Tracking Investment Intentions: The Impact of Information, Confusion, and Avoidance Attitude in Stock Investment Applications

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Abstract – The proliferation of stock investment applications has significantly augmented the accessibility and speed of acquiring investment-related information. However, the ease of information access may inadvertently lead to information overload, fostering confusion and, in extreme cases, user avoidance of these applications. Despite the potential ramifications of overload information on avoidance behaviors, research linking consumer confusion to avoidance attitudes and intentions remains scarce. This study seeks to bridge this gap by identifying factors influencing individuals' intentions to avoid using stock investment applications, specifically focusing on information acquisition, overload confusion, and avoidance attitudes. Conducted through online questionnaires, data collection involved 130 responses that met the specified criteria, subsequently analyzed using SmartPLS 3 software. The findings reveal that effective information acquisition diminishes avoidance attitudes and intentions but does not impact overload confusion. Furthermore, overload confusion escalates avoidance attitudes without influencing intention to avoid. Notably, avoidance attitudes exhibit a positive correlation with the intention to avoid using stock investment applications. This research contributes to the academic landscape by shedding light on the underexplored role of overload confusion in shaping avoidance behaviors, offering insights not extensively addressed in prior studies. Moreover, it provides valuable implications for practitioners in the financial industry, offering guidance for the development of more effective marketing strategies in the context of stock investment applications.

Keywords: intention to avoid, information acquisition, overload confusion, avoidance attitude

Introduction

The rapid advancement of technology has profoundly altered the investment landscape, particularly with the emergence of stock investment applications. These applications not only offer convenience in stock search and trading but are also readily accessible through diverse mobile devices, such as tablets and smartphones (Laudon et al., 2018). With the burgeoning convenience, there has been a notable surge in public interest towards investment. This phenomenon aligns with findings from Liu et al. (2022), which underscore the correlation between technological advancements and heightened investment activity. Despite the facilitation of the investment process by technology, it remains imperative to underscore the necessity of comprehensive information acquisition prior to embracing any application. The significance of acquiring pertinent information for grasping the stock investment applications is paramount. As elucidated by Roy, S. K. et al. (2020), companies must possess adept information management capabilities to enhance customer comprehension. Precise information dissemination not only fosters users' comprehension of the application but also augments consumers' intention to utilize it.

In this context, the information retrieval process assumes a pivotal role in shaping consumers' decisions regarding the adoption of an application. Despite the instantaneous access to information facilitated by technology, it is imperative to acknowledge the potential negative repercussions. Findings from Cao and Sun (2018) illuminate that information overload can exert cognitive strain on users, inducing feelings of overwhelm. The proliferation of widely disseminated information poses challenges in terms of control, inundating users with an excessive volume of information, thereby engendering confusion. Lu et al. (2016) posit that increased information search can lead to heightened confusion. Consumers are frequently
exposed to information from diverse sources, engendering confusion during the information acquisition process. Confusion arising from information overload can mold attitudes and intentions to avoid the application. Chauhan and Sagar's (2023) research reveals that information overload, information similarity, and information ambiguity contribute to confusion formation, subsequently shaping the intention to switch. Day’s study (2011) indicates that humans possess limitations in processing information, and information overload can impede individual decision-making abilities. Consequently, overload information acquisition can result in overload confusion and avoidance attitude, ultimately nurturing the intention to avoid the application.

User attitudes toward applications constitute a pivotal factor in shaping user intentions (Hamari & Keronen, 2017). Negative attitudes toward applications can reinforce the inclination to avoid them. Consequently, this research aims to scrutinize investors’ experiences in using stock investment applications, with a specific focus on the factors influencing users' attitudes and intentions toward these applications. By accentuating information acquisition as a determinant, this study not only elucidates that information acquisition aids in mitigating user confusion with the application but also furnishes valuable insights for business practitioners in formulating more effective marketing strategies within the financial industry.

Empirical evidence indicates that consumer confusion correlates with significant economic implications for companies, including diminished revisit intention (Garaus and Wagner, 2016), increased discontinuation intention (Dang, 2020), and reputational damage (Fitzgerald et al., 2019). Nonetheless, there remains a dearth of research investigating the role of overload confusion in shaping avoidance behavior toward applications, thus revealing a notable research gap. This study elucidates that overload confusion constitutes a determinant factor in shaping avoidance attitudes and intentions, representing a novel contribution to the literature. Building upon the prior work of Mathur (2021), which elucidated how choice overload-induced confusion prompts consumers to allocate more time to information acquisition and processing, ultimately deferring immediate decisions, there emerges a critical need to delve deeper into the phenomenon of overload confusion. Such an exploration is essential for service providers to gain deeper insights into user behavior within the continuously evolving financial market landscape. By recognizing the significance of acquiring pertinent information to mitigate confusion and avoidance intentions, stock investment applications stand to enhance their efficiency, responsiveness, and accessibility across diverse segments of society, thereby fostering inclusivity within the realm of online investment.

Research Hypothesis

Information Acquisition and Overload Confusion

The role of information acquisition is pivotal in the utilization of applications, aligning with the recognition that acquiring pertinent information fosters cognitive resonance among users, as evidenced by the research conducted by Cheng and Wei (2020). According to their findings, a conducive information acquisition process enables users to cultivate substantial knowledge about the application in use. Acquiring information constitutes a crucial endeavor for consumers seeking to mitigate perceived risks associated with their decisions. Sa Vinhas and Bowman (2019) affirm the significance of information-seeking efforts as a pivotal stage that consumers must traverse to alleviate uncertainties and bolster their confidence in the product or service they intend to procure.

In the context of this study, information acquisition transcends a mere mechanistic effort; it serves as the initiation of user curiosity towards applications, propelled by their eagerness to access pertinent and valuable information, as underscored by Berger (2014). From this perspective, information acquisition is not merely a passive process of data gathering but
an integral component in the formulation of a comprehensive and critically informed understanding of an application. Users who willingly invest more time and effort in the exploration and processing of information are less prone to experiencing confusion compared to their counterparts who exhibit a lesser inclination to do so (Lu et al., 2016). The burgeoning volume of available information and the intricate nature of consumer information requirements have been demonstrated to induce consumer confusion (Luo et al., 2023). Hence, cognizance of the significance of structured and critical information acquisition becomes paramount for application users in mitigating confusion and uncertainty. Building upon the aforementioned assertions, this study posits the following hypothesis:

H1: Information acquisition exerts a negative influence on overload confusion.

Information Acquisition, Avoidance Attitude, and Intention to Avoid

The acquisition of information emerges as a pivotal factor in shaping user attitudes toward applications, with a particular emphasis on factors such as relevance, clarity, and quantity. The study conducted by Ha et al. (2013) underscores that information satisfaction significantly contributes to shaping expectations and attitudes toward products. Dick (2019) further posits that the strength of information plays a crucial role in determining how the valence of information influences attitudes. Within the domain of applications, an adequate and reliable level of information serves as a catalyst for cultivating a positive attitude toward the application. However, overload, unclear, and inaccurate information acquisition tends to elicit negative user attitudes and intentions to avoid the application.

Xiang and Law (2013) highlight that consumers tend to engage in extensive information searches to mitigate risks in purchasing decisions, a principle that also holds true in the realm of applications. Additionally, negative information or feedback assumes a significant role in user decision-making, as evidenced by Hegner et al. (2017). Information not only serves as evaluative material for stock investment applications but also shapes user attitudes and intentions toward the application. Consequently, the overarching argument posits that optimal information acquisition aligned with user needs leads to positive attitudes and intentions, whereas information overload and inadequacy can trigger negative user attitudes and intentions to avoid using the application. Hence, a meticulously tailored information management strategy attuned to user preferences proves indispensable in fostering application acceptance and use. Building upon these considerations, this research posits the following hypotheses:

H2: Information acquisition exerts a negative influence on avoidance attitude.

H3: Information acquisition exerts a negative influence on the intention to avoid.

Overload Confusion, Avoidance Attitude, and Intention to Avoid

In the contemporary technological landscape, the issue of confusion consistently arises among application users. Recent challenges related to perplexing applications encompass the dissemination of information overload and the inherent complexity of applications, leading to user reluctance in their adoption. Some applications are deemed excessively intricate, rendering them challenging for users to comprehend, ultimately fostering a hesitancy to employ them. Within marketing literature, attention to consumer perceptions of confusion is an evolving area, underpinned by the assumption that confusion practices are inherently detrimental (Walsh et al., 2007).

Confusion, in this context, transcends a mere sentiment arising from uncertainty; it carries deeper ramifications by instigating avoidance attitudes, extending to the intention to avoid using a particular application. This avoidance phenomenon is closely aligned with the concept of uncertainty avoidance, denoting an individual's discomfort in confronting novel and unfamiliar situations (Hofstede and Minkov, 2010). When confusion gives rise to uncertainty,
users tend to experience unease and exhibit reluctance to engage with applications that are unclear or intricate. In this framework, avoidance is not merely a transitory response to feelings of uncertainty but can evolve into a more entrenched intention to actively avoid using the application.

Research conducted by Shiu (2021) underscores that consumers grappling with confusion often encounter challenges or cognitive tension in selecting, interpreting, and evaluating application information. Furthermore, confusion can impede the decision-making process as consumers gather information from diverse sources. In essence, confusion disrupts not only the user experience but also significantly impacts the consumer decision-making process. Users who confronted with confusion due to an inability to comprehend the functionality of an application are inclined to exhibit avoidance behavior, thereby dissuading them from embracing the application. Grounded in this perspective, this study posits the following hypotheses:

H4: Overload confusion exerts a positive influence on avoidance attitude.
H5: Overload confusion exerts a positive influence on the intention to avoid.

Avoidance Attitude and Intention to Avoid

Recent research conducted by Ray et al. (2021) provides a comprehensive understanding that attitudes not only reflect consumer preferences but also articulate their thoughts regarding a product or service. The formation of these attitudes is critically influenced by consumer experiences, which, as elucidated by Kusumawati and Rahayu (2020), play a pivotal role in determining subsequent consumer behavior. Positive experiences with a product, as affirmed by Biscaia et al. (2017), significantly contribute to elevated satisfaction levels, further reinforcing the notion that consumer satisfaction is integral to the cultivation of brand loyalty. Conversely, experiences of dissatisfaction may result in brand avoidance, a concept defined by Elliot (1999) as the act of rejecting a brand to circumvent potential negative consequences. In the specific context of this study, if users anticipate a negative experience when using an application, their proclivity is to avoid it. The negative attitudes that users harbor towards applications are, therefore, considered a fundamental factor influencing intentions to avoid. Hence, based on this comprehension, the study proposes the following hypothesis:

H6: Avoidance attitude exerts a positive influence on the intention to avoid.

Research Methods

Sample and data collection

The data collection process involved the distribution of Google Form-based questionnaires to the stock investor community across various groups. Additionally, online questionnaires were disseminated via private messages using the Facebook Messenger, WhatsApp chat, Instagram direct message, and Telegram chat. The questionnaire link was shared from October 28 to November 15, 2023, reaching approximately 517 individuals, with respondent participation being entirely voluntary.

Out of the 203 responses received, 29 were deemed ineligible as they had never utilized a stock investment application, and 44 respondents were eliminated because they gave same assessments for all statements. Finally, only 130 responses remained viable for further analysis. Based on the demographic profile of respondents outlined in Table 1, the majority were male (62%), and aged 17–22 years old (50%). Approximately 57% of the respondents held a bachelor's degree, and the monthly income was predominantly within the range of IDR 1,000,000 – IDR 5,000,000 (36%).

Table 1. Respondent Demographics
Demographics

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>62%</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>38%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-22 years old</td>
<td>65</td>
<td>50%</td>
</tr>
<tr>
<td>23-30 years old</td>
<td>44</td>
<td>34%</td>
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<tr>
<td>30-40 years old</td>
<td>16</td>
<td>12%</td>
</tr>
<tr>
<td>&gt;40 years old</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Domicile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sumatera</td>
<td>81</td>
<td>62%</td>
</tr>
<tr>
<td>Java</td>
<td>38</td>
<td>29%</td>
</tr>
<tr>
<td>Bali and Nusa Tenggara</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>Kalimantan and Sulawesi</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior high school</td>
<td>56</td>
<td>43%</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>67</td>
<td>52%</td>
</tr>
<tr>
<td>Postgraduated</td>
<td>7</td>
<td>5%</td>
</tr>
<tr>
<td>Profession</td>
<td></td>
<td></td>
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<tr>
<td>Student</td>
<td>72</td>
<td>55%</td>
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<tr>
<td>Government employees</td>
<td>12</td>
<td>9%</td>
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<tr>
<td>Private employees</td>
<td>33</td>
<td>25%</td>
</tr>
<tr>
<td>Self-employed</td>
<td>15</td>
<td>10%</td>
</tr>
<tr>
<td>Income per month</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;IDR 1,000,000</td>
<td>43</td>
<td>33%</td>
</tr>
<tr>
<td>IDR 1,000,000-IDR 5,000,000</td>
<td>47</td>
<td>36%</td>
</tr>
<tr>
<td>IDR 5,000,000-IDR 10,000,000</td>
<td>19</td>
<td>15%</td>
</tr>
<tr>
<td>&gt;IDR 10,000,000</td>
<td>21</td>
<td>16%</td>
</tr>
</tbody>
</table>

Item Measurement

This research utilizes measurement items derived from prior studies that have demonstrated reliability and validity. The measurement items in this research employ a Likert scale with seven response options, ranging from 1 ("strongly disagree") to 7 ("strongly agree"). Information acquisition (Cronbach's α 0.856) was measured with four items adapted from Khan (2017), while overload confusion (Cronbach's α 0.931) was measured using three items adapted from Lu et al. (2016). Furthermore, four items gauging avoidance attitude (Cronbach's α 0.937) and three items measuring the intention to avoid (Cronbach's α 0.929) were adapted from Khan et al. (2019).

Results and Discussion
Measurement Model

This research examines the intention to avoid hypothesis through the application of three reflective constructs deemed influential. The selection of SmartPLS 3 software for analyzing the research data is grounded in the PLS approach, which has demonstrated utility and effectiveness in analyzing data with small samples, ensuring robustness and statistical power (Reinartz et al., 2009; Hair et al., 2020). Various aspects were assessed in this research, encompassing factor loading, average variance extracted (AVE), composite reliability, and Cronbach's alpha. Table 2 reveals that all factor loading values of the measurement items exceed 0.6, indicating an acceptable level of endorsement (Chin, 1998). Additionally, the AVE values for all constructs signify convergent validity as they surpass the minimum required threshold of 0.50. Composite reliability and Cronbach's alpha values exceeding 0.70 signify significant construct reliability for all items and constructs (Hair et al., 2020). In Table 3, the presence of cross-loadings among indicators demonstrates a good level of discriminant validity, with each indicator exhibiting the highest correlation with its respective construct (Chin, 1998).

Table 2. Measurement Model Analysis

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factor Loading</th>
<th>Average of variance extracted (AVE)</th>
<th>Composite Reliability</th>
<th>Cronbach’s α</th>
</tr>
</thead>
</table>


Structural Model

Table 4 shows the interrelationships among the constructs. The analysis results indicate that the first hypothesis (H1) is not supported, as information acquisition (IA) does not exhibit a significant effect on overload confusion (OC) (b = -0.121, ρ < 0.05). However, both the second (H2) and third (H3) hypotheses find support, with IA demonstrating a negative relationship with avoidance attitude (AA) (b = -0.166, ρ < 0.05) and intention to avoid (ITA) (b = -0.062, ρ < 0.001). Moreover, OC has a positive effect on AA (b = 0.707, ρ < 0.05), supporting H4. Nevertheless, OC did not exhibit a significant effect on ITA (b = -0.047, ρ < 0.05), resulting in the non-support of H5. Regarding the relationship between AA and ITA (b = 0.962, ρ < 0.05), a significant and positive effect is observed, which supports H6.

Table 4. Results of Structural Analysis

<table>
<thead>
<tr>
<th>Path</th>
<th>Path Coefficient</th>
<th>P Values</th>
<th>Hypothesis</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA → OC</td>
<td>-0.121</td>
<td>0.187</td>
<td>H1</td>
<td>Not Supported</td>
</tr>
<tr>
<td>IA → AA</td>
<td>-0.166</td>
<td>0.011</td>
<td>H2</td>
<td>Supported</td>
</tr>
<tr>
<td>IA → ITA</td>
<td>-0.062</td>
<td>0.034</td>
<td>H3</td>
<td>Supported</td>
</tr>
<tr>
<td>OC → AA</td>
<td>0.707</td>
<td>0.000</td>
<td>H4</td>
<td>Supported</td>
</tr>
</tbody>
</table>
This research found the pivotal role of avoidance attitude in shaping the intention to avoid, aligning with the Theory of Reasoned Action, which posits that behavior is influenced by intentions, which are predicted through attitudes based on positive or negative evaluations of that behavior (Bagozzi, 1992). Consequently, the emergence of the intention to avoid using stock investment applications can be elucidated as a consequence of users' negative sentiments toward the application, resulting in avoidance. The study also reveals that information acquisition negatively influence on avoidance attitudes and intention to avoid. Previous research by Zhu W. et al. (2018) has posited that knowledge impacts risk perception, thereby stimulating information needs and search behavior, ultimately influencing consumer attitudes and intentions. This logic aligns with the findings of this research, which suggest that excessive and unclear information about stock investment applications can lead to negative attitudes and intentions to avoid the application due to users' lack of understanding. This assertion is consistent with the research findings of Zhou and Xie (2023), which indicate that information overload leads to fatigue and dissatisfaction, subsequently fostering avoidance intentions.

Moreover, the results indicate that overload confusion is a crucial factor in the formation of avoidance attitudes, aligning with research by Walsh & Mitchell (2010), which suggests that when individuals experience confusion, they may avoid decision-making or seek ways to reduce their confusion. In the case of this study, users with confusion stemming from information overload exhibit a negative attitude towards the application, leading to avoidance. Contrary to Dharmasena and Jayathilaka (2020), this study found no significant effect of information acquisition on overload confusion. However, empirical findings from Eppler and Mengis (2004) support this result, revealing that information avoidance can be an adaptive response strategy used by social media users to overcome information overload. Individuals who are open-minded, as demonstrated by Tauni et al. (2017), tend to receive information with a positive attitude, using creative approaches to access various sources without easily accepting information without evaluation. This suggests that open-minded individuals avoid information overload confusion by critically evaluating the information they encounter.

Finally, the study found that overload confusion has no effect on the intention to avoid, contrary to findings by Wang et al. (2023) who revealed that information confusion influences turnover intentions directly and indirectly through emotional exhaustion. The discrepancy attributed to the fact that confusion does not universally prompt individuals to avoid; instead, it may motivate individuals to think more critically, search for additional information, and assess uncertainties about the application. The educational background of the majority of
respondents with bachelor's degrees contribute to their tendency to think critically, reducing the likelihood of experiencing confusion. Sharma et al. (2023) have previously proven that confusion decreases as education level increases.

Conclusions and Suggestions

Research Implication

This research makes a significant contribution to marketing literature by delving into three factors influencing the intention to avoid applications, with a particular focus on the widely underexplored construct of consumer confusion. This study enriches the academic paradigm by shedding light on the crucial role of overload confusion in shaping consumer attitudes. Previous findings, as elucidated by Mathur (2020), robustly bolster this argument by affirming that dimensions of customer confusion wield a significant influence on decision-making uncertainty and the propensity to defer decisions. Moreover, this study asserts that the emergence of negative attitudes towards applications correlates with an escalation in users' (investors') inclination to avoid stock investment applications, consistent with the findings of Moshood et al. (2023), which suggest that attitudes influence intentions to switch. Furthermore, this assertion is corroborated by Zhang et al. (2021) and Popy and Bappy (2022), who demonstrate that attitudes positively impact intentions. Put differently, when users harbor a negative attitude towards an app, their inclination to avoid it intensifies. Service providers can mitigate this by furnishing clear, comprehensible information. However, if the information provided engenders confusion, then the intention to avoid the application escalates, as per research by Dang (2020), which underscores that information confusion can heighten users' psychological pressure, subsequently augmenting their intention to discontinue using the application.

While information serves as a pivotal factor in mitigating application avoidance, service providers must also recognize that information overload can precipitate confusion. Xue et al. (2020) highlight that consumer confusion often stems from the abundance of available information, particularly in online contexts. Increased frequency of information searches heightens the likelihood of encountering redundant or ambiguous information. Additionally, consumers experience anxiety and a lack of confidence in decision-making when confronted with an excess of information (Lu and Gursoy, 2015). The confusion engendered by information overload can ultimately reinforce the inclination to avoid using the application. Consequently, service providers must exercise caution in disseminating information and should curate information prior to conveying it to users of stock investment applications, thereby averting confusion and fostering a positive attitude towards the application, thereby enhancing users' intention to utilize the stock investment application.

Limitations and suggestions for further research

This research has several limitations. Firstly, a majority of the respondents are based on the island of Sumatra, which limits the generalizability of the results to the broader population of stock investment application users across Indonesia. Future research endeavors should strive to collect more geographically diverse samples to ensure a representative reflection of the diversity of users throughout the country.

Secondly, this study does not focus on one specific stock investment applications, where each stock investment application has different characteristics. As a result, the findings can be biased and not universally applicable to all stock investment applications. Future research needs to examine stock investment applications more specifically.

Lastly, this study does not explore potential moderating variables, which could play a significant role in influencing intention to avoid. Incorporating moderating variables in future
research endeavors would contribute to a more comprehensive understanding of the factors influencing intention to avoid in the context of stock investment applications. This would enhance the richness of the analysis and provide a more nuanced perspective on the dynamics at play in users' decision-making processes.

References


