimately influencing purchasing behavior. Finally, [37] found that higher levels of EW correlated with increased customer satisfaction, which subsequently led to higher PD. This study underscored the critical role of TR, fostered by positive EW and SE measures, in shaping consumer AT and behaviors. The cumulative evidence from these studies illustrates that TR is a vital mediator in the relationship between SE, EW, and PD. It is a key factor for cryptocurrency platforms aiming to enhance consumer engagement and drive adoption.

Connecting the Dots: An Integrated Model of Cryptocurrency Adoption

The research proposed an integrated model that combined the influences of EW, SE, AT, PB, and TR on cryptocurrency PD. This model aimed to provide a comprehensive understanding of how these factors interact to shape consumer behavior in the cryptocurrency market. Each component of the model was derived from extensive literature, which underscored its relevance and impact on consumer decision-making processes in digital contexts. The integrated model posited that EW and SE directly influenced TR, which in turn mediated their effects on PD. TR was central to the model, reflecting its critical role as identified in previous studies. As demonstrated by [31], SE measures were found to significantly bolster consumer TR in online platforms significantly, thereby enhancing the credibility of EW and increasing the likelihood of purchase. This relationship suggested that the more secure consumers perceived a cryptocurrency platform to be, the more likely they were to TR both the platform and the EW associated with it, leading to higher purchase intentions.

Additionally, the model incorporated AT and PB as key determinants of PD, aligning with the TPB. AT, shaped by both EW and SE perceptions, were hypothesized to influence PD directly. Study by [21] emphasized that favorable AT towards innovation and technology increased the likelihood of engaging with cryptocurrencies. Similarly, PB, which reflected consumers' confidence in their ability to navigate cryptocurrency transactions, was also expected to influence purchase intentions. As noted by [26], when consumers felt they had control over the online purchasing process, their intentions to make purchases were stronger. The rationale for the hypothesized relationships within the model was rooted in existing literature that highlighted the interconnectedness of these variables. The inclusion of EW and SE as antecedents to TR was supported by findings from [32], who stressed that TR was essential for consumers to accept and act upon EW. The mediating role of TR between EW, SE, and PD was further substantiated by studies such as those conducted by [33] and [34], which demonstrated that TR enhanced the impact of EW on purchase intentions. Moreover, the model recognized the dual role of AT and PB in shaping PD, which is consistent with the TPB framework. Study by [23] highlighted the significant influence of perceived control on the translation of positive AT into actual behavior, reinforcing the importance of these constructs in the model. The inclusion of these variables provided a more holistic view of the decision-making process, acknowledging that while TR was pivotal, AT and PB also played crucial roles in determining consumer actions.

Method

Research Design and Data Collection

The study employed a cross-sectional survey design to investigate the relationships between EW, SE, AT, PB, TR, and PD in the context of cryptocurrency usage. This design was chosen because it allowed for the collection of data at a single point in time, providing a snapshot of the variables under investigation. The cross-sectional approach was particularly suited to examining the hypothesized model, as it facilitated the exploration of correlations between variables and the testing of mediation effects. The structured nature of the survey design enabled the researchers to systematically gather quantitative data that could be analyzed to validate the proposed theoretical model. A convenience sampling method was employed to reach participants for the survey. This non-probability sampling technique was selected due to its practicality and efficiency in accessing the target population, which consisted of active cryptocurrency users. Convenience sampling allowed the researchers to gather data from individuals who were readily available and willing to participate in the study, despite potential limitations regarding the generalizability of the findings. The sample was drawn from various online communities and social media platforms where cryptocurrency users were known to be active, ensuring that the respondents were familiar with the subject matter of the survey.

Initially, the study distributed 330 questionnaires to potential participants, out of which 320 were deemed valid after the validation process. The validation step included screening responses based on the question, “Has the user ever used cryptocurrencies?” to ensure that only experienced cryptocurrency users were included in the analysis. The study justified a final sample size of 320 respondents, determined based on previous studies in similar research contexts and the complexity of the proposed model. This sample size was considered sufficient to achieve reliable and valid results, especially for the structural equation modeling techniques used to analyze the data. With 320 valid responses, the study provided adequate statistical power to detect significant relationships between the variables and to test the mediation effects of TR. Additionally, the researchers accounted for potential data attrition and ensured the stability of the parameter estimates in the model, reinforcing the robustness of the sample size selection. The target population for this study included active cryptocurrency users in Indonesia. This population was selected due to the growing interest and participation in cryptocurrency markets within the country, as well as the unique challenges faced by users in a developing economy with rapidly evolving digital financial landscapes. The population consisted of individuals who had experience with buying, selling, or investing in cryptocurrencies, making them well-suited to provide insights into the factors influencing their PD. The focus on Indonesian cryptocurrency users allowed the researchers to explore the specific dynamics of TR, SE, and EW within a culturally and economically diverse setting. Data were collected using a structured questionnaire, which was designed to measure the constructs of interest, including EW, SE, AT, PB, TR, and PD. The questionnaire was distributed online via Google Forms, a platform chosen for its accessibility and ease of use, allowing respondents to complete the survey at their convenience. The data collection took place in January 2024, with the survey link being

shared through various online forums, social media groups, and cryptocurrency communities. The structured questionnaire format ensured consistency in the data collection process, with standardized questions that facilitated the comparison of responses across the sample. The collected data were then prepared for analysis, with attention to ensuring the accuracy and completeness of the responses before proceeding to the statistical analysis phase.

Research Model and Hypothesis Development

The research model was developed based on theoretical foundations and empirical evidence from existing literature, focusing on the relationships between EW, SE, AT, PB, TR, and PD in the context of cryptocurrency. The model posited that EW and SE would have direct impacts on TR, which in turn would mediate their effects on PD. Additionally, AT and PB were hypothesized to play significant roles in influencing PD, either directly or through mediation by TR. The first hypothesis (H1) proposed that EW would positively influence TR (EW → TR). This relationship was grounded in previous studies that suggested EW could enhance consumer TR by reducing uncertainty and providing social proof [31]. The second hypothesis (H2) extended the influence of EW to AT, suggesting that positive EW would lead to more favorable consumer AT (EW → AT). This was supported by literature indicating that EW can shape consumer perceptions and AT, which are critical in the decision-making process [13].

The third hypothesis (H3) posited that SE would positively influence TR (SE → TR). Prior research highlighted the importance of perceived SE in building consumer TR, particularly in online and cryptocurrency transactions [7]. The fourth hypothesis (H4) suggested that SE would also positively influence PB (SE → PB), reflecting the notion that when consumers perceive a platform as secure, they feel more confident in their ability to control their interactions with the platform [5]. The model further hypothesized that TR would have a direct positive impact on PD (H5: TR → PD). This hypothesis was based on findings that indicated TR is a crucial determinant of consumer behavior in online environments, particularly in high-risk contexts like cryptocurrency [34]. Additionally, AT were expected to directly influence PD (H6: AT → PD), aligning with the Theory of Planned Behavior, which posits that positive AT lead to stronger intentions and behaviors [23]. Finally, the seventh hypothesis (H7) proposed that PB would positively influence PD (PB → PD), reflecting the idea that consumers who feel they have control over the transaction process are more likely to follow through with a purchase [26].

The research model was visually represented in a diagram that illustrated the hypothesized relationships between the variables. The diagram depicted EW and SE as the exogenous variables influencing TR, AT, and PB. TR was positioned as a central mediator that connected these variables to PD. AT and PB were also shown to directly influence PD, highlighting their roles in shaping consumer behavior in the cryptocurrency market. This diagram provided a clear and concise visual representation of the research framework, facilitating an understanding of the proposed relationships and the overall structure of the study. The Figure 1 presented the integrated model, clearly mapping out the hypothesized paths between EW, SE, TR, AT, PB, and PD. This visual framework served as a foundation for the subsequent data analysis, where each path was tested to determine the validity of the hypotheses. The diagram underscored the centrality of TR as a mediator in the model, illustrating how it

linked EW and SE to consumer PD, while also highlighting the direct effects of AT and PB on those decisions.

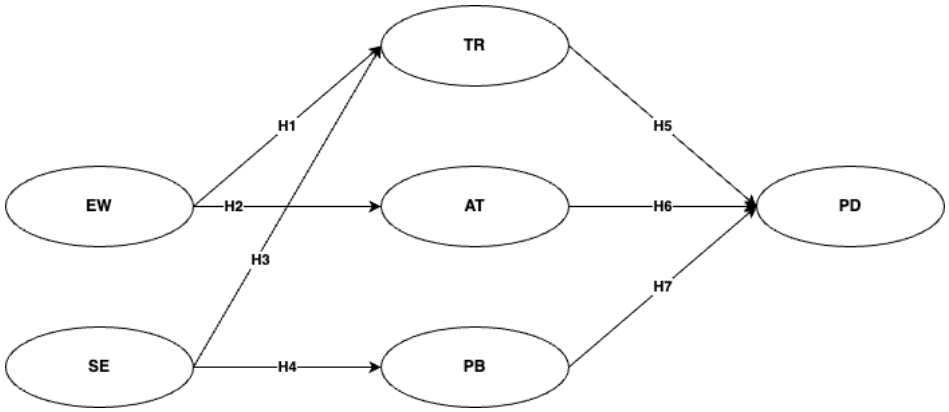

Figure 1 **Research Framework**

Measurement Instruments

The study employed a structured questionnaire to measure the constructs of interest, including EW, SE, AT, PB, TR, and PD. Each scale was developed or adapted based on established instruments from previous research, ensuring both reliability and validity. The adaptation process involved reviewing the original scales and modifying them to fit the specific context of cryptocurrency transactions. This approach was critical in capturing the nuances of consumer behavior in the digital currency market. For the **EW** construct, the items were designed to assess the impact of online peer recommendations and reviews on the respondent's perception of cryptocurrencies. These items were adapted from previous studies that explored the role of EW in shaping consumer AT and behaviors in online settings [13]. The **SE** scale included items that measured the perceived SE of cryptocurrency transactions, reflecting the importance of robust SE measures in fostering TR and reducing perceived risks. These items were based on scales from prior research that examined SE perceptions in online and financial contexts [7]. The **AT** scale was designed to evaluate the respondent's overall attitude towards cryptocurrency, including their positive or negative feelings about using or investing in digital currencies. These items were adapted from studies that utilized the TPB to measure AT towards technology adoption [21]. For **PB**, the items focused on the respondent's perceived ease or difficulty in using cryptocurrencies, capturing their confidence in managing transactions and navigating the market. This scale was informed by research that examined perceived control in online shopping and digital finance [26].

The **TR** scale gauged the level of TR the respondent had in cryptocurrency platforms and transactions. The items were adapted from studies that highlighted the critical role of TR in online environments, particularly in contexts where the perceived risk is high [32]. Finally, the **PD** scale assessed the likelihood of the respondent engaging in cryptocurrency transactions, reflecting their intention to buy or invest in digital currencies. These items were based on scales used in research that measured purchase intentions in e-commerce and digital finance [23]. The questionnaire included a comprehensive set of items for each construct, ensuring that all relevant aspects of the research model were

covered. For each variable, three items were developed to measure the underlying construct, providing a robust and reliable assessment of the respondents' perceptions and intentions. The items were presented on a Likert scale, ranging from "strongly disagree" to "strongly agree," allowing respondents to express the degree of their agreement with each statement. The table 1 below summarizes the specific items used in the questionnaire for each construct, reflecting the careful consideration given to scale development and adaptation.

Table 1. Item Questionnaire

Construct	Item Code	Questionnaire Item
EW	EW1	I trust online reviews when deciding on cryptocurrency usage.
	EW2	Positive comments about cryptocurrency influence my decisions.
	EW3	I often rely on social media for cryptocurrency advice.
SE	SE1	I feel secure when conducting cryptocurrency transactions.
	SE2	Cryptocurrency platforms are safe from hacking and fraud.
	SE3	My personal data is protected when using cryptocurrencies.
AT	AT1	I have a favorable opinion of cryptocurrencies.
	AT2	Using cryptocurrency is a good idea.
	AT3	I am interested in learning more about cryptocurrencies.
PB	PB1	I can easily use cryptocurrencies for my transactions.
	PB2	I have control over my cryptocurrency investments.
	PB3	Managing cryptocurrency transactions is straightforward.
TR	TR1	I trust the security of cryptocurrency platforms.
	TR2	Cryptocurrency platforms are reliable for transactions.
	TR3	I trust the overall system of cryptocurrency transactions.
PD	PD1	I am likely to purchase cryptocurrency in the near future.
	PD2	I intend to invest in cryptocurrency.
	PD3	I will recommend cryptocurrency to others.

This structured approach to scale development ensured that the measurement instruments were both comprehensive and aligned with the study’s objectives, providing a solid foundation for the subsequent data analysis.

Data Analysis

The data collected from the structured questionnaire were analyzed using SmartPLS, a software tool designed for partial least squares structural equation modeling (PLS-SEM). This method was selected due to its suitability for handling complex models and smaller sample sizes, as well as its ability to assess both measurement and structural models simultaneously. The analysis followed a systematic approach, beginning with the evaluation of the measurement model to ensure the reliability and validity of the constructs, followed by the evaluation of the structural model to test the hypothesized relationships. The first step in the data analysis process involved evaluating the measurement model. This step was crucial for confirming that the items used to measure each construct were both reliable and valid. The reliability of the constructs was assessed using Cronbach's alpha and composite reliability scores, which indicated the internal consistency of the items within each

construct. Values of Cronbach's alpha and composite reliability above 0.7 were considered acceptable, signifying that the items consistently represented the underlying constructs. The validity of the constructs was evaluated through convergent and discriminant validity. Convergent validity was assessed by examining the Average Variance Extracted (AVE) for each construct, with an AVE value above 0.5 indicating that the construct explained a sufficient proportion of the variance in its items. Discriminant validity was evaluated using the Fornell-Larcker criterion, ensuring that each construct was distinct from the others in the model.

After confirming the reliability and validity of the measurement model, the structural model was evaluated to test the hypothesized relationships between the constructs. This involved calculating the path coefficients, which represented the strength and direction of the relationships between the independent and dependent variables. The significance of these path coefficients was tested using bootstrapping procedures, which provided t-statistics and p-values to determine whether the hypothesized paths were statistically significant. A path was considered significant if the p-value was below 0.05, indicating that the relationship between the constructs was not due to chance. In addition to the path coefficients, the model fit was assessed using various fit indices. The R-squared (R^2) values were calculated to determine the proportion of variance in the dependent variables that could be explained by the independent variables. Higher R^2 values indicated a better fit of the model to the data. The study also considered the predictive relevance of the model using the Stone-Geisser Q^2 statistic, which was calculated through blindfolding procedures. A Q^2 value greater than zero suggested that the model had predictive relevance for the dependent constructs. The overall model fit was further examined using the Standardized Root Mean Square Residual (SRMR), with a value below 0.08 indicating a good fit between the model and the observed data. The comprehensive evaluation of both the measurement and structural models ensured the robustness of the research findings. Through this rigorous data analysis process, the study was able to validate the hypothesized relationships and provide empirical evidence on the role of TR in mediating the impact of EW and SE on cryptocurrency PD.

Result and Discussion

Descriptive Statistics

The study's sample consisted of 320 respondents, who were surveyed to understand the factors influencing cryptocurrency PD. The demographic characteristics of the sample provided insights into the diversity and representativeness of the respondents. The age distribution showed that the majority of participants were between 18 and 34 years old, with 32.81% aged 18-24 years and 30.63% aged 25-34 years. Participants in the 35-44 years age group comprised 23.75% of the sample, while those aged 45 years and older accounted for 12.81%. This distribution highlighted the participation of both younger and middle-aged adults in the cryptocurrency market, with a stronger representation of younger individuals. In terms of gender, the sample was relatively balanced, with 55.31% male and 44.69% female respondents. The educational background of the participants revealed that 61.88% held a Bachelor’s degree, while 38.13% had a Master’s degree or higher. This educational composition indicated a well-educated sample, likely reflective of

the knowledge and skills required to engage in cryptocurrency transactions. Additionally, the data on internet usage indicated that a significant portion of the sample spent considerable time online, with 54.69% reporting 4-6 hours of internet use per day and 25.31% spending more than 7 hours online daily. Only 6.25% of participants used the internet for less than 1 hour per day, and 13.75% reported 1-3 hours of daily internet usage. These findings suggested that the respondents were highly active online, which is consistent with the digital nature of cryptocurrency trading. Table 2 provided a detailed breakdown of these demographic characteristics, illustrating the diversity within the sample and offering a comprehensive understanding of the participants' backgrounds.

Table 2. Demographic Data

Demographic Characteristic	Category	Frequency	Percentage (%)
Age	18-24 years	105	32.81%
	25-34 years	98	30.63%
	35-44 years	76	23.75%
	45+ years	41	12.81%
Gender	Female	143	44.69%
	Male	177	55.31%
Education Level	High School or equivalent	198	61.88%
	Bachelor’s Degree	122	38.13%
	Master’s Degree or higher	81	22.44%
Internet Usage	Less than 1 hour	20	6.25%
	1-3 hours	44	13.75%
	4-6 hours	175	54.69%
	7-9 hours	81	25.31%
	10 hours or more	20	6.25%

The descriptive statistics for each variable, including the mean, standard deviation, and range, were also calculated to provide an overview of the data distribution and variability. These statistics helped in assessing the central tendency and dispersion of the responses for each construct in the study. Additionally, the Variance Inflation Factor (VIF) was calculated to assess the presence of multicollinearity among the independent variables. VIF values for the hypothesized paths indicated that multicollinearity was within acceptable limits, with all values below the commonly used threshold of 5. Specifically, the VIF values ranged from 1.0 to 4.872, suggesting that the predictor variables were not highly correlated and that the model did not suffer from significant multicollinearity issues. The analysis of VIF values revealed that the path from AT to PD had the highest VIF at 4.872, followed by TR to PD with a VIF of 4.719. These higher VIF values, while still within acceptable limits, suggested a strong relationship between AT, TR, and PD, which was consistent with the theoretical expectations. The paths from Electronic Word of Mouth (EW) to TR and SE to TR both had VIF values of 1.516, indicating a moderate level of correlation. Meanwhile, the paths from EW to AT and SE to PB had the lowest VIF values of 1.0, suggesting minimal multicollinearity for these relationships. Table 3 provided a summary of these findings, offering a clear picture of the relationships between the independent variables and their impact on the model's structural integrity. The descriptive statistics and VIF analysis together

ensured that the data met the necessary assumptions for further statistical testing, paving the way for reliable and valid results in the subsequent hypothesis testing and structural model evaluation.

Table 3. Inner Variance Inflation Factor (VIF) Results

Hypothesis	Path	VIF
H1	EW -> TR	1.516
H2	EW -> AT	1
H3	SE -> TR	1.516
H4	SE -> PB	1
H5	TR -> PD	4.719
H6	AT -> PD	4.872
H7	PB -> PD	2.816

Measurement Model Evaluation

The reliability of the constructs was assessed using Cronbach's alpha and composite reliability scores, which are standard measures to determine the internal consistency of the items within each construct. The results indicated that all constructs achieved acceptable levels of reliability. Specifically, the Cronbach's alpha values ranged from 0.709 to 0.894, demonstrating that the items within each construct were consistent in measuring the underlying concept. For instance, the SE construct exhibited the highest reliability with a Cronbach's alpha of 0.894, indicating a high degree of internal consistency among the security-related items. Similarly, the PB construct showed strong reliability with a composite reliability score of 0.884, further confirming the consistency of the measurement. Composite reliability scores, which provide a more comprehensive assessment of reliability by considering the different loadings of items within a construct, also indicated strong internal consistency across all constructs. The composite reliability values ranged from 0.714 to 0.935, with the SE construct again demonstrating the highest score of 0.935. These results confirmed that the measurement model was reliable and that the items used for each construct consistently captured the intended concepts. The consistency and reliability of these constructs were critical for ensuring the validity of the subsequent structural model analysis. Table 4 provided a detailed summary of these reliability metrics, underscoring the robustness of the measurement model.

Table 4. Reliability Analysis and Convergent Validity

Construct	Item	Factor Loading	Cronbach's Alpha	Composite Reliability	AVE
AT	AT1	0.805	0.709	0.714	0.56
	AT2	0.786			
	AT3	0.723			

Construct	Item	Factor Loading	Cronbach's Alpha	Composite Reliability	AVE
EW	EW1	0.781	0.722	0.781	0.524
	EW2	0.777			
	EW3	0.759			
PB	PB1	0.894	0.802	0.884	0.719
	PB2	0.873			
	PB3	0.771			
PD	PD1	0.818	0.718	0.758	0.514
	PD2	0.795			
	PD3	0.724			
SE	SE1	0.919	0.894	0.935	0.827
	SE2	0.959			
	SE3	0.848			
TR	TR1	0.755	0.774	0.739	0.588
	TR2	0.713			
	TR3	0.719			

Convergent validity was evaluated by examining the Average Variance Extracted (AVE) for each construct. AVE measures the extent to which a construct explains the variance in its items, with a threshold value of 0.5 indicating adequate convergent validity. The results showed that all constructs met or exceeded this threshold, demonstrating that the constructs were able to capture a significant proportion of the variance in their respective items. For example, the SE construct had an AVE of 0.827, indicating that over 82% of the variance in the security-related items was accounted for by the construct. Other constructs, such as PB and TR, also displayed strong convergent validity with AVE values of 0.719 and 0.588, respectively. These findings confirmed that the items within each construct were not only reliable but also valid in terms of their ability to represent the underlying concept. The convergent validity of the constructs was essential for ensuring that the measurement model accurately reflected the theoretical framework of the study, thus providing a solid foundation for testing the hypothesized relationships in the structural model.

Discriminant validity was assessed using the Fornell-Larcker criterion, which compares the square root of the AVE for each construct with the correlations between that construct and other constructs in the model. Discriminant validity is established when a construct shares more variance with its own items than with those of other constructs, meaning the square root of the AVE should be higher than the correlations with other constructs The results indicated that discriminant validity was achieved for all constructs in the model. For instance, the square root of the AVE for the SE construct was 0.722, which was higher than its correlations with other constructs, such as TR at 0.698 and PB at 0.637. Similarly, the AT construct had a square root of AVE of 0.678, which exceeded its correlation with electronic Word of Mouth (EW) at 0.616. These findings demonstrated that each construct was distinct and measured different aspects

of the underlying theoretical model, thereby supporting the integrity of the measurement model. Table 5 provided a comprehensive overview of these discriminant validity metrics, illustrating the distinctiveness of each construct and reinforcing the overall validity of the measurement model.

Table 5. Discriminant Validity

Construct	AT	EW	PB	PD	SE	TR
AT	0.678					
EW	0.616	0.651				
PB	0.555	0.65	0.648			
PD	0.632	0.557	0.642	0.717		
SE	0.677	0.583	0.637	0.568	0.61	
TR	0.588	0.621	0.596	0.639	0.722	0.698

The combination of reliability, convergent validity, and discriminant validity assessments confirmed that the measurement model was robust and well-suited for the subsequent analysis of the structural relationships hypothesized in the study. These rigorous evaluations ensured that the constructs were both reliable and valid, providing confidence in the study's ability to accurately capture the dynamics between EW, SE, TR, and cryptocurrency PD.

Summary of Inner Model Results

The hypothesis testing results provided empirical support for the proposed relationships within the research model, confirming the strength and significance of the pathways between the variables. Each hypothesis was tested using path coefficients, t-statistics, and p-values to determine the validity of the hypothesized relationships. The first hypothesis (H1) posited that EW would have a positive influence on TR (EW → TR). The analysis revealed a path coefficient of 0.606 with a t-statistic of 15.602 and a p-value of 0.000, indicating a strong and significant relationship between EW and TR. This result confirmed that positive EW significantly enhanced TR in cryptocurrency platforms, supporting the idea that consumers rely on peer recommendations to build TR in digital transactions.

The second hypothesis (H2) suggested that EW would positively influence AT (EW → AT). The path coefficient for this relationship was 0.916, with a t-statistic of 59.198 and a p-value of 0.000, demonstrating a very strong and highly significant impact of EW on AT. This finding highlighted the critical role of EW in shaping consumer AT, suggesting that favorable online reviews and recommendations strongly influence how consumers perceive and evaluate cryptocurrencies. The third hypothesis (H3) proposed that SE would positively impact TR (SE → TR). The path coefficient was 0.369, with a t-statistic of 8.803 and a p-value of 0.000, indicating a significant relationship between perceived SE and TR. This result underscored the importance of robust SE measures in fostering consumer TR in cryptocurrency platforms, aligning with previous

research that emphasized SE as a key determinant of TR in online environments.

The fourth hypothesis (H4) examined the relationship between SE and PB (SE → PB). The analysis showed a path coefficient of 0.937, with a t-statistic of 78.784 and a p-value of 0.000, confirming a very strong and significant impact of SE on PB. This finding suggested that consumers who perceive cryptocurrency platforms as secure are more confident in their ability to manage and control their transactions, which in turn influences their willingness to engage with digital currencies. The fifth hypothesis (H5) proposed that TR would positively influence PD (TR → PD). The path coefficient for this relationship was 0.405, with a t-statistic of 7.368 and a p-value of 0.000, indicating a significant impact of TR on PD. This result reinforced the central role of TR in the decision-making process, demonstrating that higher levels of TR lead to increased intentions to purchase cryptocurrencies.

The sixth hypothesis (H6) suggested that AT would positively impact PD (AT → PD). The analysis revealed a path coefficient of 0.419, with a t-statistic of 8.387 and a p-value of 0.000, confirming that favorable AT significantly increased the likelihood of making a purchase. This finding was consistent with the Theory of Planned Behavior, which posits that positive AT towards a behavior are strong predictors of the intention to perform that behavior. Finally, the seventh hypothesis (H7) examined the impact of PB on PD (PB → PD). The path coefficient was 0.204, with a t-statistic of 6.935 and a p-value of 0.000, indicating a significant, albeit weaker, influence of PB on PD. This result suggested that while perceived control over the transaction process is important, its impact on PD is less pronounced than that of TR and AT. Table 6 provided a comprehensive overview of these findings, summarizing the path coefficients, t-statistics, and p-values for each hypothesized relationship. Additionally, the R-squared (R^2) values for the dependent variables—AT (0.839), PB (0.879), PD (0.942), and TR (0.764)—indicated that the model explained a substantial portion of the variance in these constructs, confirming the robustness and explanatory power of the research model.

Table 6. Inner Model Results (Summary)

Hypothesis	Path	Coefficient	T Statistics	P Values	Supported
H1	EW -> TR	0.606	15.602	0	Yes
H2	EW -> AT	0.916	59.198	0	Yes
H3	SE -> TR	0.369	8.803	0	Yes
H4	SE -> PB	0.937	78.784	0	Yes
H5	TR -> PD	0.405	7.368	0	Yes
H6	AT -> PD	0.419	8.387	0	Yes
H7	PB -> PD	0.204	6.935	0	Yes

The structural model analysis was visually represented in the Inner Model Results Framework, highlighting the significant paths and the relationships between the constructs. This figure 2 illustrated the strength and direction of each path, providing a clear overview of how the variables interacted within the

model.

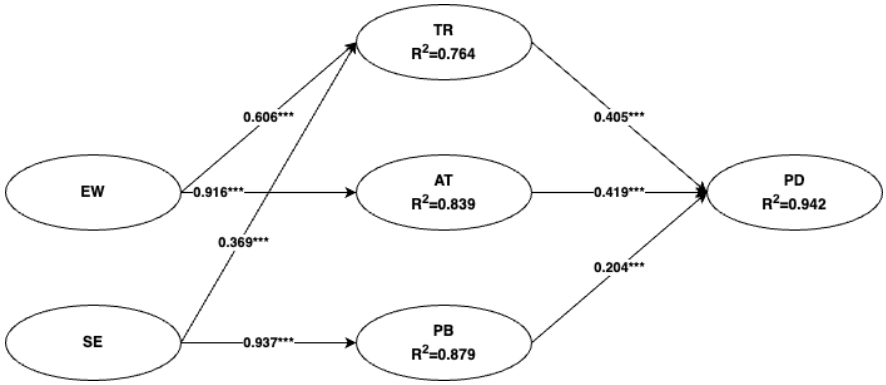

Figure 2 **Inner Model Result Framework**

Testing for Mediating Effects

The study conducted Sobel tests to evaluate the significance of the mediating effects of TR and PB in the relationships between EW, SE, and PD. The Sobel test is a statistical method used to determine whether a mediator variable significantly carries the influence of an independent variable to a dependent variable, thereby validating the mediating role within the model The first Sobel test was performed on the mediation path from EW to PD through TR (EW → TR → PD). The test yielded a Sobel statistic of 6.654, indicating that the mediation effect of TR was significant. This result confirmed that TR played a crucial role in translating the influence of EW into actual PD. Consumers were likely to rely on positive EW to build TR in cryptocurrency platforms, which subsequently increased their likelihood of making a purchase. The significance of this mediation effect highlighted the importance of TR as a key factor in the decision-making process for cryptocurrency users. The second mediation path tested was from EW to PD through AT (EW → AT → PD). The Sobel test produced a statistic of 8.303, signifying a strong and significant mediating effect of AT. This result suggested that EW not only directly influenced PD but also shaped consumer AT, which in turn drove their purchase intentions. The significant mediation effect of AT underscored the power of positive EW in enhancing consumer perceptions and leading to higher purchase intentions.

The third Sobel test examined the mediation effect of TR in the relationship between SE and PD (SE → TR → PD). The Sobel statistic for this path was 5.646, indicating a significant mediating role of TR. This finding supported the hypothesis that perceived SE positively influenced TR, which then translated into increased PD. The result emphasized that consumers who perceived cryptocurrency platforms as secure were more likely to develop TR in those platforms, ultimately leading to a higher likelihood of purchasing cryptocurrencies. Lastly, the Sobel test for the mediation path from SE to PD through PB (SE → PB → PD) produced a statistic of 7.011, demonstrating a significant mediation effect. This result confirmed that PB was an important mediator in the relationship between SE and PD. When consumers felt that they had control over their cryptocurrency transactions, bolstered by a sense of SE, they were more inclined to proceed with their PD. The significance of this mediation effect highlighted the critical role of perceived control in the decision-making process, particularly in high-risk environments like cryptocurrency

trading. Table 7 provided a detailed summary of these findings, showcasing the Sobel statistics for each mediation path and confirming the importance of TR and PB as mediators in the model. These results offered robust evidence that both TR and PB significantly influenced the pathways from EW and SE to PD, reinforcing the central role these mediators play in the context of cryptocurrency adoption.

Table 7. Mediation Testing Results

Construct	Construct Relationship	t-value of Path Coefficient	Sobel test
EW → TR → PD	EW → TR	15.602	6.654
	TR → PD	7.368	
EW → AT → PD	EW → AT	59.198	8.303
	AT → PD	8.387	
SE → TR → PD	SE → TR	8.803	5.646
	TR → PD	7.368	
SE → PB → PD	SE → PB	78.784	7.011
	PB → PD	6.935	

Discussion

The findings of this study provided significant insights into the role of TR in mediating the impact of EW and SE on cryptocurrency PD, contributing to the broader understanding of consumer behavior in the digital currency market. The results aligned with and extended existing literature, confirming that TR is a pivotal factor in the decision-making process for cryptocurrency users. The strong and significant influence of EW on TR and AT, as evidenced by the high path coefficients, emphasized the power of peer recommendations and online reviews in shaping consumer perceptions. This finding was consistent with previous research by [32], which highlighted the importance of EW in building TR and influencing consumer behavior in online environments. The study further demonstrated that when consumers TR the information provided through EW, they are more likely to develop positive AT, ultimately leading to PD Moreover, the significant mediating role of TR in the relationship between SE and PD underscored the critical importance of perceived SE in the cryptocurrency market. The findings supported the conclusions of [7], who emphasized that robust SE measures are essential for fostering TR in online platforms. This study added to the literature by showing that perceived SE not only directly influenced TR but also had an indirect effect on PD through the mediation of TR. This dual impact highlighted the necessity for cryptocurrency platforms to prioritize SE to build consumer TR and encourage adoption. The significant mediation effects of PB further reinforced the idea that consumers' confidence in their ability to manage cryptocurrency transactions plays a crucial role in their decision-making process, which was consistent with the findings of [26].

In terms of theoretical implications, this study contributed to the literature by integrating the concepts of EW, SE, TR, AT, and PB into a comprehensive model that explained cryptocurrency purchase behavior. The significant relationships identified in the study provided empirical support for the TPB by demonstrating that AT, PB, and TR are key determinants of purchase intentions

in the cryptocurrency market. The study also expanded the TPB framework by highlighting the importance of EW and SE as antecedents to TR and AT, suggesting that these factors should be considered in future research on digital currency adoption. From a practical perspective, the findings offered valuable insights for businesses and marketers in the cryptocurrency industry. The strong impact of EW on TR and PD suggested that companies should actively manage and encourage positive online reviews and peer recommendations to enhance consumer TR and drive sales. Similarly, the significant influence of SE on TR indicated that businesses must invest in robust SE measures and effectively communicate these measures to potential users to build TR and reduce perceived risks. The results also implied that enhancing consumers' PB, perhaps through user-friendly interfaces and clear instructions, could further increase their willingness to engage in cryptocurrency transactions. The comparison with previous studies revealed both confirmations and new insights. While the strong influence of EW and SE on TR was expected based on existing literature, the study also uncovered the nuanced roles of AT and PB in the cryptocurrency purchase process. One unexpected finding was the particularly strong impact of EW on AT, which suggested that peer recommendations could have an even greater influence on consumer perceptions than previously thought. This insight could lead to new avenues for research, such as exploring the specific characteristics of EW that most effectively shape AT and drive behavior in digital markets.

Conclusion

This study investigated the role of TR in mediating the impact of EW and SE on cryptocurrency PD. The findings highlighted the critical importance of TR and PB in the decision-making process. TR was found to significantly mediate the relationship between both EW and SE with PD, indicating that consumers rely heavily on trusted sources of information and secure platforms when making cryptocurrency investments. Moreover, PB also played a significant mediating role, particularly in the relationship between SE and PD, suggesting that consumers' confidence in their ability to manage cryptocurrency transactions significantly influences their purchasing behavior. These results underscored the interconnectedness of EW, SE, TR, and PB in shaping consumer decisions in the cryptocurrency market. The study made several theoretical contributions, most notably the validation of an integrated model that explains cryptocurrency purchase behavior. The research extended the TPB by incorporating EW and SE as antecedents to TR, AT, and PB. This integration provided a more comprehensive understanding of the factors influencing cryptocurrency PD. The study also demonstrated the mediating roles of TR and PB, offering empirical support for the hypothesis that these constructs are pivotal in the decision-making process. This research contributed to the existing literature by highlighting the complex interactions between psychological factors and digital communication in the context of cryptocurrency adoption. The findings of this study have important practical implications for cryptocurrency platforms, marketers, and policymakers. For cryptocurrency platforms, the results emphasized the necessity of establishing and communicating robust SE measures to build consumer TR. Marketers should focus on leveraging positive EW to enhance consumer AT and TR, which in turn can lead to higher purchase intentions. Additionally, platforms should consider designing user-friendly interfaces and providing clear guidance to enhance PB, thereby increasing

consumers' confidence in managing their cryptocurrency transactions. Policymakers might also consider these findings when developing regulations that protect consumers and foster TR in the digital currency market. Despite its contributions, the study had several limitations. The use of convenience sampling, for instance, may limit the generalizability of the findings to a broader population. Additionally, the focus on a specific demographic, particularly within a single country, might not capture the full diversity of cryptocurrency users globally. Future research could address these limitations by employing random sampling techniques and expanding the study to include a more diverse demographic across multiple regions. Further studies could also explore other potential mediating variables, such as perceived risk or user experience, to provide a more nuanced understanding of the factors influencing cryptocurrency PD. Conducting longitudinal studies would also be beneficial to examine how these relationships evolve over time.

Declarations

Author Contributions

Conceptualization: M.I.; Methodology: M.I.; Software: M.I.; Validation: M.I.; Formal Analysis: M.I.; Investigation: M.I.; Resources: M.I.; Data Curation: M.I.; Writing Original Draft Preparation: M.I.; Writing Review and Editing: M.I.; Visualization: M.I.; All authors have read and agreed to the published version of the manuscript.

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The data presented in this study are available on request from the corresponding author.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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