



## Assessing the impact of crowdfunding platforms on the investor's intention in an emerging economy, and the mediating role of trusts

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### Abstract

The study aims to examine the factors that determine investor's intentions to endow on a crowdfunding platform, which is a relatively under-researched phenomenon in developing and emerging countries. To complete this gap in the literature, we examined how the mediators; relational and calculus trust mediates the effect of our project-related factor network externality, and the factors related to the Platform, which are; third-party seal (TPS), structural assurance (SA), and perceived accreditation (PA) on the entrepreneur's intention. This research particularly explores the factors influencing an entrepreneur's intention to invest in crowdfunding platforms, an area not widely explored in developing nations. The study looks at how certain elements, like network externality and platform-related aspects such as third-party seals, structural assurances, and perceived accreditations, influence trust and thus investment intentions. In simpler terms, this research offers insights for those looking to raise funds via crowdfunding. This study provides advice for people who want to raise money through crowdfunding. It helps them build strong connections with the people who donate money, and it also advises the people who design crowdfunding websites on how to make them work better. The variables, the key terms used are as their symbols i.e., Investor's Intention (II), Network Externality (NE), third-party seal (TPS), Structural Assurance (SA), Perceived Accreditation (PA), Calculus Trust (CT), Relational Trust (RT).

**Keywords:** Crowdfunding Platforms, Mediation effect, Investor's intention, Trust

### 1. Introduction:

Concept of crowdfunding has existed for hundreds of years, one of the examples is the Statue of Liberty situated in NY, it was crowdfunded. This includes contributions from individuals and fundraising initiatives coordinated by local committees. However, due to the increasing number of

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individuals engaging in internet-based commerce, there is a rising fascination in utilizing online crowdfunding to bolster tourism and leisure offerings. Banks have been much more cautious about lending and sponsoring projects since the 2008 global financial crisis. As a result of the economic downturn, small and medium-sized businesses (SMEs) especially need new funding sources. Institutions continue to fail inflexibly when it comes to financing and lending money for innovative endeavors, which will have a huge influence on the economy in the future. SMEs are a hybrid of the two. Entrepreneurs who require financial assistance as a form of online payment have taken advantage of Crowdfunding, gaining popularity (Meyskens & Bird, 2015). Businesses can raise funds for their projects by combining a single person or an entity via the Internet. Crowdfunding is a type of crowdsourcing and alternative financing that allows people to contribute money to a person, cause, event, or business venture via the Internet. There are various online platforms available for donation-based crowdfunding campaigns. Crowdfunding has become a common method for generating funds for various endeavors. This grassroots project has been launched to address the funding gap that many independently created creative endeavors encounter (Figliomeni, 2014). Crowdfunding offers a wide range of advantages to businesses seeking money, both financial and non-financial. Contemporarily, crowdfunding platforms have appeared as an alternative source of funding for businessmen and entrepreneurs, providing access to capital from many individuals through online platforms. Trust theory has provided valuable insights into understanding the influence of the CF platform or fundraiser on consumers' decision-making process within crowdfunding settings incentive (Kang, Gao, Wang, & Zheng, 2016). The methods of crowdfunding which are used mainly are P2P lending, donation-based, equity-based, and reward-based (Rizwan & Mustafa, 2022). The following are the most prevalent methods of crowdsourcing:

- The financial incentive i.e., Crowdfunding.
- Donations are the foundation of crowdsourcing.
- Crowdsourcing equity financing is the third option.
- The company's credit score serves as the basis for crowdfunding.

Crowdfunding presents exciting prospects for those seeking funds as well as those providing them, but it also raises significant concerns such as the potential for hoax and misleading/fake advertising (Belleflamme, Lambert, & Schwienbacher, 2014). This paper has two primary objectives. Firstly, it draws upon the existing literature to identify potential factors that contribute to investor's intentions, while proposing the determinant of Trust (Relational and Calculus) that incorporates crowdfunding-platform-related factors. Secondly, it distinguishes between trust in the relationship between organizations and individuals which are relational trust and calculus trust. Prior research suggests that calculus trust positively affects relational trust (Rizwan & Mustafa, 2022). This study aims to examine whether this effect exists within the context of crowdfunding. Crowdfunding involves financing a new business venture by gathering small capital contributions from numerous individuals. The type of crowdfunding determines whether investors make donations or obtain equity in return for their financial support. By

embracing crowdfunding, entrepreneurs can bypass conventional financiers like venture capitalists and direct their efforts towards engaging a geographically diverse "crowd" consisting of consumers, lenders, and small-scale investors. This method provides aspiring business owners with an alternative means of obtaining funds, allowing them to transform their ideas into reality with the collective support of the crowd.

Crowdfunding research in developing countries, particularly Pakistan, is limited, which is a gap that needs to be addressed too. In an emerging economy like Pakistan, startup funding lacks experience and faces high-risk reward situations (Biradar, 2019), the research on the behavioral aspects of finance is also scarce. The study aimed to create a comprehensive research model that integrates various factors to understand crowdfunding behavior in Pakistan. The study examines the relationship between the Theory of Planned Behaviour (TPB), Investor's Intention, trust, and their combined effect on an entrepreneur's intention to invest in a crowdfunding platform. The outcomes of this research will provide guidelines to various stakeholders such as investors, universities, policymakers, entrepreneurs, and incubation centers towards financial inclusion, thereby leading to training programs that incorporate behavioral factors identified to enhance startup success.

According to (Strohmaier, Zeng, & Hafeez, 2019), the SECP (Pakistan) is now working on institutionalizing within Pakistan crowdfunding platforms. Scholars have highlighted the importance of studying equity-based crowdfunding platforms to better understand the Investor's behavior in Pakistani equity-based platforms. The research discovered three methods employed by crowdfunding websites to safeguard the interests of their backers: regulations set by the platform (recognized certification), security measures (external endorsement), and structural guarantees. The study also introduced an additional factor, Network Externality. It investigated how an individual's perception of these mechanisms influences the trust and distrust of the founders and backers and how this affects the realization of crowdfunding.

The main principle of crowdfunding is that many people collectively gather and pool in rather than looking for a single source. The project creators combine funds of several people who are also known as backers or funders. Backers often receive perks or incentives in exchange for their financial assistance that are appropriate for the project's nature and scope. Given equity-based crowdfunding, these benefits may include exclusive access to the project's results, customized goods, or even ownership holdings.

The growth and popularity of crowdfunding can be attributed to several key factors. First and foremost, advancements in technology have made it easier than ever for project creators to showcase their ideas and connect with potential funders. The extensive use of social media and online communities has facilitated the dissemination of crowdfunding campaigns, amplifying their reach and impact. Crowdsourcing removes the need for business owners to participate in decision-making, which is common with other kinds of fundraising like angel investment or venture capital. Entrepreneurs concerned about investors meddling with their business's day-to-day operations may

find this a deal-breaker (Macht & Weatherston, 2015). The public does not expect to take a substantial part in supporting and controlling business. Crowdfunder is motivated by an entrepreneur's purpose, value-generating objectives, and social and environmental ideals.

Creative and entrepreneurial undertakings are always a challenge for entrepreneurs since they need money to get started. Crowdfunding helps businesses raise money for their projects by combining online donations from people and supporters with a crowd financing platform. An attempt to bridge the financial gap many independent creative endeavors face is at the heart of this grassroots movement (Figliomeni, 2014). Crowdfunding provides both non-financial as well as financial benefits for businesses in need of financial assistance.

To begin with, this study leverages existing literature to identify possible elements that contribute to investor's intentions. It also introduces a determinant known as Trust, which encompasses factors associated with crowdfunding platforms. Furthermore, it differentiates between twofold types of trust: relational trust, which pertains to the relationship between organizations and individuals, and calculus trust.

Crowdfunding research in developing countries, particularly Pakistan, is limited, which is a gap that needs to be addressed too. According to (Biradar, 2019), in a developing economy like Pakistan, startup funding lacks experience and faces high-risk reward situations, the research on the behavioral aspects of finance is also scarce. This research aimed to create a thorough research model that integrates various factors to understand the crowdfunding behavior in Pakistan.

## **2. Literature Review**

Crowdfunding is a successful disruptive innovation of fintech that substitutes financial intermediaries and contributes toward financial inclusion and sustainable development (Rizwan & Mustafa, 2022). To transform and advance the financial industry and economy, crowdfunding has become a key component of alternative financing (Jiang, Qiu, & Zhou, 2021; Block, Hornuf, & Moritz, 2018). According to (Junge, Laursen, & Nielsen, 2022), crowdfunding has drawn startups and companies looking for funding while also enticing potential investors to join online platforms (Kim, Hall, & Kim, 2020). Researchers' desire to get their hands on any financial risk in a tax-free environment can be reduced by adopting grassroots capitalism through equity crowdfunding, according to (Figliomeni, 2014). Pakistan must have an inclusive E.U. legislative framework to represent its desire for crowdfunding facilitation and job development in the global marketplace. "The Importance of Crowdfunding in Entrepreneurial Finance". was backed up by this researcher (Mitra, 2012)." Moreover, researchers have delved into the types and characteristics of crowdfunding campaigns. Distinctions have been made between the types of crowdfunding method, highlighting the specific dynamics and implications associated with each model. These studies have shed light on the various strategies employed by project creators to incentivize funders and increase their campaign's chances of success. Additionally, the literature has addressed the challenges and risks faced by crowdfunding participants. Issues such as information asymmetry,

campaign failure, fraud, and legal and regulatory concerns have been analyzed to comprehend the potential pitfalls of crowdfunding and propose mitigation measures. Overall, the literature on crowdfunding provides a comprehensive understanding of this innovative financing method (Cameron, Corne, Mason, & Rosenfeld, 2013). By examining the motivations of funders, the role of trust and reputation, campaign dynamics, and the associated challenges, researchers and practitioners can gain valuable insights to enhance the effectiveness and sustainability of crowdfunding platforms (Agrawal, Catalini, & Goldfarb, 2014). Results show that the sampled participants generally agree on Pakistani crowdfunding methods and procedures used around the world that are comparable to these.

In the realm of crowdfunding, individual practices and determinants of success have become focal research points. Entrepreneurs now have avenues to custom-fit their campaigns as opposed to using one-size-fits-all platforms (Bradley & Luong, 2014). Predominantly, financiers expect either monetary returns like equity and profit-sharing, or non-monetary rewards such as the end-product or tokens of gratitude. Surprisingly, donation-driven campaigns are not as prevalent. Notably, our analysis reveals that nonprofit crowdfunding initiatives consistently outperform other structures in achieving funding goals. This aligns with the contract failure theory, suggesting that nonprofits, given their non-commercial emphasis, may be more adept at rallying community-centric monetary support (Belleflamme, Lambert, & Schwienbacher, 2013). A report published in 2013 titled "Crowdfunding Securities," which examined the sale of equities online as a form of crowdsourcing, sparked controversy among experts.

## **2.1 Crowdfunding Platform-related**

Crowdfunding is a dynamic process that helps bring ideas to life through various interactions, like entrepreneurial behavior (Huang, Pickernell, Battisti & Nguyen, 2021). This process involves a transitional platform that connects a seller (which is the fundraiser) with a buyer (which is the investor) (Ulya, 2018). To speed up investment processes, platforms use the Internet to organize, collect, and share info with potential investors and mainly (Moysidou & Hausberg, 2020). In countries like US and Europe, entrepreneurs anticipate that platforms will serve as middlemen to certify, evaluate, or reject complex projects, safeguard private data (for example, through escrow accounts), reduce the risk of fraud, and establish specialized trust factors (Frydrych & Bock, 2018).

Since only the investors can assess the skill of entrepreneurs seeking funding, trust in crowdfunding platforms can also increase investor confidence (Ferreira, Papaoikonomou, & Terceño, 2022). This study focuses primarily on the perception of the legitimacy of investor's intention (II) through platform-related factors, such as Network Externality (NE), third-party seal (TPS) perceived accreditation (PA), structural assurance (SA), with the mediation of calculus (CT) and relational trust (RT). While some studies have been firm on how various factors contribute to investment-based crowdfunding success on platforms in the UK, Germany, France, and Italy.

## 2.2. Theory of Planned Behavior (TPB)

The intent is usually influenced by the TPB. The intention is a combination of subjective norms, attitudes, and perceived control over behavior. When subjective norms, attitudes, and perceived control over behavior have a greater effect, likelihood of engaging in specific activities is higher (Ajzen, 2020). Additionally, scholarly research indicates that trust can be viewed as a factor that determines intention within the TPB framework (Mazzocchi, Lobb, Traill, & Cavicchi, 2008). Trust can encourage producers and consumers to establish better relationships and overcome consumer ambiguity, leading to increased reliability, and promoting business expansion based on research conducted in Germany and China (Agrawal, Catalini, & Goldfarb, *The Geography of Crowdfunding*, 2010). Trust can also eliminate the unevenness on crowdfunding platforms which may have a positive effect on investors. This research explains that the elements of perceived control over behavior (network externality, third-party seal, recognized certification, and structural guarantees) along with trust (calculus-based trust and relationship-based trust) will mark an individual's intention to partake (investor's intention to invest) in a crowdfunding platform (Wu & Song, 2021); (Giampietri, Verneau, del Giudice, Carfora, & Finco, 2018) per TPB.

## 2.2 Theoretical Framework

### 2.2.1 Crowdfunding

Concept of Crowdfunding or Crowdsourcing has recently emerged as an innovative method or a new way to get money for new projects. for financing new ventures. Building upon Kleemann et al.'s (2008) definition of crowdsourcing, (Belleflamme, Lambert, & Schwienbacher, 2014) further elaborate on crowdfunding, primarily facilitated through the internet, to solicit the resources financially. These sources can take the form of donations or be exchanged for rewards and/or voting rights, with the purpose of supporting specific initiatives. In essence, crowdfunding involves funding a project or venture through contributions from a collective of individuals rather than traditional professional entities. This allows people to start business, art, or community projects to ask for money from many different people, sometimes giving them products or a share in return. (Mollick, 2014).

### 2.2.1 Trust

Although there are several operational definitions and measurements of trust, practically all research follows the definition offered by (Morgan & Hunt, 1994), which is "expressed confidence in the trustworthiness and integrity of an exchange partner." Whether it is a social structure, a corporate partnership, or a personal relationship, trust is a crucial component. Because of the multidimensional nature of trust, people have had difficulty agreeing on what it means, and some of the definitions include a good that can be traded, a focus on social situations, exposure to risk, and a reason for negotiation (McCabe & Sambrook, 2014). In social and economic interactions like crowdfunding, which include ambiguity and dependency, trust is crucial. Funders attempt to lessen the unpredictability and complexity of online transactions by utilizing cognitive shortcuts



since they have limited knowledge and cognitive resources (Yu et al., 2015). Understanding the establishment and maintenance of trust is crucial for enhancing the success rate of crowdfunding projects (Shankar , Urban, & Sultan, 2002). Consumer trust can be categorized into general trust and specific trust (Mayer, Davis, & Schoorman, 1995). Schee (2007) distinguished two types of trust: personal trust and societal trust. Building on previous research perspectives, this paper acknowledges trust as both relational and calculus trust to examine the connections between platforms and users (Bartle, Avineri, & Chatterjee, 2013). Calculus trust, often referred to as "trust from the head," is a key component in this context. When people trust each other based on the benefits and costs of their economic interactions, they are using calculus-based trust. This type of trust is a constant evaluation of the value of keeping a relationship versus ending it, based on the outcomes that come from having that relationship (Ba et al., 2003). To be more relational, one must "trust from the heart." Several types of relational trust have been found, including the trust that results from long-term interactions between funders and funders as well as care and attention from sponsors brought on by emotional attachments and shared social identities (Gerber & Hui, 2013).

#### *2.2.2 Perceived Accreditation*

The concept of accreditation is related to the notion that crowdfunding platforms have made some attempts to verify that fundraisers can deliver as promised and that the project has adequate funding to operate as planned (Pavlou, 2003). It pertains to the trust in the ability of the crowdfunding platform to monitor fundraisers and projects and guarantee their legitimacy and reliability (Greenfield, Pawsey, Naylor, & Braithwaite, 2009) for the entrepreneur's crowdfunding, entrepreneur's calculus trust is greatly impacted by the perception of accreditation, which is a pioneer to platform attribution (Kang, Gao, Wang, & Zheng, 2016).

#### *2.2.3 Third-Party Seal*

Third-party seals generally describe validation of an online retailer by an independent entity (Ozpolat , Gao, Jank, & Viswanathan, 2013), such as TRUSTe and BBBOnline, which confirm that specific policies or regulations are followed by e-commerce websites (Cazier & Shao, 2006). The existence of a third party can not only reduce risk but also significantly enhance both calculus-based and relationship-based trust, leading to an increase in the intention of an entrepreneur. The utilization of third-party seals in conjunction with crowdfunding can further strengthen credibility and attract a broader range of supporters, backing to the overall sustainability and success of projects and ventures.

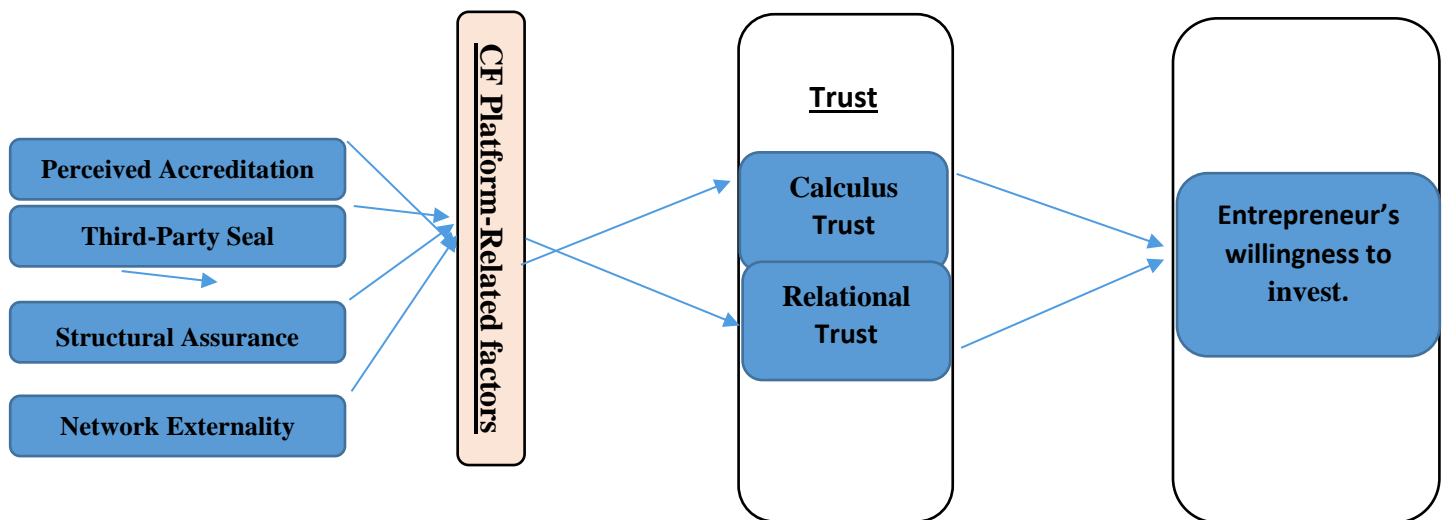
#### *2.2.4 Structural Assurance*

The platform-based factor under consideration focuses on data safety and confidentiality, which is upheld through encryption, coding, and integrated building blocks within the crowdfunding platform (Bock, Lee, Kuan, & Kim, 2012). While crowdfunding platforms emphasize the strength

of collective participation and the organic funding process, this communal approach brings inherent risks and challenges. These include the lack of structured governance, limited oversight, and the possibility of project failures. When individuals perceive that the platform has robust safety measures in place, their trust in the platform is more likely to grow.

### 2.2.5 Network Externality

Network externality occurs when the significance of a project changes with the number of consumers (Pae & Hyun, 2002). The decentralization of risk reduces uncertainty as the number of funders increases. Perceiving that a significant number of individuals in their social circle are funding a crowdfunding project may increase people's likelihood of investing in it (Prasad, Venkatesh, & Mahajan, 2010). Friends, family, and colleagues of fundraisers are also likely to contribute funds to the campaign, so fraud is less likely to occur. According to some scholars, uncertainty reduction and fraud reduction contribute to enhancing calculus trust (Wang, Hsu, & Fang, 2005). Calculus trust influences individuals' attitudes and perceptions of risk, subsequently impacting their investment intention in crowdfunding (Wang, Hsu, & Fang, 2005). Funders can support the fundraiser in various ways to enhance and perfect the project. Relationship trust creates optimistic expectations of the fundraiser's actions, resulting in a confident attitude and a higher preference to invest via crowdfunding (See-To, E.W.K; Ho, K.K.W., 2014).



**Figure 1:** Theoretical framework diagram

*Hypothesis 1 (H1). Calculus trust acts as a mediator between platform-related factors and the relational trust of investors.*



*Hypothesis 2 (H2). Calculus trust and investor intention to invest has a positive correlation.*

*Hypothesis 3 (H3). Investor intention to invest is positively associated with relational trust.*

*Hypothesis 4 (H4) The calculus trust of investors is positively influenced by Platform-related factors.*

*Hypothesis 5 (H5) The relational trust of investors is positively influenced Platform-related factors.*

*Hypothesis 6 (H6) The relationship amongst crowdfunding factors and investors' investment intention is mediated by calculus trust.*

*Hypothesis 7 (H7) On the investor's side, the relationship between CF-related factors and the intention to invest is mediated by relational trust.*

### **3. Methodology**

#### **3.1 Measurements**

To examine the hypotheses, a quantitative study was conducted, utilizing measures that utilized a five-point Likert scale response format. The scale ranged from "strongly agree" to "strongly disagree" to minimize bias commonly associated with measurement methods. The survey questions utilized in the study were carefully reviewed and approved, drawn from relevant previous research. Modifications were made to ensure clarity and reduce confusion among funders by simplifying complex terminology. Prior to the final survey administration, the questionnaire underwent refinement of wording, readability, and clarity through pre-testing by two funders and experts. An online survey was chosen as the suitable method for investigating funder behavior on internet crowdfunding platforms. A subscription was acquired from "freeonlinesurveys.com," a user-friendly platform that provided access to analytics. Each question was tested using a five-point Likert scale. Online surveys were preferred over physical submission of survey forms due to their cost-effectiveness and minimal risk of data loss. The respondent profile in the study encompassed various general characteristics, including participant education, average funding amount, and investment type. In addition, socio-demographic factors such as educational level and age were included in the survey.

The research was based on 250 responses from the individuals who took part in the survey. Specific and open-ended questions were asked so that they could fall into the criteria. The sampling technique used was snowball sampling because in Pakistan, we do not have proper platform to ask questions. Therefore, the people already know crowdfunders refers to the other

respondents. The data provided shows the characteristics of the respondents in terms of their age, schooling, and funding.

**Table 3.1:** Respondent characteristics and their responses

	Number
<b>Age</b>	
18–26	33
27–36	136
37–46	53
47 and above	28
<b>Schooling</b>	
Senior high school	101
BA/BS/BSc	117
MA/MS/MSc	30
Ph.D.	2
<b>Volume of Fund</b>	
Below 70 K	60
70 K–120 K	78
120 K–1 M	90
Above 1-M	22

The provided data represents the distribution of respondents across different categories for each characteristic. It is significant to remember that the results are particular to the supplied dataset and that the sample sizes for each category may differ.

This examination provides insightful information on the participants in the demographic and funding features. It is a tool to help you comprehend the sample composition better and may help you spot any trends or patterns that are important for your study or analysis.

The survey contained a total of 250 respondents, primarily falling within the age range of 27 to 36 and possessing bachelor's degrees. Most of these participants invested between PKR 120,000 and PKR 1 million. Four categories of investors—angel investors, seed funders, venture capitalists, and potential investors—were the subject of the study. The investigation gave particular attention to potential investors because institutional investors are few in Pakistan. A purposive sample approach was used to choose the target group, including seed funders, angel investors, venture capitalists, and unofficial or potential investors. The selection criteria for potential respondents were based on existing literature and included the following:

- That they have a social media platform which they use for Example LinkedIn, Instagram, Facebook, Twitter)
- Ownership of an active business for at least two years.
- Previous investments in avenues other than stocks and mutual funds.
- Status as a taxpayer.

The survey was initially distributed to 300 respondents via online social media platforms and online investor forums. A screening question was used to identify information-rich respondents, resulting in 250 affirmative responses. Out of these, only 250 individuals met the criteria. The sample size for the study was set at 250, with a few potential investors for startups identified. Due to the novelty of crowdfunding in Pakistan and its ongoing legalization process, no official investor database was available. The researchers employed purposive sampling initially and then utilized snowball sampling due to the lack of information.

For this study, the data analysis employed the partial least squares (PLS) approach, which requires minimal residual distributions, suitable measurement scales, and an adequate sample size. The analysis began by constructing a measurement model to assess the reliability and validity of multiple variables, including II, CT, RT, BT, PA, SA, and TPS. Subsequently, a structural equation modeling (SEM) technique was utilized to investigate the relationship between these factors related to the platform (NE, PA, SA, TPS) and calculus trust (CT) as well as relational trust (RT). Moreover, the relationships between CT, RT, and the dependent variable, investor intention (II), were investigated. Additionally, a mediation analysis was conducted to investigate the mediating impact of calculus trust and relational trust.

## **4. Results and Analysis**

### **4.1 Measurement Model**

In the table presented below, we outline our measurement model to assess internal reliability and consistency, we utilized composite reliability (CR) and Cronbach's alpha. Convergent validity was assessed using average variance extracted (AVE) and standardized item loadings. The R-squared value was employed to determine the predictive capability of the endogenous construct.

The measurement model's reliability was assessed by considering the average variance extracted (AVE) and composite reliability (CR). All constructs exhibited CR values surpassing the recommended threshold of 0.60, while the AVE values for all constructs exceeded the recommended value of 0.50. These findings indicate that the model demonstrates favorable consistency and reliability.

The study encompassed evaluations of both content validity and construct validity. The variables employed in the research were derived from existing literature, which enhances their content validity. Construct validity was assessed by examining both discriminant validity and convergent validity. Discriminant validity was supported by ensuring that the square root of the average variance extracted (AVE) from each construct exceeded the correlations between that construct and others. Convergent validity was supported by observing high loadings of all measurement items on their respective constructs, with loading coefficients above 0.6 and cross-loading coefficients below 0.4.

The table contains the following: factor loadings, reliability measures, convergent validity, and the amount of variance explained. The measures used in the study exhibit high CR, with values ranging from 0.802 to 0.914, surpassing the limit of 0.7. Although Cronbach's alpha values for the three measures are slightly below 0.7, it is worth noting that composite reliability is considered a superior measure of internal consistency, as stated by (Hair, Sarstedt, Ringle, & Mena, 2012). Therefore, the results still indicate good internal consistency.

**Table 4.1:** factor loadings, reliability measures, convergent validity, and the variance explained.

Results						
	Entry	Factor Loading	Cronbach's Alpha	CR	AVE	R-Square
I-I	II01	0.872	0.848	0.908	0.765	0.388
	II02	0.882				
	II03	0.87				
	II04	0.862				
N-E	N.E1	0.806	0.766	0.865	0.682	
	N.E2	0.788				
	N.E3	0.881				
T-P-S	T.P.S1	0.866	0.858	0.915	0.781	
	T.P.S2	0.899				
	T.P.S3	0.887				
C-T	C.T1	0.821	0.696	0.802	0.508	0.301
	C.T2	0.708				
	C.T3	0.748				
P-A	P.A1	0.815	0.68	0.858	0.752	
	P.A2	0.822				
	P.A3	0.869				
	P.A4	0.917				
R-T	R.T1	0.844	0.814	0.89	0.729	0.189
	R.T2	0.816				
	R.T3	0.9				
S-A	S.A1	0.871	0.679	0.862	0.757	
	S.A2	0.891				
	S.A3	0.87				
The sources for the reliability and validity measures are Fornell and Larcker (1981).						

Analyzing the results carefully, we can observe a clear trend: most of the items present high factor loadings. This is indicative of a powerful association or connection with the factors they belong to. Furthermore, when we look at the Alpha and CR values, they are predominantly on the higher side. This is a promising sign, as it hints at a solid and consistent internal reliability associated with these factors. Additionally, the AVE values are consistently hovering above the 0.5 mark. In the realm of research, this is a good sign, suggesting that the validity of the results converging on a single construct, known as convergent validity, is well within the acceptable range.

It is important to observe that the R-Square values are the proportion of variance explained by the underlying construct and should be interpreted accordingly. Higher R-Square values indicate that the construct explains a larger portion of the variation in the factor.

Regarding the factor loadings, all items except CT4 demonstrate values above 0.5. Since the average variance extracted (AVE) of all constructs exceeds 0.5, no items were deleted from the analysis. This reflects satisfactory results.

To assess discriminant validity, the Fornell-Larcker criterion and AVE method were employed. The AVE of each variable was compared to the squared correlation with other variables, as per the Fornell-Larcker criterion.

**Table 4.2:** Fornell–Larcker criterion

	N-E	C-T	I-I	P-A	R-T	S-A	T-P-S
N-E	0.835						
C-T	0.293	0.714					
I-I	0.283	0.591	0.869				
P-A	0.296	0.310	0.313	0.871			
R-T	0.106	0.391	0.371	0.201	0.863		
S-A	0.369	0.273	0.392	0.164	0.138	0.881	
T-P-S	0.351	0.229	0.194	0.321	0.239	0.281	0.809

The Fornell-Larcker criterion (FL) evaluates the distinctiveness of variables by looking at the average variance extracted (AVE) of each variable to the squared correlation with other variables. The standard for discriminant validity to be significant is when the AVE of each variable is more significant than the square of its association with other variables.

This criterion was used in the analysis. The table is diagonal, and the squares represent the AVE (average variance extracted) values. The other cells show the correlations between the constructs. In every case, the correlations are higher than the AVE values. This indicates adequate discriminant validity. Some further analysis is done using PLS for better analysis. Explanations are provided below.

**Table 4.3:** DV - Discriminant validity, (Heterotrait-monotrait ratio)

	C-T	I-I	N-E	P-A	R-T	S-A	T-P-S
C-T							
I-I	0.840						
N-E	0.104	0.088					
P-A	0.371	0.412	0.077				
R-T	0.661	0.743	0.043	0.509			
S-A	0.464	0.547	0.080	0.925	0.613		
T-P-S	0.719	0.719	0.103	0.567	0.690	0.719	

The HTMT ratio, also known as Heterotrait-monotrait ratio, is a system used to assess discriminant validity in the structural equation modeling (SEM) model measure the degree to

which different constructs in a model are more similar than they are different. This helps to ensure that the measure scales used to evaluate different constructs are different, meaning that they measure different concepts. The matrix shows the HTMT ratios for each pair of constructs in the model. The diagonal values are the HTMT ratio for each construct and itself. Ideally, the HTMT ratio should be 1. Values near 1 indicate good discriminate validity, which means that the construct measures a different concept.

The off-diagonal cells represent the HTMT ratios between different constructs, indicating the level of discriminant validity between them. In general, to establish discriminant validity, the HTMT values should be less than 0.85. Values above this threshold suggest a potential overlap between constructs, indicating that they may measure similar concepts rather than distinct ones.

The results show that the HTMT is below 0.85, for discriminant validity it is a good indicator. Though, in some cases the values exceed the thresholds. The HTMT matrix is crucial in assessing the discriminant validity of constructs within a measurement model. Discriminant validity refers to the extent to which distinct constructs are distinct from one another, ensuring that they measure distinct aspects rather than distinct concepts. By evaluating the HTMT values, researchers can determine whether the constructs in the model exhibit sufficient differentiation.

To calculate the HTMT value for each construct, the squared correlation between the construct and its corresponding indicator items is divided by the sum of the squared correlations between the construct and all other constructs' indicator items. This computation provides an objective measure of how well the construct stands apart from the rest in the model.

In the study, the Heterotrait-monotrait values for all the constructs are found to be below the suggested level of 0.90. This means that the constructs have good discriminant strength, meaning that they're different and don't measure the same thing. Lower HTMTs mean that there's a clear difference between the constructs, which makes it easier to measure and interpret them individually.

By providing robust discriminant validation, researchers can be sure that each construct is unique within the measurement model, allowing for more precise analysis and interpretation of relationships between constructs and their associated indicators. By ensuring that the constructs are distinct aspects of the phenomenon being studied, researchers can get a better perception of the research subject matter.

The HTMT matrix is a great tool for determining the discriminant validity of a measurement model, and it gives researchers important information about how different constructs are related to each other. When used correctly, it helps researchers understand how different constructs relate to each other and helps them advance their knowledge.

The HTMT values can range from 0.85 to 0.95, depending on the source. Generally, it's considered to be lower than 0.90. Since all the HTMT values are under 0.90, you can be sure that the constructs used in your measurement model are good for discriminating. This is an important



finding, as it ensures that the model measures different constructs and not just the same construct with different labels.

These ratios indicate a potential for some overlap between the corresponding constructs. While they are close to the threshold, further examination and consideration of the theoretical context are required to determine the significance of the overlap.

**Table:** 4.4 Model Fitness

	Estimated	Saturated
<b>S.R.M.R</b>	0.07	0.059
<b>d_ULS</b>	1.338	0.975
<b>d_G</b>	0.659	0.625
<b>Chi-square</b>	983.561	972.742
<b>NFI</b>	0.778	0.78

Model fitness measures are used to assess the overall goodness-of-fit of the structural equation model and evaluate how well the estimated model fits the observed data. Let's analyze the different fitness measures:

1. SRMR (Standardized Root Mean Residual):

- Saturated model: 0.059
- Estimated model: 0.070

SRMR calculates the average discrepancy between the observed and predicted covariance matrices. The lower SRMR values indicate a better fit of the model. In this case, the estimated model exhibits a slightly higher SRMR compared to the saturated model, suggesting a slightly poorer fit of the estimated model. Conversely, it is important to note that both values are relatively low, indicating a satisfactory level of fit.

2. d\_ULS (d-value based on Unweighted Least Squares):

- Saturated model: 0.975
- Estimated model: 1.338

The d\_ULS value represents the standardized root mean square residual for the unweighted least squares estimation method. Similar to SRMR, lower values indicate better fit. In this case, the estimated model has a higher d\_ULS than the saturated model, suggesting a relatively worse fit.

3. d\_G (d-value based on Geodesic):

- Saturated model: 0.625
- Estimated model: 0.659

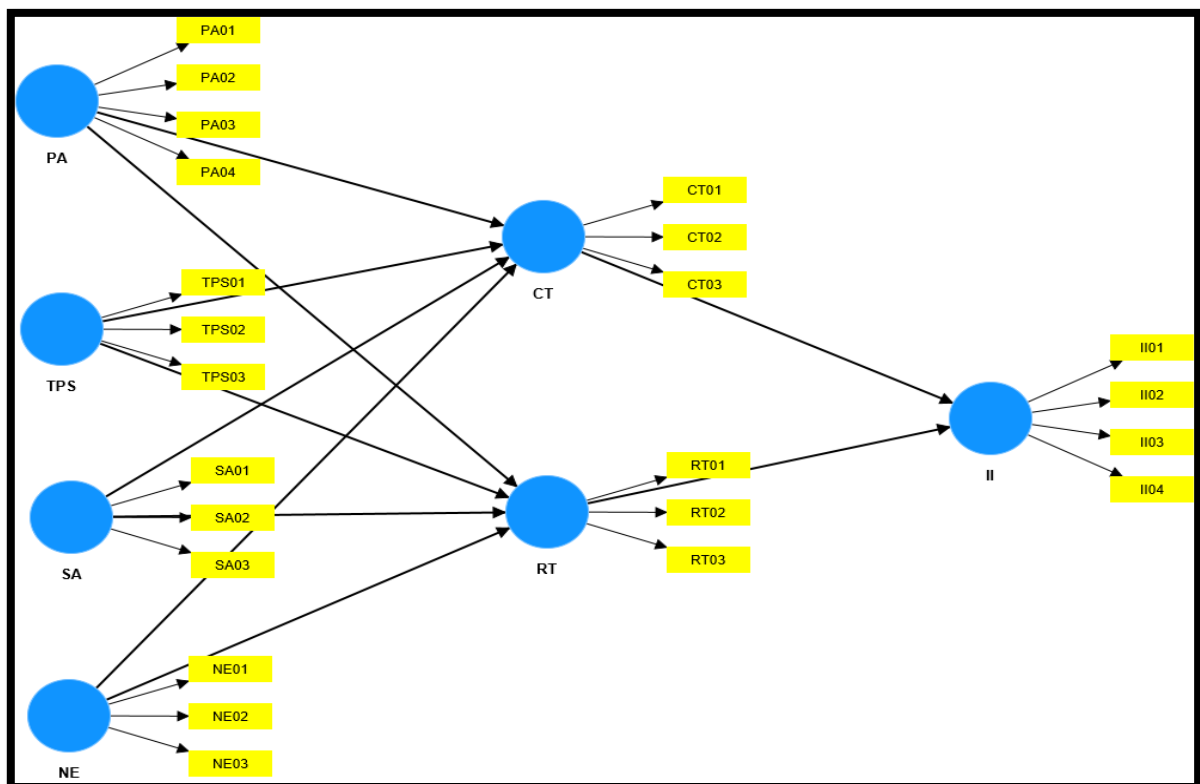
The d\_G value represents the standardized root mean square residual for the geodesic estimation method. Again, lower values indicate better fit. The estimated model has a slightly higher d\_G

value compared to the saturated model, indicating a slightly worse fit. However, both values are relatively low, suggesting an acceptable fit.

4. Chi-square:

- Saturated model: 972.742
- Estimated model: 983.561

The chi-square statistic quantifies the difference between the observed and estimated covariance matrices. Typically, a lower chi-square value signifies a better fit of the model. In this particular instance, the estimated model has a slightly higher chi-square value compared to the saturated model, indicating a slightly poorer fit of the estimated model. However, it's worth noting that the chi-square test is sensitive to sample size, and larger samples tend to produce significant chi-square values. Therefore, the chi-square statistic should be interpreted in conjunction with other fit indices.



5. NFI (Normed Fit Index):

- Saturated model: 0.780
- Estimated model: 0.778

The NFI assesses the relative improvement in fit by comparing the estimated model with a null model. NFI values range from 0 to 1, with values closer to 1 indicating better fit. In this case, both

the saturated and estimated models have NFI values that are very close to each other, suggesting a similar level of fitness.

Overall, the fitness measures indicate that the estimated model fits the data reasonably well, although it may have slightly lower fit indices compared to the saturated model.

**Table 4.5:** Path coefficients

	Path coefficients
CT -> II	0.587
NE -> CT	-0.036
NE -> RT	0.017
PA -> CT	0.019
PA -> RT	0.088
RT -> II	0.300
SA -> CT	-0.015
SA -> RT	0.145
TPS -> CT	0.648
TPS -> RT	0.458

Path coefficients represent the strength and direction of the relationships between the variables. A path coefficient of 0.587 suggests that an increase in Calculus Trust is associated with a moderate increase in Investor's Intention to Invest. A value of -0.036 suggests that an increase in Network Externalities is associated with a slight decrease in Calculus Trust. The path coefficient of 0.017 indicates that an increase in Network Externalities is associated with a slight increase in Relational Trust. This path coefficient reflects a very weak positive relationship between Perceived Accreditation and Calculus Trust. A value of 0.019 suggests that an increase in Perceived Accreditation is associated with a slight increase in Calculus Trust. The path coefficient of 0.088 indicates a positive relationship between Perceived Accreditation and Relational Trust. An increase in Perceived Accreditation is associated with a moderate increase in Relational Trust. This path coefficient represents a moderate positive relationship between Relational Trust and Investor's Intention to Invest. A value of 0.300 indicates that an increase in Relational Trust is associated with a moderate increase in Investor's Intention to Invest. The path coefficient of -0.015 suggests that an increase in Structural Assurance is associated with a slight decrease in Calculus Trust. The path coefficient of 0.145 indicates a positive relationship between Structural Assurance and Relational Trust. An increase in Structural Assurance is associated with a moderate increase in Relational Trust. A value of 0.648 suggests that an increase in Third Party Seal is associated with a significant increase in Calculus Trust. Here, we observe a strong positive relationship between Third Party Seal and Relational Trust. The path coefficient of 0.458 indicates that an increase in Third Party Seal is associated with a significant increase in Relational Trust.

These path coefficients provide insights into the relationships between the constructs in your model. They quantify the direction and strength of the connections between the variables. It is important to interpret these coefficients within the context of your research question, theoretical framework, and the specific scales or measures used for each construct.

**Table 4.6:** Path coefficients

	Original sample	Sample mean (M)	Standard deviation	T statistics	P values
<b>CT -&gt; II</b>	0.586	0.589	0.064	9.162	0.000
<b>NE -&gt; CT</b>	-0.036	-0.043	0.045	0.789	0.430
<b>NE -&gt; RT</b>	0.016	0.009	0.058	0.277	0.781
<b>PA -&gt; CT</b>	0.016	0.014	0.099	0.163	0.870
<b>PA -&gt; RT</b>	0.084	0.086	0.131	0.647	0.518
<b>RT -&gt; II</b>	0.303	0.301	0.072	4.212	0.000
<b>SA -&gt; CT</b>	-0.016	-0.013	0.110	0.142	0.887
<b>SA -&gt; RT</b>	0.146	0.150	0.124	1.171	0.242
<b>TPS -&gt; CT</b>	0.650	0.648	0.071	9.187	0.000
<b>TPS -&gt; RT</b>	0.459	0.454	0.086	5.367	0.000

To understand what the original sample and sample mean are according to the SmartPLS forum, in easy terms the first calculation uses your whole data set, just like a regular PLS method would. The second one is the average from all the smaller groups of data you picked during the bootstrapping step.

These values are used to assess the significance and strength of the relationships between the variables. In this case, the path coefficient from Calculus Trust to Investor's Intention to Invest is 0.586. The t-value of 9.162 is much higher than the critical value, and the p-value of 0.000 indicates that the relationship is statistically significant. The path coefficient from Network Externality to Calculus Trust is -0.036. The t-value is 0.789, and the p-value is 0.430. These values indicate that the relationship is not statistically significant, as the t-value is below the critical value and the p-value is greater than the significance level of 0.05. The path coefficient from Network Externality to Relational Trust is 0.016. The t-value is 0.277, and the p-value is 0.781. These values suggest that the relationship is not statistically significant.

The path coefficient from Perceived Accreditation to Calculus Trust is 0.016. The t-value is 0.163, and the p-value is 0.870. These values suggest that the relationship is not statistically significant. The path coefficient from Perceived Accreditation to Relational Trust is 0.084. The t-value is 0.647, and the p-value is 0.518. These values indicate that the relationship is not statistically significant. The path coefficient from Relational Trust to Investor's Intention to Invest is 0.303. The t-value is 4.212, and the p-value is 0.000, indicating a statistically significant relationship. The path coefficient from Structural Assurance to Relational Trust is 0.146. The t-value is 1.171, and the p-value is 0.242. These values indicate that the relationship is not

statistically significant. The path coefficient from Third Party Seal to Calculus Trust is 0.650. The t-value is 9.187, and the p-value is 0.000, indicating a statistically significant relationship.

The path coefficient from Third Party Seal to Relational Trust is 0.459. The t-value is 5.367, and the p-value is 0.000, indicating a statistically significant relationship. The t-values assess the statistical significance of each path coefficient, while the p-values indicate the level of significance. Typically, a p-value below 0.05 is considered statistically significant.

**Table 4.7:** Total Indirect effects

	Original sample	Sample mean	Standard deviation	T statistics	P values
PA -> RT -> II	0.026	0.028	0.043	0.601	0.548
TPS -> RT -> II	0.139	0.135	0.038	3.620	0.000
TPS -> CT -> II	0.381	0.382	0.062	6.191	0.000
SA -> RT -> II	0.044	0.044	0.039	1.131	0.258
SA -> CT -> II	-0.009	-0.007	0.065	0.141	0.888
NE -> RT -> II	0.005	0.002	0.018	0.278	0.781
NE -> CT -> II	-0.021	-0.025	0.027	0.784	0.433
PA -> CT -> II	0.009	0.008	0.058	0.162	0.871

Total indirect effects represent the combined influence of one variable on another through one or more mediator variables. The total indirect effect of Network Externalities on Investor's Intention to Invest is -0.016. The t-value is 0.451, and the p-value is 0.652. These values indicate that the indirect effect is not statistically significant. The total indirect effect of Perceived Accreditation on Investor's Intention to Invest is 0.035. The t-value is 0.452, and the p-value is 0.651. These values indicate that the indirect effect is not statistically significant. The total indirect effect of Structural Assurance on Investor's Intention to Invest is 0.035. The t-value is 0.420, and the p-value is 0.675. These values indicate that the indirect effect is not statistically significant. The indirect effect of Third-Party Seal on Investor's Intention to Invest is 0.520. The t-value is 8.084, and the p-value is 0.000, suggesting that the indirect effect is statistically significant. Based on the provided results, it appears that only the total indirect effect of TPS (Third Party Seal) on II (Investor's Intention to Invest) is statistically significant. The other indirect effects from NE, PA, and SA to II are not statistically significant. It's important to consider the theoretical context and the specific research question when interpreting these findings.

Specific indirect effects represent the influence of one variable on another through a specific mediator variable. The specific indirect effect of Perceived Accreditation on Investor's Intention to Invest through Relational Trust is 0.026. The t-value is 0.601, and the p-value is 0.548. These values indicate that the specific indirect effect is not statistically significant. The specific indirect effect of Third-Party Seal on Investor's Intention to Invest through Relational Trust is 0.139. The t-value is 3.620, and the p-value is 0.000, indicating that the specific indirect effect is statistically significant. The specific indirect effect of Third-Party Seal on Investor's Intention to

Invest through Calculus Trust is 0.381. The t-value is 6.191, and the p-value is 0.000, indicating that the specific indirect effect is statistically significant.

The specific indirect effect of Structural Assurance on Investor's Intention to Invest through Relational Trust is 0.044. The t-value is 1.131, and the p-value is 0.258. These values indicate that the specific indirect effect is not statistically significant. The specific indirect effect of Structural Assurance on Investor's Intention to Invest through Calculus Trust is -0.009. The t-value is 0.141, and the p-value is 0.888. These values indicate that the specific indirect effect is not statistically significant. The specific indirect effect of Network Externalities on Investor's Intention to Invest through Relational Trust is 0.005. The t-value is 0.278, and the p-value is 0.781. These values indicate that the specific indirect effect is not statistically significant. The specific indirect effect of Network Externalities on Investor's Intention to Invest through Calculus Trust is -0.021. The t-value is 0.784, and the p-value is 0.433. These values indicate that the specific indirect effect is not statistically significant.

The specific indirect effect of Perceived Accreditation on Investor's Intention to Invest through Calculus Trust is 0.009. The t-value is 0.162, and the p-value is 0.871. These values indicate that the specific indirect effect is not statistically significant. Based on the provided results, it appears that only the specific indirect effects of TPS (Third Party Seal) on II (Investor's Intention to Invest) through RT (Relational Trust) and CT (Calculus Trust) are statistically significant. The other specific indirect effects are not statistically significant.

**Table 4.9:** Total effects

	Original sample	Sample mean	Standard deviation	T statistics	P values
<b>CT -&gt; II</b>	0.586	0.589	0.064	9.162	0.000
<b>NE -&gt; CT</b>	-0.036	-0.043	0.045	0.789	0.430
<b>NE -&gt; II</b>	-0.016	-0.023	0.035	0.451	0.652
<b>NE -&gt; RT</b>	0.016	0.009	0.058	0.277	0.781
<b>PA -&gt; CT</b>	0.016	0.014	0.099	0.163	0.870
<b>PA -&gt; II</b>	0.035	0.036	0.077	0.452	0.651
<b>PA -&gt; RT</b>	0.084	0.086	0.131	0.647	0.518
<b>RT -&gt; II</b>	0.303	0.301	0.072	4.212	0.000
<b>SA -&gt; CT</b>	-0.016	-0.013	0.110	0.142	0.887
<b>SA -&gt; II</b>	0.035	0.037	0.083	0.420	0.675
<b>SA -&gt; RT</b>	0.146	0.150	0.124	1.171	0.242
<b>TPS -&gt; CT</b>	0.650	0.648	0.071	9.187	0.000
<b>TPS -&gt; II</b>	0.520	0.518	0.064	8.084	0.000
<b>TPS -&gt; RT</b>	0.459	0.454	0.086	5.367	0.000

Total effects represent the direct influence of one variable on another variable without considering any mediator variables. The total effect of Calculus Trust on Investor's Intention to Invest is 0.586. The t-value is 9.162, and the p-value is 0.000, indicating that the direct effect is statistically significant.



The total effect of Network Externality on Calculus Trust is -0.036. The t-value is 0.789, and the p-value is 0.430. These values indicate that the direct effect is not statistically significant. The total effect of NE on Investor's Intention to Invest is -0.016. The t-value is 0.451, and the p-value is 0.652. These values indicate that the direct effect is not statistically significant. The total effect of Network Externality on Relational Trust is 0.016. The t-value is 0.277, and the p-value is 0.781. These values indicate that the direct effect is not statistically significant. The total effect of Perceived Accreditation on Calculus Trust is 0.016. The t-value is 0.163, and the p-value is 0.870. These values indicate that the direct effect is not statistically significant. The total effect of Perceived Accreditation on Investor's Intention to Invest is 0.035. The t-value is 0.452, and the p-value is 0.651. These values indicate that the direct effect is not statistically significant.

The total effect of Perceived Accreditation on Relational Trust is 0.084. The t-value is 0.647, and the p-value is 0.518. These values indicate that the direct effect is not statistically significant. The total effect of Relational Trust on Investor's Intention to Invest is 0.303. The t-value is 4.212, and the p-value is 0.000, indicating that the direct effect is statistically significant. The total effect of Structural Assurance on Calculus Trust is -0.016. The t-value is 0.142, and the p-value is 0.887. These values indicate that the direct effect is not statistically significant. The total effect of Structural Assurance on Investor's Intention to Invest is 0.035. The t-value is 0.420, and the p-value is 0.675. These values indicate that the direct effect is not statistically significant. The total effect of Structural Assurance on Relational Trust is 0.146. The t-value is 1.171, and the p-value is 0.242. These values indicate that the direct effect is not statistically significant.

The total effect of Third-Party Seal on Calculus Trust is 0.650. The t-value is 9.187, and the p-value is 0.000, indicating that the direct effect is statistically significant. The total effect of Third-Party Seal on Investor's Intention to Invest is 0.520. The t-value is 8.084, and the p-value is 0.000, indicating that the direct effect is statistically significant. The total effect of Third-Party Seal on Relational Trust is 0.459. The t-value is 5.367, and the p-value is 0.000, indicating that the direct effect is statistically significant. Based on the results provided, it appears that the direct effects of Calculus Trust, RT (Relational Trust), and TPS (Third Party Seal) on Investor's Intention to Invest are statistically significant. The other direct effects are not statistically significant.

## 5. Conclusion

The concept of Crowdfunding has gained significant attention from businesses and policymakers worldwide, particularly in its potential impact on venture capital and the investor's landscape of developing economies. However, there is limited research on investor perceptions of equity-based crowdfunding, particularly in the social contexts of developing countries.

In Pakistan, there exists a substantial prospect to enhance financial inclusion by leveraging fintech, including crowdfunding and blockchain, to replace traditional intermediaries. The use of blockchain technology can contribute to strengthening the trust factor in crowdfunding. While

technology adoption and online activities are rapidly increasing in emerging economies, infrastructure and financial systems still require advancement.

This research broadens that perspective, looking into the role of trust in crowdfunding and its influence on funders' intentions. We've found some evidence that trust in crowdfunding has two main aspects: one based on relationships and the other on logical reasoning. Even though these aspects are closely linked, they stand out individually. It's like a pill that has an emotional outer layer (relationship-based trust) and a logical core (reason-based trust). Also, many research focus only on direct effects between elements, often overlooking the chain-reaction of intermediary factors

Currently, crowdfunding startups in Pakistan operate within a regulatory sandbox, but to bolster trust among stakeholders such as investors, entrepreneurs, platform owners, and policymakers, it is essential to establish a comprehensive regulatory framework. This framework should feature transparent rules on platform ownership, the implementation of caps, and relaxed maximum net worth requirements for investors. Additionally, collaboration with international platforms and allowing funds from foreign resources can boost fundraising capabilities.

The establishment of the first equity-based platform, the Pakistan National Investor portal, operating under the Securities and Exchange Commission of Pakistan (SECP), marks a significant step. A proper regulatory framework will enable startups and micro, small, and medium enterprises (MSMEs) to access a larger number of investors. By establishing a robust regulatory framework, Pakistan can create an enabling environment that promotes crowdfunding as a viable alternative financing method. This, in turn, can drive economic growth, empower MSMEs, and foster innovation. The comprehensive regulatory framework should not only focus on enhancing trust and transparency but also facilitate the engagement of previously untapped segments, such as young and less educated investors, who represent a significant portion of Pakistan's population. Policymakers should design targeted policies and initiatives to educate and attract these investors, enabling them to participate actively in crowdfunding activities and benefit from the opportunities it presents. In conclusion, crowdfunding holds tremendous potential for transforming the financing landscape in developing economies like Pakistan. By leveraging fintech solutions, establishing a comprehensive regulatory framework, and encouraging collaboration between domestic and international platforms, Pakistan can foster an environment conducive to entrepreneurship, financial inclusion, and economic growth. It is through these collective efforts that crowdfunding can truly become a catalyst for positive change and provide a platform for entrepreneurs to realize their innovative ideas and drive the country's socioeconomic development.

### 5.1 Managerial Implications

Crowdfunding is an emerging concept in Pakistan, and its formal acceptance by the Securities and Exchange Commission of Pakistan (SECP) began in 2019, enabling equity-based funding. This study aims to provide valuable insights for entrepreneurs, policymakers, and investors by identifying the key factors influencing investor intentions. Rather than focusing solely on relational

aspects, it is crucial to prioritize the enhancement of technology, certifications, endorsements, systems, information, and procedures to foster trust and promote investment. This holistic approach is vital for ensuring long-term economic sustainability and attracting untapped investors who were previously not engaged. Additionally, the study incorporates age and education level as control variables, revealing a significant association between trust and highly educated, middle-aged investors. The suggested study model looks particularly relevant for crowdfunding. This brings forward some crucial theoretical insights. The idea of behavioral intention is widely discussed in IS studies, it hasn't been explored much in relation to crowdfunding. Our research bridges this gap, shedding light on funders' readiness to invest in such platforms. Given Pakistan's predominantly young population, policymakers should formulate targeted policies to actively involve and cater to the untapped potential of young and less educated investors. By doing so, Pakistan can harness the full potential of crowdfunding and foster a thriving investor's ecosystem for sustainable economic growth.

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## Appendix A

### Questionnaire

Construct	Items	References
Network externality	A significant number are contributing to crowdfunding initiatives.	Pae and Hyun (2002)
	An increase in contributors to crowdfunding initiatives offers advantages to those involved.	
	A considerable audience is directing their resources towards crowdfunding endeavors.	
Investor's Intention to crowdfund	I'm inclined to back a venture on a crowdfunding site.	Kim et al. (2008)
	I'd suggest my network (like friends and family) consider backing projects on crowdfunding platforms.	
	I'd support a project on a crowdfunding site if it holds significance to me.	
	I trust the projects and platforms associated with crowdfunding.	
Calculus trust	I trust the projects and platforms associated with crowdfunding.	Ranganathan et al. (2013)
	I have confidence in the integrity and reliability of crowdfunding platforms and their projects.	
	I view crowdfunding platforms and their associated projects as high in integrity.	
Relational trust	I Would Feel a Sense of Personal Loss If I Could No Longer Crowdfund	Johnson and Grayson (2005)
	It would be disappointing if I couldn't participate in crowdfunding anymore.	
	I feel I can discuss concerns with project creators, believing they'd be receptive.	
Third-party seal	Sharing concerns with project creators, I expect them to be empathetic in response.	Kim et al. (2008)



	TPS in The Crowdfunding Platform Make Me Feel That the Platform Is Secure	
	Recognizing certifications on crowdfunding sites give me confidence in the funding process.	
<b>Structural assurance</b>	I trust the crowdfunding platform to have proper legal measures ensuring a successful funding relationship.	Bock et al. (2012) and Lu et al. (2010)
	I am confident that the security measures on crowdfunding platforms shield me from potential risks.	
	I feel that interactions with project creators are secure due to platform safeguards.	
<b>Perceived accreditation</b>	Evaluating the capability of new project creators is crucial in the crowdfunding process.	Pavlou (2002)
	Gauging the reliability of a project is vital before backing it on a crowdfunding platform.	
	I think crowdfunding platforms rigorously vet those who wish to fundraise.	
	I trust that crowdfunding platforms diligently evaluate the credibility and potential of projects.	