

CONSUMER BEHAVIOR IN DIGITAL BANKING AMONG GEN Z IN SURABAYA

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Abstract. The development of technology is an essential part of various aspects of life, including the economy. This also encouraged the transition from using physical to digital payment, which has positively impacted the banking industry. BLU by BCA Digital is a digital bank to answer necessity of digital era. That makes ease of use perception a crucial aspect, with contribution from BLU by BCA Digital's brand image as part of the BCA Group. This research examines the contribution of perceived ease of use on the intention to use through brand image as an intervening variable of BLU by BCA Digital in Surabaya. By using quantitative and statistical data analysis descriptive with SEM-PLS, this research is limited to the research population, which is M-BCA customers in Surabaya. The sample in this study is 100 M-BCA customers aged 17-27 years who are part of Generation Z and familiar with BLU by BCA Digital. The results show that Perceived Ease Of Use (X) and Brand Image (Z) have a contribution to Intention To Use (Y), Perceived Ease Of Use (X) has a contribution to Brand Image (Z), and Brand Image (Z) able to strengthen the contribution in the midst of Perceived Ease Of Use (X) and Intention To Use (Y) BLU by BCA Digital in Surabaya as an indirect effect.

Keywords: brand image; intention to use; perceived ease of use

I. INTRODUCTION

The development of information technology is something that cannot be avoided. Dependence on smartphones has become one of the impacts of the need for technology. Nowadays, smartphones are not only for communication but also become necessary in various aspects of life, including the economy. The emergence of financial technology has also changed the perspective and habits of moving from using physical to digital payment. The volume of electronic money transactions in September 2023 increased by 55.7% compared to September 2022 [25]. This increase in electronic money transactions positively impacts the banking industry's ability to compete. BLU by BCA Digital is one of the digital banks officially launched on July 22, 2021, and is part of Bank BCA, known as the world's strongest bank [24]. The percentage of BLU by BCA Digital's active users of diminished from 45% to 40% [23]. This indicates that even though it is under the BCA Group, BLU by BCA Digital has yet to become user's digital bank of choice. Regarding the financial report 2022, BLU by BCA Digital recorded a net loss of IDR 71.60 billion. BLU by BCA Digital was ranked 4th out of 5 as the best digital bank chosen by customers [3]. The existing data and phenomena show that BLU by BCA Digital is not succeeding in attracting customers, switching to its services, and becoming the best digital bank of choice for customers, even though it is under Bank BCA, which has a strong brand image.

Existing perceptions regarding the easiness of using digital banking is one member of the aspects that enhance the intention of using digital bank [6]. Digital banks that provide a user-

friendly experience for online transactions, such as bank transfers or bill payments, benefit customers and make them faster and more reliable for banking transactions. This makes customers consider using digital banking services. Therefore, perception users of ease of use are more likely to intend to use services from digital banks, similar to research [2] and [21]. However, not all relationships between ease-of-use perception and intention of using are considerably modified. Several studies contradict each other and become a research gap in this study. The results of studies [10] and [14] show that a digital bank's perception of easy to use does not appear to significantly impact user's intention to adopt or utilize its service. Other variables could play a more substantial role in shaping user intentions.

The existing phenomena and research gaps, this study includes intervening variables brand image that determines the nature of all correlated variables. This research has the following objectives: 1) Analyze the contribution of perceived ease of use against the intention to use BLU by BCA Digital, 2) Analyze the effect of perceived ease of use of brand image BLU by BCA Digital, 3) Analyze the contribution of the brand image against the intention to use BLU by BCA Digital, 4) Analyze the contribution of perceived ease of use against the intention to use BLU by BCA Digital through brand image.

A. Perceived Ease Of Use

Davis' TAM Theory, 1989 in [16], explains that ease of use perception demonstrates the intensity of understanding and belief that technology is simple to grasp and operate effectively. According to [7] indicators from perceived ease of use, namely:

1) Easy to learn, 2) Easy to understand, 3) Flexible. Perceived ease of use can improve the intention of using digital banking and the company's brand image. It's an easy-to-use service that makes the user's interest. For use service, the feeling of comfort and stability from the user to service is because of easy usage and the least effort required for learning and operating it. It can make a good impression on users as service-efficient banking and a positive image for the company. Perception, convenience, perceived use, and good brand image from the user perspective will impact the increasing high intentions user for use service said use service excellent and efficient banking will be more popular.

B. Intention To Use

Intention to use pertains to the level of user's preference in making decisions and desired actions [13]. Indicator intention to use according to [18], including: 1) Desire to use, 2) Planning to use, 3) Tendency to use frequently, and 4) Using the service in the future. Perceived ease of use and brand image reinforcement can leverage the intention of using digital banking. User's perception of how effortless a service to access affects their willingness to engage with a digital banking platform. Additionally, the company's favorable reputation influences user's intention to embrace digital banking.

C. Brand Image

Kotler & Keller 2012 [9] explain that brand image is user's social or psychological side, including beliefs and perceptions in their minds. Kotler and Keller 2016 in [12] explain that brand image has several indicators, namely: 1) Strength, 2) Uniqueness, and 3) Excellence. Brand image can influence the intention of using service banking, because the perspective of users towards the company will convince users of the quality of service, reputation, and capability of the company to serve daily needs. This encourages users to intend to use the service. In addition, the brand image can also improve the link between ease-of-use perception and intention of using, where having a good point of view from customers regarding the ease of banking services will influence interest in adopting the service later days.

The conceptual framework used in the research is as follows

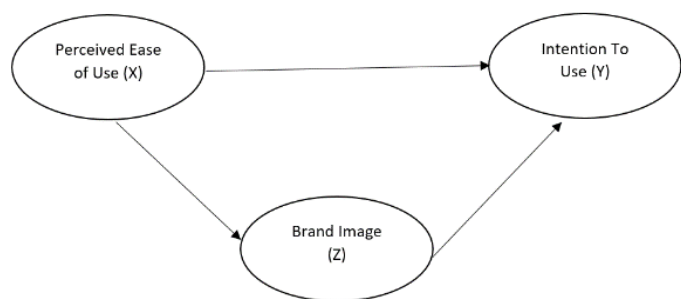


Figure 1. Framework

The hypothesis for this study is as outlined below:

H1: Suspected perceived ease of use has a significant and positive contribution to the intention to use BLU by BCA Digital

H2: Suspected perceived ease of use has a significant and positive contribution to the brand image BLU by BCA Digital

H3: Suspected brand image has a significant and positive contribution to the intention to use BLU by BCA Digital

H4: Suspected perceived ease of use has a significant and positive contribution to the intention to use through brand image BLU by BCA Digital.

II. RESEARCH METHOD

The study employs a quantitative method, specifically utilizing Partial Least Squares (PLS). The target population consists of M-BCA users residing in Surabaya. The study used a non-probability sampling method, explicitly using purposive sampling to choose participants according to specific criteria that are pertinent to the research. A total of 100 M-BCA users aged 17-27 years who are part of Generation Z and already familiar with BLU by BCA were selected for the study sample.

III. RESULTS AND DISCUSSION

A. Outer Model

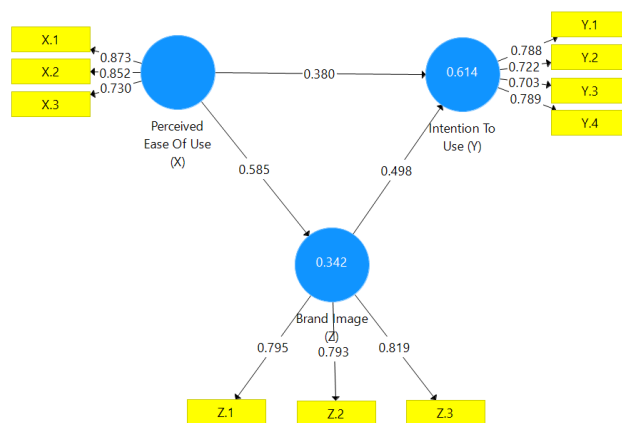


Figure 2. PLS Model

In the PLS model image above, the path coefficient value is shown by the connection of the exogenous and endogenous variable arrow lines. In addition, the value of outer loading for every variable indicator is also found on the arrow line connecting the variable with its indicator. Inside the circle representing the endogenous variable is also the value of R-square.

As a result, all the indicators in the study successfully fulfilled the requirements of convergent validity, the results show that the indicators accurately represent the constructs they are intended to measure, meeting the necessary statistical criteria. Validity is deemed sufficient when values surpass 0.5 or when the T-statistic exceeds 1.96 (Z value at $\alpha = 0.05$). A factor loading value above 0.5 indicates validity, while a T-statistic higher than 1.96 confirms significance.

TABLE I
OUTER LOADING

	Original Sample (O)	Sample Mean (M)	Standard Deviation (SDEV)	T Statistics (O/SDEV)	P Values
X.1 <- Perceived Ease Of Use (X)	0.873	0.863	0.057	15,433	0
X.2 <- Perceived Ease Of Use (X)	0.852	0.85	0.045	19,05	0
X.3 <- Perceived Ease Of Use (X)	0.730	0.731	0.061	11,915	0
Y.1 <- Intention To Use (Y)	0.788	0.784	0.07	11,272	0
Y.2 <- Intention To Use (Y)	0.722	0.707	0.117	6,188	0
Y.3 <- Intention To Use (Y)	0.703	0.688	0.094	7,497	0
Y.4 <- Intention To Use (Y)	0.789	0.788	0.052	15,286	0
Z.1 <- Brand Image (Z)	0.795	0.791	0.065	12,148	0
Z.2 <- Brand Image (Z)	0.793	0.777	0.1	7,956	0
Z.3 <- Brand Image (Z)	0.819	0.816	0.045	18,395	0

TABLE II
CROSS LOADING

No.	Perceived Ease Of Use (X)	Intention To Use (Y)	Brand Image (Z)
X.1	0.873	0.559	0.447
X.2	0.852	0.603	0.547
X.3	0.730	0.481	0.435
Y.1	0.59	0.788	0.54
Y.2	0.476	0.722	0.578
Y.3	0.379	0.703	0.475
Y.4	0.548	0.789	0.566
Z.1	0.438	0.597	0.795
Z.2	0.46	0.55	0.793
Z.3	0.507	0.587	0.819

From the cross-loading table results, it was observed that the factor loading values for each indicator in the variables Perceived Ease of Use (X), Intention to Use (Y), and Brand Image (Z) are higher than indicators on each variable, indicating all indicators of this research exhibit good validity.

TABLE III
AVE

	AVE
Perceived Ease Of Use (X)	0.674
Intention To Use (Y)	0.565
Brand Image (Z)	0.644

The AVE test outcome reveal that Perceived Ease of Use (X) has a reflects of 0.674, Intention to Use (Y) is 0.565, and Brand Image (Z) is 0.644. Since all values exceed 0.5, it can be inferred that the all of variables demonstrate strong validity.

TABLE IV
COMPOSITE RELIABILITY

	Composite Reliability
Perceived Ease Of Use (X)	0.860
Intention To Use (Y)	0.838
Brand Image (Z)	0.844

A composite reliability value exceeding 0.7 implies that all of indicators are reliable in consistently assessing the respective latent variables. This implies that the indicators for Perceived Ease of Use (X), Intention to Use (Y), and Brand Image (Z) show a high level of consistency. In other words, all of indicators work well together to measure the same underlying construct, confirming that the measurements are dependable and repeatable.

TABLE V
LATENT VARIABLE CORRELATIONS

	Perceived Ease Of Use (X)	Intention To Use (Y)	Brand Image (Z)
Perceived Ease Of Use (X)	1,000	0.671	0.585
Intention To Use (Y)	0.671	1,000	0.720
Brand Image (Z)	0.585	0.720	1,000

The correlation analysis of latent variables shows the correlation between Intention to Use (Y) and Brand Image (Z) is stronger than the relationships between other variables in the model, with a correlation coefficient of 0.720. This indicates that when users have a favorable perception of a brand, users are likely to exhibit the intention to adapt its digital bank. This relationship is more significant compared to other potential interactions in the model

B. Inner Model

TABLE VI
R-Square

	R Square	R Square Adjusted
Intention To Use (Y)	0.614	0.606
Brand Image (Z)	0.342	0.335

The value of R-square is utilized as an indicator of the goodness-of-fit model. The value of R² value for Intention To Use (Y) is 0.614, signifying that the model accounts for 61% of variation in Intention to Use (Y) variable, which is influenced by Brand Image (Z) and Perceived Ease of Use (X). The remaining 39% is attributable to additional factors not considered in this study. Additionally, the R² value for Brand Image (Z) is 0.342, meaning the model accounts for 34% of the variation in Brand Image (Z) as influenced by Perceived Ease of Use (X), with the remaining 66% accounted for by variables beyond the scope of this study.

C. Hypothesis Analysis

TABLE VII
PATH COEFFICIENTS DIRECT EFFECT

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics ((O/STDEV))	P Values
Perceived Ease Of Use (X) -> Intention To Use (Y)	0.380	0.387	0.115	3.294	0.001
Perceived Ease Of Use (X) -> Brand Image (Z)	0.585	0.579	0.117	5.014	0.000
Brand Image (Z) -> Intention To Use (Y)	0.498	0.496	0.119	4.200	0.000

Direct analysis tests effect obtained from the conclusion from the hypothesis which, states:

1. The hypothesis that perceived ease of use significantly and positively contributes to intention to use BLU BCA Digital is accepted. This is demonstrated by a path coefficient of 0.380, a T-statistic of 3.294 (greater than 1.96 at a 5% significance level), and a P-value of 0.001 (less than 0.05), which is **significant (positive)**
2. The hypothesis that perceived ease of use significantly and positively contributes to brand image of BLU by BCA Digital is accepted. This is demonstrated by a path coefficient of 0.585, a T-statistic of 5.014 (greater than 1.96 at the 5% significance level), and a P-value of 0.000 (less than 0.05), which is **significant (positive)**
3. The hypothesis that brand image significantly and positively contributes to intention to use BLU by BCA Digital is accepted. This is demonstrated by a path coefficient of 0.498, a T-statistic of 4.200 (greater than 1.96 at a 5% significance level), and a P-value of 0.000 (less than 0.05), which is, **significant (positive)**

TABLE VIII
PATH COEFFICIENTS INDIRECT EFFECT

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics ((O/STDEV))	P Values
Perceived Ease Of Use (X) -> Brand Image (Z) -> Intention To Use (Y)	0.291	0.292	0.1	2.919	0.002

Indirect analysis test effect obtained the conclusion from the hypothesis which states:

1. The hypothesis that perceived ease of use significantly and positively contributes to intention to use BLU by BCA Digital through brand image is accepted. This is demonstrated by a path coefficient of 0.291, a T-statistic of 2.919 (greater than 1.96 at the 5% significance level), and a P-value of 0.002 (less than 0.05), which is **significant (positive)**.

A. The Influence of Perceived Ease of Use on Intention to Use BLU by BCA Digital

The outcomes demonstrated that the first hypothesis (H1) accepted that perceived ease of use has a significant and positive influence on intention to use. This suggests that as ease-of-use perception increases, the impact of intention of using BLU by BCA Digital becomes stronger. From the analysis results all perceived ease of use indicators, namely, are easy to learn, easy to understand, and flexible in contributing relationships with intention to use. The "Easy to Learn" indicator is the strongest indicator that has an influence. In this case, perception of users to learn BLU by BCA Digital services, such as the flow of use and the explanation of digital bank policies, can influence the desire of users to use BLU by BCA Digital later on because it is designed with clear instructions and navigation. This aligns with research [1] and [17], which shows similar results.

B. The Influence of Perceived Ease of Use on Brand Image of BLU by BCA Digital

The outcomes demonstrated that second hypothesis (H2) accepted that perceived ease of use has a significant and positive influence on the brand image. This implies that the greater the perceived ease of use, the stronger the impact on BLU by BCA Digital's brand image. From the analysis results, all perceived ease of use indicators, namely, are easy to learn, easy to understand, and flexible in contributing relationships with brand image. The "Easy to Learn" indicator is the strongest indicator that influences ease of use perception of BLU by BCA Digital as a service feature with clear directions and an interface display with an easy-to-understand design can influence the BLU by BCA Digital's brand image. The relationship shows that ease of use is important in shaping customer perceptions, where a comfortable and seamless experience creates a better brand image. This aligns with research [15] and [20], which shows similar results.

C. The Influence of Brand Image on Intention to use BLU by BCA Digital

The outcomes demonstrated that the third hypothesis (H3) accepted that brand image has a significant and positive influence on intention to use. This can be described as a stronger brand image leading to a greater impact on intention of using BLU by BCA Digital services. From the analysis results, all brand image indicators, namely, are strength, uniqueness, and superiority influence relationships towards intention to use. The "Superiority" indicator is the strongest indicator that provide influence. The added value that BLU by BCA Digital has, such as the bluAccount, bluSaving, bluGather service features, and others, can influence intention of using BLU by BCA Digital with a good image, a high reputation, and values that are in accordance with user expectations because of its advantages. In this case, this will encourage users to choose BLU by BCA services. A strong brand image helps create a good perception for the company and its services, thus increasing the intention of using BLU by BCA as digital banking option. This aligns with research [5] and [8], which show similar results.

D. The Influence of Perceived Ease of Use through Brand Image on Intention to Use BLU by BCA Digital

The outcomes demonstrated that the fourth hypothesis (H4) is accepted that perception of ease of use has a significant and positive indirect effect on brand image, which in turn leads to a significant and positive influence on intention to use. This implies that the perception of easy-to-use BLU by BCA Digital not only directly impacts the intention to use but also influence through the relationship of brand image. A positive brand image strengthens the intercourse between ease-of-use perception and intention to use so that an easy-to-use experience improves the brand image, which can ultimately increase the intention of using BLU by BCA. This aligns with research [4], [11], and [22], which show similar results.

IV. CONCLUSIONS

This study concludes of perceived ease of use and brand image significant and positive influence the intention to use BLU by BCA Digital in Surabaya. Specifically, as users perceive the service as more straightforward to use and view the brand more positively, their intention to utilize BLU by BCA Digital increases. Furthermore, perceived ease of use significant and positive influence brand image, indicating that a favorable perception of usability can enhance the brand's reputation at BLU by BCA Digital in Surabaya. Additionally, perceived ease of use indirectly contributes to intention to use through its effect on brand image, suggesting that a positive perception of usability can effectively motivate individuals to choose BLU by BCA Digital in Surabaya. The company advised in optimizing ease of use with an interface that suits customer preferences, adding gamification features, and interactive financial education to increase intention to use. Brand strengthening image of BLU by BCA Digital can be done through AI integration in customized financial analysis. Further research is suggested to use both quantitative and qualitative methods that focus on the decision to use, as well as factors such as AI, UI, and UX.

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