



RESEARCH ARTICLE

The Role of Frugality in Crowd funding Platform Adoption: Moderating Effects on Perceived Value and Risk

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This study aims to analyze the impact of perceived value and on individuals' intentions to use crowdfunding platforms, considering the moderating role of frugality. Using a quantitative approach, data was gathered from individuals who have engaged in online donations via crowdfunding platforms in Indonesia. We found that individuals with high frugality levels are more sensitive to both perceived value and risks in deciding whether to use the fundraising crowdfunding platform as compared to those who are less frugals. These results emphasize the importance of frugality as a moderating factor in financial technology adoption, with implications for risk management and value enhancement strategies in crowdfunding platforms.

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INTRODUCTION

The development of financial technology (fintech) has driven the emergence of various crowdfunding platforms that offer alternative funding options for individuals and organizations. These platforms enable online fundraising for various purposes, such as creative projects, social aid, and business investments. Currently, crowdfunding platforms have become an effective mechanism for online fundraising. Through these platforms, nonprofit organizations can easily reach a broader audience of Internet users (Chen et al., 2019) and efficiently disseminate information to the public (Zhao & Shneur, 2020). It distinguishes crowdfunding platforms from traditional donation methods, which are still limited in geographic reach and social connectivity (Chen et al., 2019; Purwandari et al., 2023). The presence of crowdfunding platforms has revolutionized philanthropic practices by integrating conventional donation concepts with Internet technology.

On the other hand, frugal lifestyle has become increasingly popular in modern society. Individuals with a frugal tendency carefully consider whether their contributions provide tangible and proportional value or benefits (perceived value). A study by Fanggidae (2024) reveals that frugal individuals typically make financial decisions with a strong focus on practicality and perceived value. In other words, frugal consumers evaluate the impact and importance of their actions when contributing to philanthropic initiatives. This reflects their inclination to make thoughtful, value-driven choices in different areas of life. Another study by Awais et al. (2020) highlights that frugal individuals exercise great caution in their spending habits, frequently engaging in detailed research to evaluate and select meaningful causes or initiatives to support. It indicates that frugal people also consider the risks associated with their financial decisions (perceived risk).

In principle, individuals with a frugal lifestyle tend to be cautious in spending money and place greater emphasis on the benefits or value of each expenditure (Lastovicka et al., 1999). This assumption may suggest that frugal individuals are less likely to engage in donation activities.

However, studies also indicate that frugal individuals are not necessarily reluctant to donate. Some research has found that they are willing to make donations if they perceive clear value in their helping behavior (Fanggidae, 2024). A further consideration arises with the emergence of crowdfunding platforms as digital intermediaries that eliminate direct interaction between donors and recipients, which may increase perceived risk.

Earlier research has investigated the elements that affect people's intentions to donate through crowdfunding platforms. In general, perceived value—which includes the social, emotional, and moral benefits of donating—has often been identified as a primary driver for individuals to use these platforms (Islam & Khan, 2021; Li et al., 2018; Thaker, 2018; Purwandari et al., 2023; Um, 2024). On the other hand, the perceived risk remains a significant barrier, particularly in the digital financial context, where uncertainties regarding the transparency and credibility of campaigns persist. While these studies provide valuable insights, there is still debate on how individuals with specific characteristics—such as those who adopt a frugal lifestyle—process value and risk in their decision-making regarding crowdfunding platforms for donations. The objective of this research is to tackle the question posed in this study:

"How does frugality play a role as a moderating factor in perceived value and risk on the intention to use a crowdfunding platform?"

This study highlights the role of frugality as a moderator in the adoption of crowdfunding platforms by examining how frugal individuals consider the perceived value and perceived risk in their decision-making process. Currently, there is a lack of research that specifically examines how frugality influences the relationship between perceived value, perceived risk, and the intention to adopt crowdfunding platforms.

LITERATURE REVIEW

2.1 Adopsi platform crowdfunding

In various studies on technology adoption, several theories have been employed to explain the factors influencing users' intentions to adopt a digital system or platform. A widely recognized theory is the Technology Acceptance Model (TAM), which highlights how Perceived Usefulness (PU) and Perceived Ease of Use influence users' attitudes regarding the adoption of technology (Davis, 1989). In crowdfunding platforms, PU reflects the extent to which users perceive that utilizing the platform provides benefits or convenience in donating or raising funds. Chen et al. (2022) highlighted the positive influence of PU in a study on factors affecting individuals' willingness to donate to critical illness crowdfunding projects on online platforms. Other studies have also found that the perception of ease of use has a positive relationship and a direct impact on the perceived usefulness of crowdfunding platforms, particularly in adopting the crowdfunding-waqf model (Thaker, 2018).

Another influential theory in understanding technology adoption is the Unified Theory of Acceptance and Use of Technology (UTAUT). In this model, Performance Expectancy and Social Influence are two key factors driving technology adoption (Venkatesh et al., 2003). Performance Expectancy reflects individuals' expectations that crowdfunding platforms can help them achieve specific goals and values, such as donating more effectively and transparently. Meanwhile, Social Influence represents the social impact or norms surrounding individuals, indicating that users are more inclined to engage with crowdfunding platforms if they see that people around them also use and trust these platforms. Studies by Li et al. (2018) and Islam & Khan (2021) found that Performance Expectancy (PE) and Social Influence (SI) significantly impact individuals' behavioral intention to adopt crowdfunding platforms for donation purposes. Social Presence Theory (Short et al., 1976) has often been utilized to clarify why users embrace crowdfunding platforms (Chen et al., 2019; Kenang & Gosal, 2021). The presence of social elements, such as donor testimonials, interactions with fundraisers, or direct communication with beneficiaries, enhances the perceived value of crowdfunding platforms, thereby encouraging users' donation intentions. Other relevant studies conducted by Liu et al. (2022), Kenang & Gosal (2021), and Chen et al. (2019) adopt the perspective of the Theory of Planned Behavior (TPB) introduced by Ajzen (1991). Their research explores three main factors influencing individual behavior: Perceived Behavioral Control, Subjective Norms, and Attitude Toward Behavior, which shape users' intentions to adopt crowdfunding platforms or engage in online donation behavior.

On the other hand, perceived risk in adopting crowdfunding platforms is also a concern in various studies. Trust is often used to reflect user trust in the platform and its managers (Chen et al., 2022; Chen et al., 2019; Um, 2024; Zhang et al., 2020). Users tend to be more willing to use a crowdfunding platform if they believe the system is safe, transparent, and trustworthy. In addition, platform quality also plays an important role in shaping user risk perceptions. Website Quality or Website Credibility is a factor that determines whether users feel comfortable making transactions through the platform (Kenang & Gosal, 2021; Purwandari et al., 2023). Crowdfunding sites that have good design, clear information, and adequate security features will increase the perception of trust and reduce user concerns regarding possible risks.

From the literature review, we can conclude that various theories in technology adoption research share a common thread in explaining the elements affecting the acceptance of crowdfunding platforms. Variables such as Perceived Usefulness, Performance Expectancy, Social Influence, Personal Norm, Social Presence, and concepts in the Theory of Planned Behavior (TPB), such as Attitude Toward Behavior and Subjective Norms, essentially represent perceived value, which refers to the benefits users perceive when using the platform. Meanwhile, variables such as Trust, Website Quality, Website Credibility, and Perceived Credibility reflect perceived risk, which refers to the level of uncertainty and potential risks that may affect users' trust in crowdfunding platforms. Understanding the perceived value and perceived risk is crucial in designing strategies to enhance the adoption of crowdfunding platforms and encourage greater participation in online philanthropic activities. By effectively managing these two aspects, crowdfunding platforms can create a more transparent, credible ecosystem that provides tangible benefits to users.

2.2 Frugality and donation

Studies exploring the link between frugal living and charitable contributions are still quite limited. The lack of literature connecting these two aspects leads to the prediction that there is no direct correlation between frugality and a person's intention to donate (Kasser, 2005). This assumption may seem unusual, considering that one of the key characteristics of frugality is the habit of managing expenses carefully (Bayer et al., 2021). However, a recent Fanggidae (2024) study reveals that frugality can still influence donation intentions, particularly under certain conditions.

The concept of a frugal lifestyle was introduced in the late 1990s by Lastovicka et al. (1999). They stated that people who practice frugality often focus on value rather than indulgence, finding fulfillment in purchases that offer significant value. Furthermore, frugality emphasizes that frugal individuals tend to be cautious about financial transactions (Awais et al., 2020). As a result, it can be assumed that they will carefully consider donating. Therefore, frugal individuals will likely seek comprehensive information about charitable activities before contributing (Fanggidae, 2024).

Considering the two main perspectives on frugal behavior, it can be concluded that frugal individuals perceive donations from two different aspects: value and risk. From the value perspective, they are more likely to donate if they see clear benefits and a significant positive impact from their contributions, aligning with their tendency to prioritize value in spending. On the other hand, from the risk perspective, frugal individuals are more cautious in making financial decisions and tend to conduct a more thorough evaluation before donating. This cautiousness reflects their inclination to minimize risks in discretionary spending, including ensuring the credibility of charitable organizations and the effectiveness of fund utilization. Therefore, understanding how frugal individuals balance the value they gain and the risks they perceive is crucial in examining their donation behavior in charitable crowdfunding.

Research conceptual model

This study's conceptual model examines the role of frugality in influencing the relationship between perceived value and risk and a person's intention to engage with crowdfunding platforms for donations. In addition to the moderation effect, we explore the direct link between perceived value and risk concerning a person's adoption of crowdfunding platforms for donations (Figure 1).

3.1 Relationship between perceived value and risk with the intention to use a crowdfunding platform

Perceived value (PV) is an individual's subjective evaluation of the benefits obtained compared to the costs incurred when using a technology or service (Zeithaml, 1988). Models of technology adoption, such as TAM and UTAUT, highlight that the perception of a technology's usefulness and performance expectancy significantly influence users' intentions to embrace the technology. When individuals perceive that crowdfunding platforms facilitate the donation process, provide transparency in reporting, and have a clear social impact, they are more likely to use them.

Additionally, consumer behavior theory suggests that the perceived value of a service is influenced not only by functional aspects but also by emotional and social aspects. In charitable crowdfunding, emotional value—such as the satisfaction of helping others—and social value—such as engagement in a philanthropic community—also contribute to shaping users' intentions to donate through digital platforms.

Several empirical studies in the social commerce domain have confirmed that PV positively impacts behavioral intention (Bushara et al., 2023; Tuncer et al., 2021). In crowdfunding, the benefits perceived in terms of ease of transactions, transparency of fund usage, and the real impact of donations will increase an individual's intention to use the platform.

On the other hand, perceived risk often acts as a barrier to technology adoption. High risk can reduce trust and hinder a person's decision to use technology. Several studies in the e-health and e-commerce domains have shown that factors such as website credibility, trust in the organization, and risk perception significantly impact usage intentions (Arfi et al., 2021; Jiang et al., 2021). In the context of crowdfunding, risks such as lack of transparency, potential fraud, and uncertainty of project success can influence an individual's decision to participate in the platform.

Based on these findings, this study proposes two hypotheses:

H1: Perceived value has a positive relationship with the intention to use a crowdfunding platform.

H2: Perceived risk has a negative relationship with the intention to use a crowdfunding platform.

The first hypothesis is based on the finding that perceived value significantly increases technology adoption intention. In contrast, the second hypothesis highlights the role of risk as a deterrent in the decision-making process. By understanding the dynamics between value and risk, this research seeks to enhance understanding of the elements that affect potential users' acceptance of crowdfunding platforms.

3.2 Moderating role of frugality

Frugality, or a frugal lifestyle, is an individual's tendency to manage financial resources and carefully avoid wasteful spending (Lastovicka et al., 1999). Very frugal people tend to consider value and risk before making financial decisions, including using digital services such as crowdfunding platforms.

Individuals with high levels of frugality tend to prioritize long-term benefits and the value gained from a financial transaction. They do not only focus on price or cost but also consider whether a product or service provides optimal value for them (Bove et al., 2009).

In the realm of crowdfunding, individuals with a frugal lifestyle are more likely to contribute if they perceive that the platform provides clear benefits, either in the form of transparency of the use of funds, significant social impact, or mechanisms that allow them to ensure that the funds distributed are used effectively. Therefore, for individuals with a high level of frugality, The impact of perceived value on the willingness to utilize the crowdfunding platform will be stronger. Based on this understanding, the following hypothesis is proposed:

H3: Frugality increases the positive influence of perceived value on the intention to use the crowdfunding platform.

In addition to considering value, individuals with high levels of frugality also tend to avoid unnecessary financial risks. They are more careful in making financial decisions and tend to avoid services with high uncertainty (Fanggidae, 2024).

In the context of crowdfunding, highly frugal individuals are likely to be more sensitive to various risk aspects, such as platform security, campaign credibility, and regulatory clarity. If they perceive a crowdfunding platform to be high in risk—either in terms of potential misuse of funds, unclear beneficiaries, or lack of guarantees of return—then their propensity to use the service will be lower compared to less frugal individuals. In other words, frugality amplifies the negative effect of perceived risk on the intention to use a crowdfunding platform. This leads to our next hypothesis:

H4: Frugality strengthens the negative influence of perceived risk on the intention to use crowdfunding platforms.

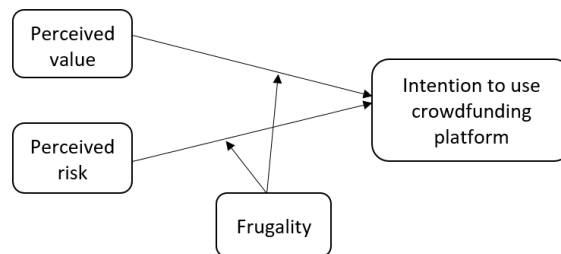


Figure 1. Research conceptual model

RESEARCH METHODOLOGY

4.1 Instrument development

The research instrument was developed to measure the main variables that are the focus of this study, namely perceived value, perceived risk, frugality, and intention to use the crowdfunding platform. Each variable is operationalized through a series of indicators or items compiled based on references from relevant prior research. To guarantee the instrument's reliability and validity, all question items have been adjusted to the context of this study and translated properly to maintain the accuracy of meaning in their use.

There are four items that we use to measure the perceived value variable. We adopted these items from Bushara et al. (2023). For the perceived risk variable, we adapt three items to the context from Jiang et al. (2021) and Arfi et al. (2021). We use six items from Michaelis et al. (2020) to measure frugality. Finally, we take three items from Sihotang et al. (2024) to measure the intention to use the crowdfunding platform.

4.2 Data collection

In this research, data was gathered via an online questionnaire utilizing Google Forms. The questionnaire was distributed through various digital platforms, including instant messaging applications and social media, to reach respondents more widely. This study targets individuals with experience using crowdfunding platforms in Indonesia, such as kitabisa.com, Ayopeduli.id, Gandengtangan, and others.

4.3 Data analysis

The conceptual model proposed in this study was examined using the Partial Least Squares (PLS) approach. As a variant of Structural Equation Modeling (SEM), PLS allows for the simultaneous evaluation of both the measurement and structural models. In assessing the measurement model, this study also conducted a discriminant validity test to confirm that the reflective indicators accurately capture the intended constructs. Each indicator is expected to exhibit a strong association with its corresponding construct, while measures of different constructs should remain distinct and not display high correlations.

Partial Least Squares (PLS) can also handle complex models that involve hierarchical structures, multiple indicators, constructs, and interconnections (Hair et al., 2011). Additionally, PLS effectively addresses issues related to small sample sizes and normality assumptions (Sihotang et al., 2023). As

a result, PLS serves as a valuable analytical tool, particularly in situations where other methods may not be appropriate.

RESULT

This section outlines the results of the study derived from the gathered data and performed analyses. The findings are organized into three primary sections. Firstly, we outline the demographic features of the participants to present a summary of the sample profile. Secondly, we evaluate the measurement model to assess the reliability and validity of the constructs employed in this research. Lastly, we analyze the structural model to evaluate the proposed hypotheses and identify the relationships among key variables.

5.1 Respondent demographics

We limited the target respondents to people who have used crowdfunding platforms to donate in Indonesia. It is useful for obtaining more appropriate analysis results. The number of respondents involved in this study was 129 people. Table 1 shows the demographics of the respondents.

Table 1. Respondent demographics

Item	Data category	Percentage
Gender	Male	55.6
	Female	44.4
Year old	<17	0
	18-23	9.8
	24-29	19.9
	30-35	25.1
	36-40	14.7
	>40	30.5
Education	High school	12.9
	Diploma	13.3
	Bachelor (S1)	47.6
	Magister (S2)	22.4
	Doctor (S3)	3.8
Occupation	Student	15.7
	Civil servants	31.3
	Private employees	33.2
	Entrepreneur	10.6
	Does not work	9.2
Average income (IDR)	<1.000.000	2.4
	1.000.000-3.000.000	30.8
	4.000.000-7.000.000	39.5
	8.000.000-10.000.000	19.6
	>10.000.000	7.7
Average donation (IDR)	<100.000	40.5
	100.000-300.000	35.8
	301.000-500.000	15.7
	>500.000	8

The demographic characteristics of participants in this research indicate that most donors come from the productive age group, with the highest percentage being 24-35 years and over 40 years. It indicates that individuals who have entered the workforce and have a higher level of financial independence tend to be more active in donating through crowdfunding platforms. In addition, respondents' relatively high level of education, where almost half of them are bachelor's graduates, and most have master's or doctoral degrees, suggests that awareness of the importance of sharing and contributing to social activities may be higher among educated people.

Moreover, the majority of participants are employed in the formal sector as either civil servants or private workers, suggesting that those with a stable income are more inclined to participate in charitable donations. It is supported by income data showing that most respondents come from the

middle class, with incomes ranging from IDR 4,000,000 to IDR 7,000,000. With a relatively stable economic capacity, this group has a greater opportunity to set aside part of their income to support social crowdfunding projects.

However, the number of donations given by respondents tended to be in the small to medium range, with most donating less than IDR 100,000 or in the range of IDR 100,000 - 300,000. This pattern reflects the trend of micro-donations, where large participation plays a greater role in the success of a crowdfunding campaign than the amount donated.

5.2 Measurement model test

Assessing the measurement model is a critical step in structural equation modeling (SEM), as it ensures that the study's constructs are valid and reliable. Validity was assessed through factor loadings and Average Variance Extracted (AVE), while reliability was determined using Composite Reliability (CR). Following the guidelines of Hair et al. (2018), factor loadings above 0.70, AVE values exceeding 0.50, and CR values greater than 0.70 indicate acceptable levels of validity and reliability. The analysis revealed that all indicator loadings exceeded the threshold of 0.70, confirming the indicators' strong association with their respective constructs. This result demonstrates that the individual items significantly contribute to their corresponding latent constructs.

Additionally, the AVE values for all constructs were well above the minimum requirement of 0.50, which confirms sufficient convergent validity. Convergent validity demonstrates that the measures for each construct exhibit a considerable amount of shared variance (Hair et al., 2018). The AVE values varied from 0.789 for the construct Frugality to 0.863 for Adoption Intention, showing that the latent constructs adequately explain the variance of their indicators.

Furthermore, Composite Reliability (CR) and Cronbach Alpha values were computed to assess the internal consistency reliability. Every construct demonstrated CR values above the suggested benchmark of 0.70, ranging from 0.888 for frugality to 0.929 for Adoption Intention. Elevated CR values indicate that the constructs demonstrate high reliability, confirming that the items consistently measure the intended latent variables (Hair et al., 2018). All Cronbach Alpha (α) values surpassed the 0.70 threshold, as advised by Hair et al. (2018). This outcome reinforces the reliability of the scales utilized in the research.

The findings indicate that the measurement model exhibits strong validity and reliability, ensuring its appropriateness for further analysis. Table 2 offers a comprehensive overview of the assessment of the measurement model.

Table 2. The outcomes of the assessment of the measurement model

Variable	Item	Loading	α	CR	AVE
Perceived Value (PV)			0,923	0.901	0.812
	PV1	0,929			
	PV2	0,847			
	PV3	0,922			
Perceived Risk (PR)	PV4	0,904			
			0,907	0.918	0.843
	PR1	0,939			
	PR2	0,887			
Frugality (FR)	PR3	0,926			
			0,947	0.888	0.789
	FR1	0,896			
	FR2	0,902			
	FR3	0,881			
	FR4	0,884			
Intention to use (IU)	FR5	0,868			
	FR6	0,898			
			0,920	0.929	0.863
	AI1	0,945			
	AI2	0,910			
	AI3	0,931			

Next, to evaluate the validity of the constructs, we analyzed the square root of the Average Variance Extracted (AVE) for each construct and compared it with the correlation coefficients among the constructs. A higher square root of the AVE for a construct than its correlations with other constructs in the model indicates strong discriminant validity. The results, as illustrated in Table 3, adhere to the Fornell-Larcker criterion. The constructs exhibit satisfactory discriminant validity as the diagonal values surpass the related correlation values.

Table 3. The result of the Fornell-Larcker criterion

	PV	PR	FR	IU
PV	0.901			
PR	0.737	0.918		
FR	0.519	0.704	0.910	
IU	0.432	0.387	0.574	0.929

5.3 Structural model test

This research investigated how frugality moderates the connections between perceived value and the intention to adopt, as well as the perceived risk and the intention to adopt, specifically within crowdfunding donation platforms. Furthermore, the direct relationships among perceived risk, perceived value, frugality, and the intention to adopt were also explored to enhance the overall understanding of the structural model. Below, we present the findings from the structural equation modeling (SEM) analysis performed using SmartPLS software.

5.3.1 Direct effect testing

We examined the direct connections among the constructs in the research model. Initially, the direct link between perceived value and intention to adopt was found to be positive and statistically significant ($b = 0.412, p < 0.01$). This finding indicates that when individuals perceive a high value in using crowdfunding donation platforms, they are more likely to adopt them. Second, the perceived risk did not directly influence adoption intention ($b = -0.331, p > 0.05$), suggesting that while perceived risk may discourage adoption, its effect is relatively weak in the studied context. Third, the direct effect of frugality on adoption intention was also positive but not statistically significant ($b = 0.381, p > 0.05$). Although frugality was hypothesized to play a moderating role, these findings indicate that its direct influence on adoption intention is less pronounced. Table 4 shows the results of the direct relationship test in this study.

Table 4. Results of the main effect model

Hypotheses	Path coefficient	Standard error	T statistic	P value
H1: PV→IU	0.444	0.142	3.128	0.002
H2: PR→IU	-0.322	0.282	1.143	0.253

5.3.2 Moderator effects testing

As expected, the moderating effects of frugality were significant. First, the interaction effect of frugality and perceived value on adoption intention was positive and statistically significant ($b = 0.318, p < 0.01$). This supports the hypothesis that frugality enhances the positive impact of perceived value on adoption intention. The result suggests that frugal individuals who prioritize cost-effectiveness and rational decision-making are more likely to adopt platforms they perceive as valuable. Second, the interaction effect of frugality and perceived risk on adoption intention was negative and statistically significant ($b = -0.405, p < 0.01$). The results are illustrated in Table 5.

Table 5. Results of the interaction model (moderation effect)

Interaction term	Path coefficient	Standard error	T statistic	P value
FRXPV	0.328	0.116	2.842	0.005
FRXPR	-0.446	0.133	3.344	0.001

This finding indicates that frugality amplifies the negative impact of perceived risk on adoption intention. Frugal individuals, who are generally risk-averse, maybe more strongly discouraged by perceived risks that may arise from adopting the crowdfunding platform. The moderating patterns as generated by simple slope analyses, are presented in Figure 2.

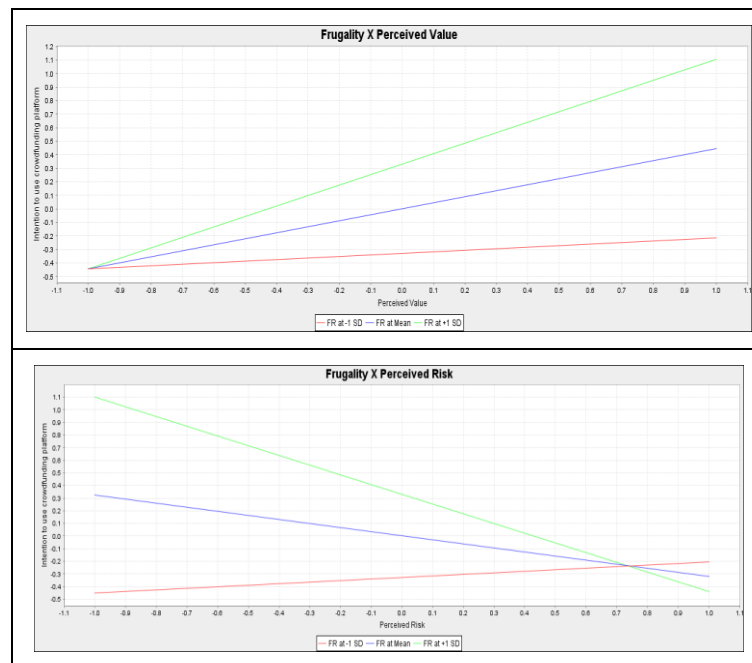


Figure 2. Simple slope analysis

The findings from the simple slope analysis suggest that the perceived value positively influences the intention to utilize crowdfunding platforms. Individuals with high frugality are more responsive to the benefits or value offered by crowdfunding platforms. This is evident from the green line (+1 SD frugality), which has the steepest slope, followed by the blue line (average frugality) and the red line (-1 SD frugality).

In other terms, the greater the perceived value, the stronger the individual's inclination to utilize the crowdfunding platform, especially for those who are highly frugal (high frugality). Individuals are more inclined to utilize the platform when they believe it provides distinct advantages, such as attractive returns or enduring benefits. Conversely, people who exhibit low frugality are not greatly impacted by perceived value, as indicated by the relatively flat red line.

Our findings also revealed that perceived risk negatively influences the intention to utilize crowdfunding platforms, and this effect is amplified among individuals who exhibit high frugality. This is illustrated by the green line, which displays a steeper slope compared to the blue and red lines. Highly frugal individuals are more sensitive to risk and tend to avoid crowdfunding platforms if they perceive uncertainty or potential threats. Conversely, individuals with low levels of frugality are less affected by perceived risk, as indicated by the relatively flat red line.

DISCUSSION

Based on the demographic profile of respondents, it is evident that the productive age group with relatively high levels of education dominates participation in donations through crowdfunding platforms. This group tends to better understand the platform's perceived value, such as transaction convenience, fund usage transparency, and the social impact generated. Additionally, most respondents come from the working class with stable incomes. This can enhance their trust in the platform (perceived risk), especially if the system ensures transaction security and accountability in fund distribution. However, the donation pattern, predominantly small to medium amounts, indicates a tendency toward frugality in financial decision-making. Frugal individuals tend to be more selective in allocating their funds, meaning they will only adopt crowdfunding platforms if they perceive the benefits worth the resources spent. Thus, the success of crowdfunding platforms in attracting users depends not only on the perceived value and risk but also on how well they can convince frugal donors to continue contributing. This reinforces the notion that frugality is a moderating factor that can strengthen or weaken the relationship between perceived value and perceived trust in the intention to adopt crowdfunding platforms.

The findings of this research suggest that the perception of value significantly boosts individuals' likelihood of utilizing crowdfunding platforms. It means that the greater the benefits individuals

perceive from using the platform, the more likely they are to adopt it. These findings align with most other studies on technology adoption in general (Sihotang et al., 2023) and on the adoption of crowdfunding platforms specifically (Chen et al., 2022).

Interestingly, the moderation analysis results show that highly frugal people are more responsive to perceived value. It means that the more frugal or careful a person manages their finances, the greater the influence of perceived value on their decision to use a crowdfunding platform. It indicates that individuals more cautious with their spending will be more inclined to use crowdfunding services if they perceive that the benefits significantly outweigh the potential risks.

The results of this research additionally showed that the perception of risk negatively influences the intention to utilize the crowdfunding platform, even though this effect lacks statistical significance. The negative path coefficient suggests that as an individual's perception of risk associated with the crowdfunding platform increases, their likelihood of using it decreases. Unfortunately, because the results are insignificant, this impact is not strong enough to directly inhibit users' decisions to use the platform. This finding contradicts several previous studies that found that risk is often a major barrier to technology adoption in general, for example, in the acceptance of e-healthcare technology (Arfi et al., 2021) and e-commerce (Jiang et al., 2021).

This study has shown that perceived value has a greater influence than perceived risk in determining usage intention. This indicates that individuals tend to focus more on the benefits or value they gain rather than the risks involved. In many cases, if a person perceives a significant potential benefit, they will likely overlook the risks or find ways to mitigate them. In the context of this study, the insignificance of perceived risk may be due to the dominance of respondents with higher education levels and strong financial and digital literacy. Users already familiar with digital transactions may better understand how to manage existing risks, such as conducting further research before investing or supporting projects with high credibility (Fanggidae, 2024).

Fortunately, the findings from the analysis suggest that frugality significantly influences how perceived risk affects the intention to use crowdfunding platforms. People with higher levels of frugality are typically more careful about their financial management, which makes them more aware of potential risks. In this situation, frugality heightens the negative effect of perceived risk on the intention to use these platforms. This implies that more frugal individuals are more inclined to steer clear of crowdfunding platforms if they recognize substantial risks. Conversely, individuals with lower frugality levels may be more tolerant of risks and continue using crowdfunding platforms, especially if they see greater potential benefits. These findings support the risk-based decision-making theory by Lynch et al. (2010), which states that individuals with a more conservative spending tendency are more likely to avoid risky financial activities. Thus, while perceived risk may not be significant overall, it becomes more impactful for those who are more frugal and selective in their financial decisions.

Research implication

This research offers theoretical advancements by enhancing the existing literature on technology adoption, particularly concerning crowdfunding platforms, through the introduction of a novel perspective that highlights the moderating influence of frugality. The findings from the moderation analysis indicate that individuals who exhibit high frugality are more influenced by perceived value when making decisions. In contrast, their sensitivity to perceived risk tends to be lower. These findings enrich our understanding of how personality characteristics moderate the relationship between risk and value factors in adopting digital financial innovation or financial technology (fintech).

From a practical standpoint, the results of this research offer valuable information for crowdfunding platform creators, digital marketers, and policymakers to enhance the acceptance and utilization of crowdfunding platforms. First, frugality serves as a moderating factor in the connection between perceived value and perceived risk, indicating that user groups demonstrating high frugality are more inclined to prioritize the value of benefits over the associated risks when making choices. Therefore, marketing strategies highlighting the economic benefits, cost efficiency, and potential benefits or values of crowdfunding may be more attractive to this user segment. Second, crowdfunding service providers can develop financial literacy and education campaigns that target

users with high-risk awareness. Users can feel more confident participating by providing clearer information about the working mechanisms of crowdfunding, the success rate of projects, and the security systems implemented.

CONCLUSION

This study highlights how perceived value and perceived risk affect people's intentions to contribute to crowdfunding platforms. These two factors are the main characteristics inherent in individuals with high levels of frugality. The findings of the study indicate that as frugality increases, individuals are more likely to assess the advantages provided (perceived value) and the potential risks they encounter (perceived risk) prior to making a donation via a crowdfunding platform.

The analysis shows that perceived value positively affects usage intention, meaning that the greater the perceived benefits of a crowdfunding platform, the higher the tendency of individuals to use it. Conversely, perceived risk significantly negatively impacts usage intention, indicating that individuals who perceive the platform as risky tend to avoid using it. However, the interaction with frugality provides additional insights: individuals with higher levels of frugality are more responsive to the benefits of a crowdfunding platform. At the same time, their sensitivity to risk also increases.

Overall, this research offers fresh perspectives on the elements that affect the acceptance of crowdfunding platforms. Nonetheless, this study has certain limitations, including the sample representation, which may not adequately reflect the broader population of crowdfunding participants. As a result, future research could investigate factors that moderate the connection between perceived value, risk, and intention to use and apply this model in different financial technology (fintech) contexts.

AUTHOR(S) CONTRIBUTIONS

DMS conceived the idea, conducted the literature review, designed the model, and wrote the manuscript. JPF provided the frugal concept and moderation, performed the data analysis, and assisted in drafting the manuscript. All authors read and approved the final manuscript.

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