Analysis Of Positioning Online Investment Apps In Indonesia

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ABSTRACT

This study aims to determine Online Investment in Indonesia in terms of its attributes. Online Investment such as BIBIT, AJAIB, STOCKBIT, MOST, and IPOT. The study used a quantitative method with a sample of 162 respondents. The study used multidimensional scaling analysis with SPSS Version 27. The results of the MDS analysis are that each Online Investment has its own advantages that are not possessed by others. In addition, Dimension 1 (d1) is perceived usefulness, and Dimension 2 (d2) is trust. In the perceived reputation attribute, BIBIT is superior, the trust attribute IPOT is superior, the perceived usefulness and user interface attributes can be seen between AJAIB and STOCKBIT.

INTRODUCTION

Indonesia is a country that has a variety of ethnic groups, races, and cultures, and it has a biodiversity that needs to be preserved. Along with the times, Indonesia's economic growth rate is also improving; this is based on data from Bank Indonesia stating that economic growth can reach a range of 4.7-5.5% by 2024. The digital economy has begun to develop in Indonesia. This is characterized by the presence of technology in society, including in increasing economic growth and development from various business sectors, including the financial and investment industries.

Based on data from the Indonesian Central Securities Depository (KSEI 2024), the number of capital market investors reached 13.08 million. This figure increased by 7.48% from the 2023 period of 12.78 million. The number of Indonesians who have invested in the Indonesian Capital Market is due to the existence of various online investment platforms. The presence of an online investment application platform (online investment) makes it easier to make the right decisions when investing.

Online investment is a form of investment activity that involves online buying or selling securities such as stocks, bonds, and mutual funds (Hansel, 2017). Konana et al. (2000) explain that online investment can provide more benefits for investors, some of which are lower commissions, and online investment applications also have relatively complete features, such as news, real-time price movements, and financial reports that will make it easier for investors to invest.

Current Online Investment applications, according to Kita Lulus (2024), discuss the best investment applications in Indonesia that are safe and reliable, namely Bareksa, Bukareksa, Ajaib, Bibit, Tanamduit, Trima, Stockbit, Ipot, Investree and Pluang. According to CNBC Indonesia (2022) mentions

about 14 Best & Legal Stock & Mutual Fund Investment Applications in OJK, namely SimInvest, Stockbit, BIBIT, IPOT, RTI Business, BCAS Best Mobile, Ajaib, Tanamduit, Mirae HOTS, MOST, Motions Trade, BIONS and Poems ID. Based on the above recommendations related to the awards and achievements that the Online Investment application for investors has achieved, this research uses 5 Online Investment, namely BIBIT, AJAIB, STOCKBIT, MOST, and IPOT.

The development of Online Investment applications is speedy, and until now, there are approximately 14 best stock applications registered by OJK (CNBC Indonesia, 2024); the number of Online Investment apps will confuse the public in choosing which application will be made to invest. So, it impacts competition between increasingly competitive Online Investment companies; competition has led to many companies providing various services to attract users. Therefore, this research will examine the importance of positioning strategies for online investment providers so that they can monitor and evaluate their position in users' minds. It can help these service providers understand the attributes that are their competitive advantage so they can later design a more effective positioning strategy.

Kotler and Keller (2016: 297-298) state that positioning is the act of designing the company's offerings and image to occupy a distinct place in the target market's minds. The goal is to find the brand in consumers' minds to maximize the company's potential benefits.

Therefore, in positioning, it is necessary to monitor and evaluate the position of Online Investment, whether it needs to be strengthened or changed. One way that can be done is through perceptual mapping. Perceptual mapping is also known as map positioning because it helps develop market positioning strategies for products and services. Nigam and Kaushik (2011) explain that Perceptual mapping offers a unique ability to understand market structure and analyze complex relationships among market competitors and criteria used by buyers in making purchasing decisions and recommendations.

One of the multivariate analyses used in determining perceptual mapping is Multidimensional Scaling (MDS). MDS, also known as perceptual mapping, is a procedure that allows researchers to assess the relative perceived image of a set of objects (such as companies, products, ideas, or other items that have a common perception). The purpose of MDS is to convert consumers' judgments of overall similarity or preference (e.g., preference for a store or brand) into distances represented in multidimensional space Hair et al. (2014). Some attributes related to consumer perceptions of the use of online investment apps are Perceived Reputation, Trust, Perceived Usefulness, and User Interface.

The importance of using a positioning strategy is that it will create a clear picture of what and how the product is perceived by the audience so that the advantages of each online investment can get a good perception in the minds of consumers. It is necessary to conduct a research study called “Analysis of Positioning Online Investment Apps in Indonesia.”

LITERATURE REVIEW

The Technology Acceptance Model (TAM) was first developed by Barhoumi (2016). The theory is an adaptation of the theory of reasoned action. The TAM theory continues to undergo modifications up to three times. In 2000, TAM 2 was published, eliminating the attitude towards usage construct, where the constructs of perceived usefulness and perceived ease of use directly influence behavioral intention to use (Alomary & Woollard, 2015).

Venkatesh introduced the Unified Theory of Acceptance and Use of Technology (UTAUT) by reviewing and consolidating the existing variables in eight previous theories underlying technology-based service adoption behavior (Venkatesh et al., 2003). User Acceptance can be defined as the desire of a user group to utilize Information Technology (IT) designed to help their work. Lack of user acceptance will significantly affect the success of the implementation of information technology. So, UTAUT helps understand how consumers accept new technologies, such as applications or digital platforms.

Kotler, Keller, and Chernev (2022: 79) define consumer behavior as the study of how individuals, groups, and organizations choose, buy, use, and dispose of goods, services, ideas, or experiences to meet their needs and desires.

According to Tandelilin, investment is a person's commitment to invest his funds or capital to get more benefits in the future (Ferdiani, 2019). Investment is the sacrifice of resources (time, money, and effort) today to get more resources in the future (Laopodis, 2021). Along with the times and technology, people invest online. Online investment is a form of investment activity that involves online buying or selling securities such as stocks, bonds, and mutual funds (Hansel, 2017). Konana et al. (2000) explain that online investment can provide more benefits for investors, some of which are lower commissions, and online investment applications also have relatively complete features, such as news, real-time price movements, and financial reports that will make it easier for investors to invest.

Kotler and Keller (2016: 31) explain one of the core marketing concepts, namely Segmentation, Targeting, and Positioning. Marketers identify different buyer segments by identifying their demographic, psychographic, and behavioral differences. Kotler and Armstrong (2018: 75) define positioning as an action that organizes products distinctively and desirably and can be compared with other competitors' products to occupy a place in the minds of target consumers. Kotler and Keller (2016: 297–298) state that positioning is the act of designing the company's offerings and image to occupy a different place in the target market's minds. Through positioning strategies, marketers can take advantage of differentiation and specific products to meet the needs of customers whom the company targets to strengthen brand or product positioning by analyzing using a perceptual positioning map.

According to Xin et al. (2015), Perceived Reputation is the level of individual Trust in service providers regarding their competence, honesty, and benevolence. This indicates that if the service provider has a good reputation, it will strengthen individual attitudes towards the platform. Users tend to adopt platforms that have a high reputation. According to Abroud et al. (2024), Trust is defined as the availability of one party to trust the actions or suggestions of another party and to be vulnerable to risks that may exist based on the expectation that the other party influences these actions.

According to Davis, usability (Usability/Perceived Usefulness) is the level of a person's belief that using a system will improve their job performance. According to Adi et al. (2024), a User Interface is part of an application or technology device that allows users to interact with it. The User Interface includes all visual, textual, and interactive elements in the application.

Best (2013: 208) states that creating a perceptual map will help us better understand the business's competitive position and identify key competitors against whom to benchmark. Hair et al. (2014: 520-521) state that perceptual mapping is a series of techniques that seek to identify the perceived relative image of a set of objects, such as companies, products, ideas, or other items related to commonly held perceptions. One of the multivariate analyses used in determining perceptual mapping is Multidimensional Scaling (MDS).

Hair et al. (2014) define Multidimensional Scaling (MDS), also known as perceptual mapping, as a procedure that allows researchers to determine the perceived relative image of a set of objects (such as companies, products, ideas, or other items that have common perceptions). The purpose of MDS is to convert consumer judgments about overall similarity or preference (for example, preference for a store or brand) into distances represented in multidimensional space. The following analysis model will be the conceptual framework in this study,

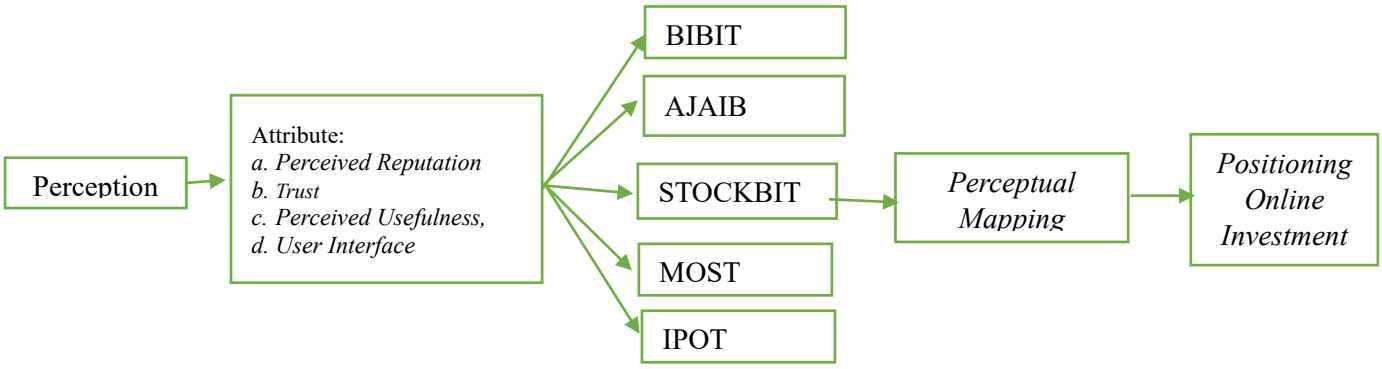

Figure 1. Research Model

Source: Data Processed by Researchers (2024)

RESEARCH METHOD

This research design uses descriptive research design. Bungin (2011: 44) defines quantitative descriptive research as research that aims to explain and summarize various conditions, situations, or variables that arise in society and to become the object of research based on what happens. This research uses quantitative descriptive research, which will examine the positioning of online investment applications in Indonesia through perceptual mapping.

The population used in this study is people who use the Online Investment application. Meanwhile, the sample or participants in this study were selected using the purposive sampling method. In addition, determining the number of samples in this study uses the sample measurement theory described by Hair et al. (2010), the number of indicators + the number of latent variables x (5 to 10 times). Based on these guidelines, the minimum number of samples for this study was 160 respondents. This research sample is taken from individuals who use one of the Online Investment applications and know all Online Investment applications. The respondents in this study were 162 respondents. The method used in data collection is an online survey with a questionnaire that the respondent himself fills out. For measurement, use a Likert scale of 1-5.

This study's data analysis technique uses Ecosystem Analysis. Previous data was tested for validity and reliability. After the validity and reliability tests were conducted, testing will be performed using the Multidimensional Scaling Technique (MDS) with SPSS Version 27 software.

RESULTS AND DISCUSSION

The data in Table 1 shows the characteristics of respondents who have filled out the survey in this study. The majority of respondents in this study were men, totaling 104 people or around 64.2%. For the age range of respondents, the majority of respondents in this study were 29-37 years, namely 63 respondents or 38.9%. Then, most of the respondents' education was quite high, namely at the Bachelor (S1) / Diploma IV education level, with as many as 112 respondents or around 69.2%. The majority of respondents' jobs in this study are those who work in private companies, as many as 30.3% of all respondents. Then, for the income or income of respondents per month, 70 people had an income of> Rp from this study. 7,000,00.

Table 1. Respondent Characteristics

Desription		Respondent	Persentage
Gender	Male	104	64,2%
	Female	58	35,8%
Age	18 - 27 Years	51	31,5%
	28 - 37 Years	63	38,9%
	38 - 46 Years	31	19,1%
	> 47 Years	17	10,5%
Eduction	High School Equivalent	20	12,3%
	Diploma I - Diploma III	22	13,6%
	Bachelor (S1)/Diploma IV	112	69,2%
	Magister (S2) atau Doctor (S3)	8	4,9%
Occupation	Student	26	16,0%
	Civil Servants	31	19,1%
	Private Employees	49	30,3%
	BUMN/BUMD Empolyee	29	17,9%
	Enterpreneur	21	13,0%
	Housewife	5	3,1%
	Others	1	0,6%
Income	Rp 1.000.000,- to. Rp 3.000.000,-	26	16,1%
	Rp 3.000.001,- to. Rp 5.000.000,-	30	18,5%
	Rp 5.000.001,- to. Rp 7.000.000,-	36	22,2%
	>Rp 7.000.001,-	70	43,2%

Source: Data Processed by Researchers (2024)

The validity test results in Table 2. show that all statement items on X1.1 to X1.3 are related to perceived reputation attributes, X2.1 to X2.3 are related to trust attributes, X3.1 to X3.3 are related to perceived usefulness attributes and X4.1 to X4.3 are related to user interface attributes. The calculated r value is seen from the Corrected Item-Total Correlation, which is the item validity value. It can be considered valid if it has a value of r count greater than r table; in this case, the value of r table is DF = N-2 => DF = 162- 2 = 160, r table at DF 160 probability 0.05 of 0.159 so that the whole is valid and can be used for further analysis.

Table 2. Validity and Reliability Test Results

Variabel Indicator	r tabel	r hitung	Cronbach Alpha
This app has a high reputation among users (PR1)	0,159	0,822	0,962
This app has a fair reputation (PR2)	0,159	0,880	
This app has an honest reputation (PR3)	0,159	0,896	
Believe you will not get fraudulent transactions in the application (T1)	0,159	0,861	0,963
Trust Confidential information is delivered securely to customers (T2)	0,159	0,807	
Believe that the risk of transaction failure with this application is low (T3)	0,159	0,863	
This investment application is useful in investment activities (PU1)	0,159	0,898	0,961
This investment application makes it easier to invest (PU2)	0,159	0,885	
Using this investment app gives you more control over your investment portfolio (PU3)	0,159	0,865	
The display design on the application is easy to see and read (UI1)	0,159	0,833	0,963
The application provides a good page layout (UI2)	0,159	0,721	
The application provides well-designed menu navigation and icons as well as a clear information structure (UI3)	0,159	0,904	

Source: Data Processed with SPSS (2024)

The reliability test results in Table 2 also show that perceived reputation, trust, perceived usefulness, and user interface have a Cronbach alpha value of more than 0.60. Thus, the three research attributes are reliable. An analytical tool or instrument can be reliable if the Cronbach coefficient or α value is> 0, 6.

A perceptual map analysis is carried out to determine the comp. Harisudin et al. (2013) state that perceptual mapping is a vital marketing analysis tool in product planning, advertising development, product positioning, and many other marketing-related things. Using multidimensional scaling (MDS) analysis as an analytical tool, from the existing respondent perception data can also see the proximity distance between the observed online investment apps, for example, in BIBIT with competing online investment apps, so that the distance between these e-wallets can be known from one another.

The Stress value indicates that the output results are close to the actual situation. The closer to zero, the more similar the output is to the actual situation. The test results state a stress value of 0.15771; this indicates that the condition is pretty good based on the stress value guidelines from Waoma et al. (2024).

The RSQ or Rsquare requirement is a standard RSQ value of 0.6, and if RSQ <0.6, then H0 is rejected. The analysis results using SPSS state that the RSQ value is > 0.6, namely 0.78914. This RSQ

value indicates the respondents' perceptions of the object under study are well-positioned. Based on cumulative ranking, a multidimensional scale was used in the data analysis of Waoma et al. (2024).

The output obtained is a perceptual mapping divided into several dimensions. At least two dimensions of space are formed that can be used as material for analysis. Analyze each dimension by looking at the position of the proximity of objects that show their similarity. From the proximity between these objects, it can be determined whether they compete with each other or not.

Table 3. Coordinate Perceptual Maps

Online Investment Apps	Dimensions		Attribute	Dimensions	
	1	2		1	2
BIBIT	0.160	-1.973	Perceived Reputation	1.661	-0.946
AJAIB	0.239	0.188	Trust	-0.504	2.286
STOCKBIT	0.239	0.188	Perceived Usefulness	1.683	0.109
MOST	-2.2875	-1.875	User Interface	1.630	0.495
IPOT	-2.234	1.512			

Source: Data Processed with SPSS (2024)

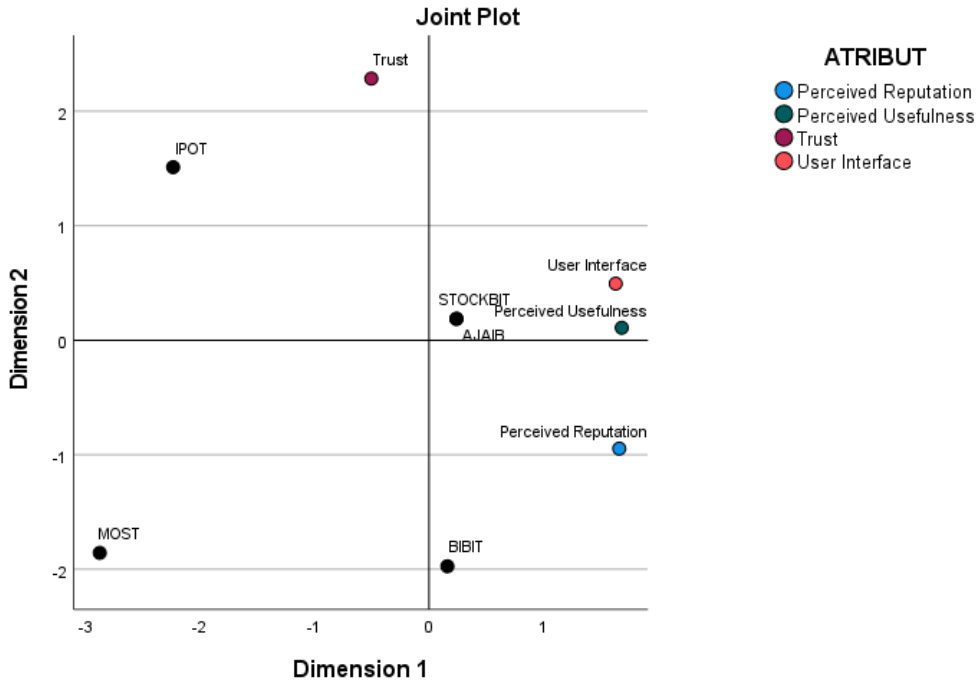

Figure 2. Multidimensional Scaling (MDS) Analysis of Each Online Investment Application

Source: Data Processed with SPSS (2024)

The final result of this study, which analyzed data using multidimensional scaling (MDS) analysis, found that the position map of five online investment apps from the processing results of correspondence analysis can be seen in Figure 2. The figure explains the location of online investment apps' map position (perceptual mapping); some are located quite close to other online investment apps, and some are far apart. The position of online investment apps close to others means many similarities in perceptions of the attributes. At the same time, online investment apps located far apart from others suggest different perceptions of these attributes compared to their competitors.

Dimensions describe the relative position of each object in a multidimensional map based on an individual's perception of an attribute or combination of characteristics of that object. The axes in the multifaceted space represent different dimensions of the assessed attributes. This dimension can be a single attribute or a combination of several attributes (Hair et al., 2014). Dimension labeling in Figure 2 shows that the best point of each attribute in Dimension 1 (d1) is perceived usefulness, and Dimension 2 (d2) is trust. Dimension 1 from Figure 2 shows that the more to the right, the greater the number of dimension 1. It can also be seen that AJAIB and STOCKBIT are closest to the most significant dimension 1 number {at the right end of the horizontal line}. This means that the online investment apps STOCKBIT and AJAIB have factors in dimension one that distinguish them from other online investment apps.

Figure 2 shows that the higher the number of dimension 2, the greater the number of dimension 2. It can also be seen that the online investment app IPOT is closest to the most significant dimension 2 number {at the top of the vertical line}. This means that IPOT has factors in dimension two that are most differentiating from other online investment apps. In the perceived reputation attribute, it can be seen that the position between online investment apps from a distance in the dimension, that the position of BIBIT, where BIBIT is superior to other online investment apps in terms of perceived reputation, this application is considered by consumers to have the advantages it carries.

At the trust attribute, we can see the position between online investment apps from a distance on the dimension, and the position of IPOT is close to this attribute. Consumers consider IPOT to have superior trust in the application. At the perceived usefulness attribute, the position between online investment apps can be seen from the distance on which AJAIB and STOCKBIT show closeness to the perceived usefulness attribute. Consumers consider these two online investment apps similar in their superiority attributes. Meanwhile, at the user interface attribute, it can be seen that the position between online investment apps from a distance on the dimension, that AJAIB and STOCKBIT show closeness to the user interface attribute, these two online investment apps are considered by consumers to be similar in terms of the superior qualities they carry.

In BIBIT, it is known that online investment apps have the best-perceived reputation among other attributes. This result explains that in the eyes of consumers, this application is known to have a robo-advisor; the BIBIT robo-advisor can recommend an investment portfolio based on the user's risk profile. This application is supported by easy registration, auto-debit features, and a wide selection of mutual funds from leading investment managers (BIBIT, 2024). This is an advantage of BIBIT compared to AJAIB, STOCKBIT, MOST, and IPOT.

In addition, BIBIT also managed to get awards from various parties, such as from the Ministry of Finance of the Republic of Indonesia, which include the Best Retail Government Securities (SUN) Distribution Partner (Midis) in 2022, the Best Retail Sharia Securities (SBSN) Midis in 2022 and 2023 in the Fintech Category and the Best Retail SUN Midis in the Fintech Category and Electronic System Trading Organizer in 2023 (Firdaus, 2024). The advantages of BIBIT can be used to attract people who want to invest in the application. The closest competitors in terms of perceived reputation are AJAIB and STOCKBIT. The existence of the nearest competitor, BIBIT, must make the right strategy to respond to competition with AJAIB and STOCKBIT.

BIBIT Head of Marketing, Angie Anandita Tjhatra, said that from 1 million downloads in 2020 to more than 10 million today, this shows clear evidence that the public increasingly accepts BIBIT as an investment partner. BIBIT has expanded the investment options that users can choose from to various asset classes, including mutual funds, stocks, and government securities such as Retail State Bonds (ORI), Retail Savings Bonds (SBR), Savings Sukuk (ST), Retail Sukuk (SR), and Fixed Rate (FR) (Bisnis.com, 2024).

In AJAIB, it is known that the application has the best-perceived usefulness and user interface, among other attributes. These results explain that in the eyes of online consumers, this investment application is known to present a simple display application and has financial education information to

improve financial literacy. This application also offers a warning feature to help investors make investment decisions. AJAIB received an award in 2023 as the "Stock Trading Application with the Most Investors," with the number of investors reaching 4.75 million as of May 2023 (Tika, 2023). This is AJAIB's advantage over BIBIT, STOCKBIT, MOST, and IPOT, so the advantages of BIBIT can be used to attract the interest of people who want to invest in the application.

In addition, AJAIB must create the right strategy to respond to competition from both BIBIT and STOCKBIT. One of the strategies carried out by AJAIB is introducing a 1% instant bonus top-up program to the investor's Customer Fund Account (RDN). The instant bonus can be directly used for transactions at AJAIB. AJAIB's President Director, Juliana, said investor enthusiasm for the stock market is increasing. This encourages the company to create a 1% instant bonus top-up program; AJAIB will provide added value for investors, especially those with a long-term investment strategy and active in managing their investment portfolios. In addition, there are additional features in the AJAIB application that have been specifically designed to meet the needs of traders, such as the Advance Charting feature, stop loss & take profit orders, and the Day Trading feature (CNBC Indonesia, 2024).

In STOCKBIT, it is known that this online investment app has superior perceived usefulness and user interface, among other attributes. Investors know STOCKBIT as a stock investor community platform where users can share information and discuss stocks. Now, Stockbit has developed into a stock trading application integrated with Stockbit Securities. Its superior features include stock analytical data, charting tools, and trading simulations through virtual trading features (STOCKBIT, 2024). This is the advantage of STOCKBIT over BIBIT, AJAIB, MOST, and IPOT so that the advantages of STOCKBIT can be used to attract the interest of people who want to invest in the application.

In addition, STOCKBIT must also create the right strategy to respond to competition from AJAIB and BIBIT. STOCKBIT introduces its innovation, the STOCKBIT Desktop App for MacOS and Windows. The STOCKBIT Desktop App offers several superior features; first, with a customizable layout, users can create a design that suits their preferences. Each layout created will also be stored in the cloud, so users can change the device used without fear of losing the layout they have made. Furthermore, the STOCKBIT Desktop App provides various template options, ranging from Multi-Chart, Multi-Orderbook, and Single-Stock to Classic. The STOCKBIT Desktop App also presents an Advanced Orderbook that helps users take action directly from the Orderbook. For example, buying and selling shares, checking order queues, and amending and canceling orders to further stock analysis (Radio Republik Indonesia, 2024).

The MOST application shows that this online investment app has a moderate perceived reputation among other attributes such as trust, perceived usefulness, and user interface. These results explain that in the eyes of consumers, this online investment app is known as part of the Bank Mandiri Group, MOST by Mansek (Mandiri Securities), which has built a good reputation in the investment industry. Many users have felt the benefits of using this application. This good reputation proves that MOST by Mansek is a reliable investment application (Serbuinfo, 2023). In addition, MOST is known for its credibility as part of Bank Mandiri and for providing educational and research services to help investors make better decisions. This is an advantage of MOST compared to BIBIT, AJAIB, STOCKBIT, and IPOT, so the advantages of MOST can be optimized to attract the interest of people who will invest in the application.

MOST must also create the right strategy to respond to competition with BIBIT and IPOT. Mandiri Sekuritas, President Director Oki Ramadhana, said that in 2023, we launched several features to improve customer convenience in transacting, such as push notifications so that customers always get the latest issuer or feature information. MOST Rewards give customers transaction prizes according to the terms and conditions (Kompas, 2023). MOST is also present in Livin by Mandiri; this can make it easier for customers to access banking and capital markets seamlessly and easily (Bisabasi, 2023).

In IPOT, it is known that this online investment app has the best trust attribute among other attributes. This result explains that in the eyes of consumers, this application is perceived as being able to provide trust to investors and guarantee investment security. Currently, mutual funds prioritize the

principle of high transparency, such as the exclusive Power Fund Series (PFS) mutual fund at IPOTFund launched by PT Indo Premier Sekuritas (Ipotnews, 2024). This is an advantage of IPOT compared to BIBIT, AJAIB, STOCKBIT, and MOST so that the advantages of IPOT can be optimized to attract the interest of people who will invest in the application.

In addition, IPOT must also create the right strategy to respond to competition from other online investment apps such as STOCKBIT and AJAIB. IPOT presents an innovation, namely the automatic rebalancing feature and integration with trading robots, making it easier for users to make investment transactions. President Director of PT Indo Premier Sekuritas, Moleonoto, said that the latest feature launched by IPOT, the "Investment Simulation" feature, allows users to simulate stock transactions in real time without worrying about real risks. Users can experience stock transactions, study issuers' potential, or deepen their analysis skills. IPOT also added the latest feature, the IPOT Buzz forum feature, embedded in the IPOT application. IPOT Buzz will make it easier for users to monitor rumors related to stocks that have the potential to profit, read news, and discuss with experts, including professional investors; this is expected to help the decision-making process in investing (Marketing, 2023). This is by IPOT, which is positively perceived in the trust attribute category; customers believe IPOT prioritizes high transparency and presents reliable, innovative products.

CONCLUSIONS

Based on the multidimensional scaling analysis results, the positioning of online investment apps, which is reviewed from the attributes of online investment apps, shows that each online investment app. The study involved 162 respondents, with the most significant number of respondents aged between 28 and 37, 63 respondents or 38.9%. This is inseparable from millennials' savings and is accompanied by their ability to learn new technologies.

Labeling Dimension obtained the best point of each attribute on d1 is perceived usefulness, and Dimension 2 (d2) is trust. In the perceived reputation attribute that BIBIT's position is superior to other applications, the trust attribute can be seen that IPOT's position is superior to other applications, the perceived usefulness and user interface attributes can be seen that the position between AJAIB and STOCKBIT shows that consumers consider both online investment apps to have similarities in terms of the advantages they carry.

BIBIT is known to have the best-perceived reputation, among other attributes. In the eyes of consumers, BIBIT is known to have a robo-advisor that can recommend investment portfolios. The closest competitors in terms of perceived reputation are AJAIB and STOCKBIT. In AJAIB, it is known that this online investment app has advantages in perceived usefulness and user interface. AJAIB presents a simple display application with financial education information to improve financial literacy and a 1% instant bonus top-up program to the investor's Customer Fund Account (RDN). In addition, AJAIB must create the right strategy to respond to competition from both BIBIT and STOCKBIT.

STOCKBIT is known that this online investment app has advantages in perceived usefulness and user interface. Investors know STOCKBIT as a stock investor community platform with superior features, including stock analytical data and charting tools. MOST online investment apps have the advantage of a moderate perceived reputation among other attributes such as trust, perceived usefulness, and user interface. MOST, in the eyes of consumers of this online investment app, is known as part of the Bank Mandiri Group, MOST by Mansek (Mandiri Sekuritas), which has built a good reputation in the investment industry. IPOT is known to have advantages in terms of the trust attribute. IPOT is perceived to provide trust to investors and guarantee investment security when IPOT mutual fund transactions prioritize the principle of high transparency.

This study extends the use of Multidimensional Scaling (MDS) analysis in evaluating the market position of technology-based applications, especially in the investment sector. The findings can be the

basis for further, more in-depth research, for example, integrating other factors such as brand loyalty or user experience.

The research findings also provide insight into how consumers perceive online investment applications such as Bibit, Ajaib, Stockbit, MOST, and IPOT. This information can be used to strengthen superior attributes or improve weak attributes. Companies can focus resources on attributes considered important by users, such as trust, user interface, and perceived usefulness, to win the competition. The results of the analysis can drive innovation in features and services based on consumer perceptions of other applications that are considered superior in specific attributes.

This study only focuses on four main attributes (perceived reputation, trust, perceived usefulness, and user interface), which may not include other important factors such as transaction costs, service speed, or investment product variety. The results of this study may not be fully generalizable to the global context or other investment applications not included in this study, given the unique characteristics of the Indonesian market. Therefore, for further research, other attributes can be used to measure the positioning of online investment apps, or objects other than online investment apps can also be used.

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