

# The Mediating Role of Trust in the Relationship Between Corporate Image, Security, Word of Mouth and Loyalty in M-Banking Using among the Millennial Generation in Indonesia

**Edi PURWANTO**

*Pembangunan Jaya University, Tangerang, Banten, Indonesia  
Management & Science University, Shah Alam, Malaysia  
edi.purwanto@upj.ac.id*

**July DEVINY**

*Bunda Mulia University, Jakarta, Indonesia*

**Ahmed M. MUTAHAR**

*Management and Science University, Malaysia  
ahmed4mutahar@gmail.com*

**Abstract.** *Millennials have a lifestyle that is different from previous generations. Millennial Generation lives and grows together with rapid technological growth and currently dominates the population in Indonesia. The purpose of this study is to empirically determine the factors that influence the millennial generation's loyalty to mobile banking applications. Elements used to analyze the millennial generation's loyalty are corporate image, application security, word of mouth (WoM), and trust. Data collected through questionnaires from a sample of 395 mobile banking users in Indonesia. The study uses structural equation modeling (SEM) to test the hypotheses with Amos 24 as the analysis tool. The results of the study proved that all predictions are proven significant. The trust in mobile banking mediates the effects of corporate image, application security, and word of mouth on millennial's loyalty. The respondent of the research was millennial mobile banking users in Indonesia. Therefore, the model should be replicated among other mobile banking users in other countries. Banks have to maintain an excellent corporate image and get a positive transmission because, in this digitalization era, information can spread very quickly between friends, relatives, family, or through the internet, digital media, and social media. Banking also needs to include a guaranteed level of application security in the mobile banking application provided to gain the trust of users and be able to foster and increase their loyalty. However, there are still other factors that can influence millennial's loyalty to a mobile banking application.*

**Keywords:** Loyalty, Corporate Image, Application Security, Word of Mouth, Trust.

Please cite the article as follows: Purwanto, E., Deviny, J., & Mutahar, A. M. (2020), "The Mediating Role of Trust in the Relationship Between Corporate Image, Security, Word of Mouth and Loyalty in M-Banking Using among the Millennial Generation in Indonesia", *Management & Marketing. Challenges for the Knowledge Society*, Vol.,15 No. 2, pp. 255-274. DOI: 10.2478/mmcks-2020-0016.

## Introduction

Based on the National Development Planning Agency (Bappenas), the populace in Indonesia reaches 265 million people in 2018, comprising of 133.17 million men and 131.88 million women (Katadata, 2018), which in the composition of the population there are 90 million millennials (Aziz, 2018). The term millennial generation is, in fact, recognizable, which was created by William Strauss and Neil Howe, in a few of his books. A millennial age or Generation Y is likewise called as age me or reverberation boomers (Ester, 2016).

Naumovska (2017) states that the millennial age is the age conceived somewhere in the range of 1980 and 2000. Therefore, that in 2019, millennials are 19 to 39 years old. Millennials grow in times of constant economic and global changes such as the emergence of female leaders, the consideration development for ethnic and social decent variety including environmental and social awareness, technology, electronics, and computerized extension, and worldwide financial procedures. The proportion of Indonesia's millennial generation reaches 33.96 percent, more than one-third of Indonesia's population. Some studies suggest that millennials tend to be unique compared to previous generations where their uniqueness lies in the use of technology, and the main things attached to millennial generation are the internet, entertainment, and traveling (Aziz, 2018).

Marketers face genuine difficulties when attempting to catch the crowd's consideration, which in this case, is the millennial generation. The millennial generation is a typical and dominant group of customers whose customer behavior, propensities, and psychology are frequently discussed yet not wholly comprehended. The technological revolution strongly influences the development of digital media and the web. This market fragment has grown uniquely in contrast to past ages, making it an alluring gathering (Naumovska, 2017). In this case, the millennial generation is the most significant market portion in Indonesia; subsequently, expanding enthusiasm for sorting and understanding their qualities is crucial for the business industry, especially those related to technological progress.

Technological advancements produce different marketing models, so the latest terms related are often found, e-business, web-based business, e-promoting, partner showcasing, online shop, online display, internet business, etc. These symptoms are in line with demand expectations, which always want ease in getting what they want and need (Fauzia, 2016). In the current digitalization era, millennials in their daily lives are very close to technology and cannot separate from their mobile phones. It is exciting and can be an excellent opportunity for the business industry to develop m-commerce to meet the lifestyle of millennials who tend to like convenience and practicality.

M-commerce is a piece of web-based business that happens solely through cell phones, for example, cell phones or tablets. M-commerce takes the form of buying and selling goods and services or forms of trading on the internet, including payments through smartphones and tablets (mobile payments). M-commerce also transfers ownership and usage rights and starts business transactions (Hestanto, 2018). M-commerce transactions using done via the internet, personal communication networks, smart cards, and other infrastructure (Sadchalis, 2015).

The intense competition and the improvement of data innovation, media communications, and the web prompted the development of web-based cell phone applications. Banks also experience competition from the development of these technologies in Indonesia, and one of the facilities offered by banks is the mobile banking technology service (Febrianta and Indrawati, 2016). Mobile banking is a type of e-commerce. Mobile banking is a bank transaction that is authorized and processed by cellular telephone through m-TAN (6 digits numeric

combination number) (Hestanto, 2018). Mobile banking is a banking service product on mobile. The convenience is it can be accessed anywhere and anytime to carry out various types of transactions. It can transact via mobile without having to go to the bank or ATM (IDS, 2017).

The banking competition in Indonesia increased since the Indonesian banking openness. It is the impact of the issuance of a policy package (PAKJUN) on June 1, 1983. To Modernize banks and then continued with the October Package (PAKTO) on October 27, 1988, which gave comfort authorizing to the foundation of new banks, including the opening of branch workplaces. Expanding the number of banks can energize the financial area business to become increasingly serious and improve banking effectiveness and well-being (Widyastuti and Armanto, 2013).

*Table 1. Four Largest Banking in Indonesia (in trillion Rupiahs)*

No.	Bank Name	July 2017	July 2018	YoY
1.	Bank Rakyat Indonesia	967,91	1.086,49	12,25%
2.	Bank Mandiri	923,37	993,09	7,55%
3.	Bank Central Asia	720,39	784,19	8,85%
4.	Bank Negara Indonesia	585,16	673,84	15,15%

Source: Sitanggang, 2018.

Eleven of the largest banks in Indonesia control more than half of the banking assets in the country. Their assets reached Rp 4,877.13 trillion as of July 2018, around 63% of all bank assets, including Rural Credit Banks (BPR) totaling Rp 7,725.15 trillion.

Banks are proof that humans today are in modern times, which are all practical and instant and are places where customers can save money and even transact money. However, the bank makes it easier for its customers with the emergence of the Mobile Banking application. M-Banking is an application where customers do not need to bother coming to the bank to transact financial problems. Only with one app, customers can transact online through their smartphone screens. Each bank usually has this M-Banking facility (Listiorini, 2018). This research will be limited to mobile banking applications provided by the four largest banks in Indonesia based on Table 1, namely BRI Mobile, Mandiri Online, BCA Mobile, BNI Mobile Banking.

Each bank certainly competes to create and introduce products and services to customers. In general, the more competitors there are, the more choices there are for customers to choose what is following their expectations, so they are always demanded to be able to provide more value to customers. Banks need to provide the best services to build an excellent corporate image, trust, and values (Omoregie et al., 2019). Garbarino and Johnson (in Ruefenacht, 2018) explicitly center around client trust in the corporate and characterize trust as client trust in the quality and dependability of administrations offered by organizations. When customer trust created and customers are delighted, they will continue to deal with the bank, be loyal to the bank, and provide positive feedback so that it can influence others. In like manner, when they are disappointed, they will respond contrarily and change to other service providers (Amin et al., 2013). Additionally, sped up and broadening in the structures and channels of correspondence and promoting of items and administrations offered to multi-channel and multi-screen clients (that is, with synchronous use in physical, electronic and cell positions for the equivalent or various purposes), has made client faithfulness considerably all the more testing to accomplish (Jimenez et al., 2016).

Be that as it may, there are still gaps in research on the connection between trust and loyalty. The findings of Akhgari et al. (2018) shows that trust positive and significantly predicts

loyalty and customer loyalty in the research of Fauzi and Suryani (2018) at Islamic Banks in Indonesia will increase more considerably if Islamic Bank in Indonesia first can increase customer confidence. As opposed to Boonlertvanich (2019), contended that trust doesn't significantly affect social loyalty for non-primary bank clients. Expanding client trust may not prompt higher conduct steadfastness; it gets crucial just for clients who firmly associated with banks. Thakur (2014) has not discovered that trust as the essential precursor of loyalty in mobile banking. Tabrani et al. (2018) revealed that trust has a strong relationship with client commitment and closeness. No meaningful relationship is found with customer loyalty and expressed that there is no immediate impact of trust on customer loyalty. It reveals another promise to the current studies that trust has not been estimated at this point as an essential variable of customer loyalty. It also encourages researchers to further research and obtain empirical evidence.

The primary objective of this research is to propose and empirically investigate the influence of the corporate image, application security, and word of mouth on the trust of the millennial generation in the mobile banking application of the four largest banks in Indonesia (BRI Mobile, Mandiri Online, BCA Mobile, BNI Mobile Banking). Also, determine the influence of the corporate image, word of mouth, and trust on the millennial generation's loyalty in the mobile banking application of the four largest banks in Indonesia (BRI Mobile, Mandiri Online, BCA Mobile, BNI Mobile Banking).

## **Literature review**

### ***Corporate Image***

Corporate image is an essential for companies to instill positive thinking in the minds of customers and keep an upper hand in the market. The definition of the term "image" from the dictionary usually refers to words such as vision, perception, portrait, and picture. While based on psychological, "image" is the combination of thoughts, sentiments, trusts that emerge because of boosts got (Zatwarnicka-Madura et al., 2016). Customers' positive perception of the corporate image is known as a corporate image (Kellerin Hafez, 2018). Corporate image is the overall public impression of a corporate (Lee and Lee, 2018).

Kennedy (1977a,b) portrayed the corporate image as an elusive passionate relationship with mental conditions formed into sentiments and attitudes. Moreover, the corporate image is a mental image of an association, held by its audience members. That is what comes to the mind of the audience when they see or hear about the corporate (Tran et al., 2015). Dutton and Duckerich (1991) have demonstrated the corporate image is a positive consequence of the conclusions, feelings, impressions, and connections of partners concerning the organization. Then again, Barich and Kotler (1991) characterize a corporate image as one of the non-physical segments of an organization and the observations or portrayals of partners in regards to the enterprise. As an outside partner, the client is noteworthy for the corporate (Mostafa et al., 2015). Corporate image is the number of convictions, encounters, data, feelings, and impressions identified with the corporate that show up in the open brain (Gürlek et al., 2017).

The approaches to the corporate image above point to the importance of maintaining the corporate image. Hafez (2018), noticed that the corporate image originates from the emotions, thoughts, and desires for customers toward service offered the business. A corporate image formed becomes a reflection of the corporate's performance that can be beneficial in gaining customer trust and becoming an asset for the corporate to safeguard its customers and get new customers.

### ***Application Security***

Security is a state liberated from a threat. One of the most noteworthy impediments on the web is secure, which includes the well-being of detecting framework, correspondence organize security, application security, and general framework security. Security is the principal one among them, which assumes a first job in shielding the web from assaults and breakdowns. Generally, security implies cryptography (confidential writing), secure correspondence, and protection ensures (Li et al., 2016).

Information security is the secrecy, trustworthiness, and accessibility of information, as clarified in the international standard for data security, the executive's frameworks (ISO 27002). Otherwise called the CIA Triad (ISO/IEC 27002, 2013). CIA Triad has consistently been the business and industry standard as far as information security; nonetheless, it isn't reasonable to deal with the elements of money related innovation development that keeps on occurring rapidly. No less fundamental, digital assaults on FinTech administrations can bring enormous monetary, social, and authoritative harm, which can likewise influence client trust (Stewart and Jürjens, 2018).

### ***Word of Mouth (WoM)***

Communication is the way toward conveying a message by somebody to another person to advise or to change mentalities, feelings, and conduct, both legitimately (face to face communication) or in a roundabout way (dissemination through the media) (Nurhadi and Kurniawan, 2017). Communication considered as an assortment of messages from official and informal sources through a decent variety of media, where organizations can move their personalities to different crowds (Melewar et al., 2017).

Word of mouth is a part of communication, which is informal communication between customers regarding suppliers or the characteristics of their products/services. Word of mouth can be positive or negative got by expected clients before they experience a product or service (Shi et al., 2016). Customers have various motives to be involved in word of mouth. Word of mouth is viewed as a truly sound wellspring of data because the sender is typically free of the association that offers the service. Word of mouth provides a 'two-way information exchange,' which allows a more significant effect on individuals at the stage of persuasion. What's more, it is the best method for correspondence. A few investigations have indicated that contracting regularly affects the evaluation of products and services (Husin et al., 2016).

Word of mouth is a social process in which we are motivated by things like a sense of obligation, a desire to help others, the pleasure of telling others about a product. We can be encouraged to give a contagion due to high involvement, to justify our decisions (produce agreement), achieve social status, increase our self-esteem, or increase self-improvement and visibility (Keiningham et al., 2018). Word of mouth can be communicated directly face to face or in social networks. Customers might use a recommendation system to recommend new products to other community members so that this can also build trust in future transactions (Hajli et. al., 2014).

### ***Trust***

Trust has concentrated in different settings and disciplines, for example, psychology, sociology, economics, and marketing (Matute et al., 2016). Trust is a dynamic and multifaceted concept (Amin et al., 2013). Trust is a result of the reliability and integrity given (Handi, et al., 2018). Trust encourages vender purchaser exchanges and has esteemed fundamental to keep up

relational conduct. Past investigations have inspected trust in different settings identified with dealing, the utilization of statistical surveying, dispersion channels, and mechanical purchaser relations. Rotter (1967), a personality psychologist, views beliefs as individual characteristics and conceives them as hopes, expectations, or feelings rooted in personality and originates from the initial psychological development of individuals (referred to as "dispositions of trust") (Khan and Rahman, 2016).

Trust is tolerating helplessness by anticipating positive conduct and the aims of others. Trust is a conviction about a site or online life as a component of correspondence that can't be controlled to convey true to form, in light of prior understanding (Melewar et al., 2017). Trust can be generated from people/groups who share similarities between individuals or comparative social qualities, past communications, or expected future advantages of the corporate or corporate-explicit traits (Kananukul et al., 2015). Customer trust is basic for business achievement since clients can be advertisers or critics (Jalilvand et al., 2017). Customer trust is essential for business success because customers can be promoters or critics (Jalilvand et al., 2017). Trust is critical for customer relations with banks and customer relations in general for a variety of reasons. Trust encourages exchanges with customers. Customers don't have to stress about defending their inclinations, investment funds in the bank, and money-related products that they have bought or intended to purchase from banks, which incorporate protection and home loan arrangements (Esterik-Plasmeijer and Raaij, 2017). Trust is fundamental in dangerous circumstances, and mobile applications accompany different vulnerabilities that open clients to different risks (Stewart and Jürjens, 2018). Customer trust in companies raises the belief that companies act in the long-term interests of customers (Ruefenacht, 2018).

### ***Loyalty***

Customer loyalty is separated into two definitions: behavioral loyalty and attitudinal loyalty. Behavioral loyalty alludes to clients' conduct to repurchase since they like a specific brand or administration. Attitudinal dedication mirrors the enthusiastic and mental wants of clients to repurchase and to prescribe to other people. This idea includes a profound duty and client promotion to buy in and an eagerness to pay more for items or administrations that are reliably preferred later on, even though situational impacts and advertising endeavors can cause behavioral shifts. The intention of loyalty is shown by the tendency to make and to improve ongoing relationships with service providers, including repeated purchases and a larger "wallet share" (Tabrani et al., 2018). Loyalty is a devotion that leads to a more significant market share when similar brands are continually bought by satisfied customers (Melewar et al., 2017). Loyalty is a critical element in determining success in the market (Sutiono, et al., 2019).

A few researchers have recently recognized customer loyalty in four stages: cognitive, affective, conative, and action loyalty. Cognitive loyalty alludes to client inclinations in discovering specific products and services in the market. At this stage, repurchase choices from subjective supporters depend on the rationale. The client will make a few examinations with other elective items or administrations before settling on a decision. Affective alludes to positive client perspectives coming about because of past encounters that are aggregate about the item or administration. This stage is more robust than psychological devotion since clients, as of now, have involvement in products or services, which prompts to positive attitudes and emotional attachment.

Besides, conative loyalty is ordered by a guarantee to repurchase certain items or administrations. At this stage, repurchase turns into a social expectation where the client demonstrates their responsibility to buy the product or service. These three phases are steady with the meaning of general attitude. Action loyalty is the outrageous state of loyalty and is identified with real client conduct. At this stage, the client has the expectation as well as the inspiration to repurchase the product or service. These four periods of customer loyalty delineate both the conduct attributes and mentalities of customer loyalty (Tabrani et al., 2018). Loyalty alludes to the dedication of clients to repurchase products and services that reliably later on (Amin et al., 2013). Customer loyalty is the corporation's capacity to prevail over particular client securities and different contenders (Omoregie et al., 2019).

### ***The Influence of Corporate Image on Trust***

The corporate image is an impression of the corporate from the outside world, a corporate character that is the main thing anybody can see. The corporate vision is the primary view of the corporate. What establishes a decent connection: having the option to pass on without saying whatever's (it's an image) (Tran et al., 2015). Anderson and Weitz (in Askariazad and Babakhani, 2015), found that a corporate reputation prompts trust on an unmistakable premise that trust at some level based on reputation. An image assumes a primary job informing client trust in two banking segments: traditional and online (Amin et al., 2013). Amin et al. (2013) found that there is a noteworthy connection among corporate image and trust, so the corporate image can generally rapidly move to trust.

H1: *Corporate image influences trust.*

### ***The Influence of Corporate Image on Loyalty***

The customers' attitude to the business is identified with the corporate image of the company. Clients will like and pick organizations with a positive corporate image (Boloemer and Ruyter in Gürlek et al., 2017). Studies show that corporate image impacts customer loyalty (Nguyen and Leblanc, 2001; Wang, 2010; Richard and Zhangin Gürlek et al., 2017) and (Ball et al., 2006; Boloemer and Ruyterin Gürlek et al., 2017) indirectly and significantly and positively. Organizations must present their monetary, social, and ecological duties to their objective clients because the corporate picture assumes a primary job in the making customer loyalty (Gürlek et al., 2017). The ideal corporate image improves the probability of brand decision, producing higher customer loyalty, and lessening weakness to dangerous advertising activities (Kellerin Kaur and Soch, 2018). The corporate image emphatically identified with loyalty (Kaur and Soch, 2018). An investigation led by Askariazad and Babakhani (2015) found that corporate image is the most significant driver of loyalty in the business advertise.

H2: *There is an effect of corporate image on loyalty.*

### ***The Influence of Application Security on Trust***

Internet users are very concerned about privacy and security. Security and privacy are critical for customers' trust in online shopping (Jauw and Purwanto, 2017). In any case, many don't know to carry on in manners that are proper to secure themselves. Indeed, even among numerous people who have the capacity and information, however, not engaged with

fundamental (yet, tedious) exercises that will protect traded off security. For example, impairing treats, perusing administration understandings to utilize individual data, and using a safe inquiry structure (Curtis et al., 2018). Numerous components impact trust in receiving FinTech advancements, for instance, information privacy, accessibility, respectability, constant wireless connections, the usability of mobile applications, transaction security, cultural influence, and organizational trust. Application security, especially on user data, is the insurance of essential data and assets (Stewart and Jürjens, 2018). Customers will look at safety during the transaction can provide confidence that the promises offered will be fulfilled (Dapas, et al., 2019).

Specifically, Belanger et al. (in Curtis et al., 2018) found that the attractive features of online use more generally determined trust in companies, then by the perceived security features. Curtis et al. (2018) also found that individuals expressed more trust in the corporate when the corporate had never experienced a security breach. The financial and startup sector sees FinTech as a passage to expand business openings, be that as it may, versatile applications and other innovation stages must be propelled to investigate such prospects. The security threat of mobile apps has overgrown and has become a challenge for users and innovators of FinTech. In online transactions, trust is an essential key to attracting and retaining clients through risk reduction arising from transactions (Asmy et al., 2019). Stewart and Jürjens (2018) also confirmed that customer trust was significantly affected by data security. They additionally state that trust is a complex multidimensional phenomenon that has a huge impact in business connections. The more educated customers are and believe their data is stored safely, the more trust in financial technology will increase.

*H3: Application security influences trust.*

### ***The Influence of Word of Mouth on Trust***

The customer must have data to conclude whether to proceed with the relationship or not. Without information, no advancement can be made in a relationship. This data required includes in managing individuals as well as for relations with existing organizations when buying one of their products or services. Individuals need the data to manufacture trust and guarantee that it is a sheltered and right decision to purchase products or services from singular organizations (Jalilvand et al., 2017). As indicated by Jalilvand et al. (2017), word of mouth about hotels affects customer trust. Positive word of mouth transmission scatters data on products and services without causing extra expenses related to publicizing.

*H4: Word of Mouth influences trust.*

### ***The Influence of Word of Mouth on Loyalty***

Controlled and uncontrolled correspondence about a corporate is a piece of general corporate communication. Both are a piece of the authoritative administration instruments; all types of correspondence that are purposefully utilized (inward and outer) in a reliable, proficient and proficient way in producing a great beginning for the corporate with corporate partners (Van Rekom Melewar, et al., 2017). The primary component of open correspondence has been distinguished as irresistible or tertiary correspondence, which is the message passed on about the association by outsiders. Word of mouth can impact clients' discernments and desires during the quest for data and ensuing buy procedures, and it changes their disposition during the assessment of repurchasing elective brands. Word of mouth can influence their choices, both



decidedly and adversely. Melewar et al. (2017) found that word of mouth affects customer loyalty; the more positive and synergistic word of mouth will create absolute brand loyalty.

H5: *Word of Mouth influences loyalty.*

### **The Influence of Trust on Loyalty**

Trust is the basis of loyalty, and trust can lead to higher levels of loyalty. This statement is also supported by findings that show that trust influences loyalty or trust is an essential factor in building loyalty (Susanty et al., 2017). Previous researchers have suggested that trust is a critical antecedent in loyalty, consistent with the concept of trust in the theory of commitment (Kananukul et al., 2015). The findings of Akhgari et al. (2018) shows that positive and significant trust predicts loyalty.

Fauzi and Suryani (2018) found that customer loyalty will increase significantly if Indonesian Islamic banks can first increase customer confidence. Palacios-Marques et al. (2016) found in the hotel sector, and Ruefenacht (2018) that insurance has a positive effect on trust in loyalty. Trust is an essential variable in the advancement of web-based business and creates customer loyalty (Jimenez, 2016).

H6: *Trust influences loyalty.*

### **The Proposed Conceptual Model**

Based on the literature review and the hypothesized relationships, a conceptual model developed, as illustrated in Figure 1.

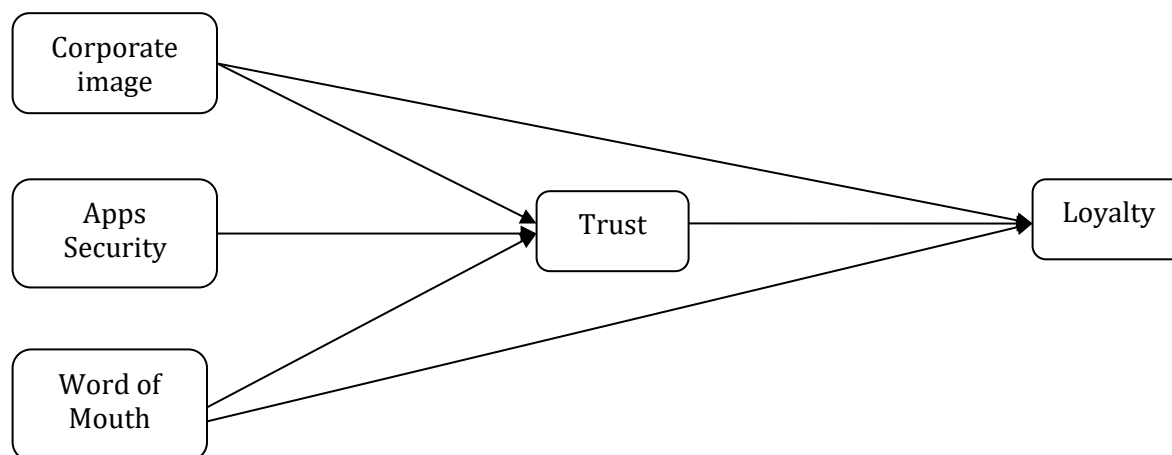


Figure 1. A Conceptual Framework

## **Research Method**

### **Research Design and Analysis Techniques**

This research uses a quantitative research design based on searching for relevant theories and developing hypotheses, which are then explained and measured quantitatively and analyzed using statistical methods (Abdillah and Jogiyanto, 2015). The analysis technique of this research uses the Structural Equation Modeling (SEM) method with Analysis of the Moment of Structure (AMOS) software program version 24.

### ***Population and Sample***

The population in this study is the millennial generation in Indonesia, aged 19-39 years in 2019. The sample of this study uses non-probability sampling with a convenience sampling technique (Purwanto, 2016), and the minimal sample size is about ten times the number of items (Karno and Purwanto, 2017; Tjiu and Purwanto, 2017). In this study, the researchers chose a population member as a sample with the following criteria respondents are millennial generation aged 19-39 years in 2019 and have used one of the mobile banking applications provided by the four largest banks in Indonesia (BRI Mobile, Mandiri Online, BCA Mobile, BNI Mobile Banking). The online questionnaires distributed from January 10 to February 26, 2019, which resulted in 395 respondents.

### ***Measurement Scale and Instrument***

This study measures three independent variables (corporate image, application security, word of mouth), one dependent variable (loyalty), and one mediating variable (trust). Corporate image used 6 (six) items adapted from Amin et al. (2013) and Askariazad and Babakhani (2015). Application security used 5 (five) items adapted from Curtis et al. (2018). Word of mouth used 4 (four) items adapted from Matute et al. (2016) and Jalilvand et al. (2017). Trust used 8 (eight) items adapted from Jimenez et al. (2016) and Curtis et al. (2018). Loyalty used 8 (eight) items adapted from Akhgari et al. (2018) and Fauzi and Suryani (2018). The Likert scale used in this study is a 5-point scale, namely a score of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).

### ***Research Instrument Testing***

For the validity test, the calculation of the construct validity coefficient uses Confirmatory Factor Analysis (CFA). The CFAs indicates acceptance levels of fit loadings of all items on the respective latent construct (Purwanto, 2014). By using a standardized loading factor analysis, validity will be based on a normalized loading factor equal to 0.50 or more and ideally 0.70 (Ghozali, 2017). While the reliability test here uses reliability analysis by looking at the value of CR (Construct Reliability), where CR value of 0.70 or more shows excellent reliability, while the value of 0.60–0.70 on reliability is still acceptable with the validity of the indicators in a good model (Ghozali, 2017).

## **Results**

### ***Data Validity Test Results***

Confirmatory Factor Analysis (CFA) is an analysis that aims to identify the relationship between variables to confirm whether the measurement model following the hypotheses. CFA processing in this study uses AMOS software. This validity test is to find out which indicators valid and which are not valid. The results are listed in the following Table 2, which shows that the loading factor of each item is  $\geq 0.5$ . Table 2 shows the six items of the corporate image: CI1, CI2, CI3, CI4, CI5, and CI6. It also shows the five items of application security are AS1, AS2, AS3, AS4, AS 5. Table 2 shows the four items of word of mouth: WOM1, WOM2, WOM3, WOM 4. Likewise, Table 2 shows the eight items of trust are TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8. Finally, Table 2 shows five items of loyalty are LY1, LY2, LY3, LY4, LY5. All of the items proved to be valid.

Table 2. Validity Test Result

No.	Items	Standardized Loading Factor	Information
1.	CI1	0,867	Valid
2.	CI2	0,862	Valid
3.	CI3	0,855	Valid
4.	CI4	0,564	Valid
5.	CI5	0,697	Valid
6.	CI6	0,716	Valid
7.	AS1	0,627	Valid
8.	AS2	0,672	Valid
9.	AS3	0,780	Valid
10.	AS4	0,642	Valid
11.	AS5	0,799	Valid
12.	WOM1	0,577	Valid
13.	WOM2	0,623	Valid
14.	WOM3	0,698	Valid
15.	WOM4	0,718	Valid
16.	TR1	0,707	Valid
17.	TR2	0,731	Valid
18.	TR3	0,668	Valid
19.	TR4	0,611	Valid
20.	TR5	0,626	Valid
21.	TR6	0,714	Valid
22.	TR7	0,657	Valid
23.	TR8	0,648	Valid
24.	LY1	0,732	Valid
25.	LY2	0,776	Valid
26.	LY3	0,778	Valid
27.	LY4	0,710	Valid
28.	LY5	0,713	Valid

Source: Data processed from Amos output, 2019.

### Data Reliability Test Results

The reliability test sees whether the indicators used are reliable. Table 3 shows that the Construct Reliability value for each variable is above the cut-off value (0.70), so all indicators used are reliable.

Table 3. Reliability Test Result

No.	Variable	Construct Reliability	Information
1.	Corporate Image	0.9547	Reliable
2.	Application Security	0.9098	Reliable
3.	Word of Mouth	0.8421	Reliable
4.	Trust	0.9427	Reliable
5.	Loyalty	0.9436	Reliable

Source: Data processed from Amos output, 2019.

### Model Feasibility Test Results

Table 4 shows that chi-square meets good fit, while the probability value is still poor fit. However, it can still be continued by looking at other criteria, namely RMSEA, GFI, AGFI, TLI, and CFI. CFI, TLI, and RMSEA meet good fit, while GFI and AGFI at the marginal fit level, as well as CMIN/DF.

Table 4. Summary Goodness of Fit

The goodness of Fit Index	Cut-off Value	Calculation Results	Match Level
Degree of Freedom (DF)	>0	312	Over Identified
Chi-Square ( $X^2$ )	$< \alpha$ . df ; $\alpha =$ cmindf/df (944,112)	944,047	Good Fit
Probability	$\geq 0,05$	0,000	Poor Fit
GFI	$\geq 0,90$	0,851	Marginal Fit
AGFI	$\geq 0,90$	0,807	Marginal Fit
CFI	$\geq 0,90$	0,917	Good Fit
TLI	$\geq 0,90$	0,900	Good Fit
CMIN/DF	$\leq 2,00$	3,026	Marginal Fit
RMSEA	$\leq 0,08$	0,072	Good Fit

Source: Data processed from Amos output, 2019.

### Hypothesis Test Results

Table 5 shows that the value of the influence of the corporate image on trust has a CR value of 7,390 > 1.96 with P-value (probability) <0.05, thus hypothesis 1 is proven to be positive and significant. The CR value of the influence of the corporate image on loyalty has a CR value of 4,568 > 1.96 with P-value (probability) <0.05, and thus hypothesis 2 is proven positive and significant. The CR value of the application security on trust has a CR value of 11,839 > 1.96 with P-value (probability) <0.05 and thus, hypothesis 3 is proven positive and significant. The CR value of the influence of word of mouth on trust has a CR value of 3,389 > 1.96 with P-value (probability) <0.05, and thus hypothesis 4 is proven to be positive and significant. The CR value of the influence of word of mouth on loyalty has a CR value of 6,723 > 1.96 with P-value (probability) <0.05, and thus hypothesis 5 is proven to be positive and significant. The CR value of the influence of trust on loyalty has a CR value of 10,175 > 1.96 with P-value (probability) <0.05, and thus, hypothesis 5 is also proven to be positive and significant.

Table 5. Hypothesis Test Results

Variable	Estimate	S.E	C.R	P	Explanation
Trust ← Corporate Image	0,361	0,049	7,390	***	Accepted
Loyalty ← Corporate Image	0,235	0,051	4,568	***	Accepted
Trust ← Application Security	0,668	0,056	11,839	***	Accepted
Trust ← Word of Mouth	0,133	0,039	3,389	***	Accepted
Loyalty ← Word of Mouth	0,325	0,048	6,723	***	Accepted
Loyalty ← Trust	0,597	0,059	10,175	***	Accepted

Source: Data processed from Amos output, 2019.

## Discussion

The result of hypothesis 1, the corporate image, has a positive and significant effect on the millennial generation's confidence in the mobile banking application of the four biggest banks in Indonesia. Respondents in this study belong to the millennial age group, which is predominantly aged 19-28 years, has an education mostly undergraduate, and is active in using mobile banking more than ten times a month. Corporate image is an essential factor in building trust, especially in mobile banking applications provided by banks because they relate to customers' personal and financial data. For the questionnaire, where the average respondent answered agreeing to statements for the corporate image where the statement "has a good reputation" (CI3) gets the highest results with an average value of 4,590. Therefore, the better the corporate image, the higher the level of trust in the millennial generation and vice versa, the worse the corporate image, the level of trust in a millennial generation will also be lower. The mobile banking application provided is important to meet the needs and wants of customers millennial generation. Their trust in the apps will increase if the service provider has a good corporate image. For the questionnaire statement, "I believe mobile banking is provided to meet the needs and desires of customers" (TR5), which gets the highest results with an average value of 4.504. This study is in line with research by Amin et al. (2013) and Askariadz and Babakhani (2015) that corporate reputation, especially banking, leads to trust. The corporate image plays an important role in shaping customer trust in the traditional (transacting directly at the bank) or online banking service. This study observed the mobile banking application facilities of the four largest banks in Indonesia. That way, a positive banking image can be relatively easy to transfer to the trust of banking customers.

Hypothesis 2 indicates that the corporate shows a positive and significant impact on loyalty in the mobile banking application of the four biggest banks in Indonesia. In this study, Responding was included in the millennial age group, where learners who obtained 19-28 years, had education mostly were undergraduate and actively used mobile banking more than ten times in number. Corporate image is an essential factor in making loyalty on the mobile banking application provided by banks because it is related to personal data and commercial finance. For the questionnaire in which the average respondent answered agreeing to the opinion responses for the image of the corporate everywhere (CI3), getting the highest results with an average value of 4,590. By improve the corporate image, the loyalty of millennial generation in using mobile banking that is provided will increase, and vice versa, improve the corporate image. The loyalty of the millennial generation will increase. Askariadz and Babakhani (2015), Gürlek et al. (2017), and Kaur and Soch (2018) stated that companies play an essential role in creating loyalties that require banking. Loyalty from the millennial generation will be created with an excellent corporate image. Following the results of the questionnaire, "I agree to continue using mobile banking" (LY5), which gets the highest results with an average value of 4,461. A corporate image is the most important driver of loyalty in the main business market in the banking business.

Hypothesis 3, Application security, has a positive and significant effect on the millennial generation's confidence in the mobile banking application of the four largest banks in Indonesia. Respondents in this study belong to the millennial age group, which is predominantly aged 19-28 years, has an education mostly undergraduate, and is active in using mobile banking more than ten times a month. Application security is an important factor for building trust, especially in mobile banking applications provided by banks because they relate to customers' personal and financial data. For the questionnaire where the average respondent answered agreeing to statements for application security where the statement "I am willing to use the mobile banking

application on my mobile phone" (AS2) gets the highest results with an average value of 4,628. If the security of mobile banking applications is increasingly guaranteed, millennials' trust will also increase, and vice versa, if the security of applications is less guaranteed, millennials' trust will also decrease. The millennial generation trusting in the mobile banking application will increase with the high level of application security. For the questionnaire statement, "I believe mobile banking is provided to meet the needs and desires of customers" (TR5), which gets the highest yield with an average value of 4.504. The study is in line with the research by Curtis et al. (2018) and Stewart and Jürjens (2018) that trust is a complex multidimensional phenomenon that plays a major part in business relationships. The more customers are educated and believe their data is stored safely, the more confident they are in financial technology. The financial and startup sector sees FinTech as a gateway to increase business opportunities. However, mobile applications' security threat has overgrown and has become a challenge for users and innovators of FinTech. Thus, the security offered and proven in a launch or introduction to an application is essential for the application's provider, especially in the banking industry related to data and financial customers. Excellent and secure application security in the mobile banking application that is provided will lead to the trust of customers to use it. In this study, what is observed is the millennial generation's trust in the four most extensive mobile banking applications in Indonesia.

Hypothesis 4, word of mouth, has a positive and significant impact on the millennial generation's trust in the mobile banking application of the four biggest banks in Indonesia. Respondents in this study belong to the millennial age group, which is predominantly aged 19-28 years, has an education mostly undergraduate, and is active in using mobile banking more than ten times a month. Word of mouth transmitted by others and scattered indeed becomes a consideration for one's trust in a corporate and is an essential factor to build trust, especially in the mobile banking application provided by banks because it is related to personal and financial data of customers. For the questionnaire in which the average respondent agreed to the statements for the word of mouth where the statement "the volume of recommendations regarding mobile banking is extensive" (WOM1) gets the highest results with an average value of 4.309. The better and more positive the contagious rumors received will increase the trust of millennials, and vice versa, if the poorly received and negative rumors are sure to reduce the trust of millennials. The study is in line with research by Jalilvand et al. (2017) that word of mouth has a positive influence on customer trust. Word of Mouth positive to help spread product and service information without incurring additional costs related to advertising. For the questionnaire statement, "I believe mobile banking is provided to meet the needs and desires of customers" (TR5), which gets the highest yield with an average value of 4.504. So it is essential for businesses, especially in the banking industry, to ensure the spread of information or information about products and services provided. Customer trust in word of mouth affects their trust in banks, and systems banking was in this study.

For hypothesis 5, word of mouth has a positive and significant influence on the loyalty of the millennial generation in the mobile banking application of the four biggest banks in Indonesia. Respondents in this study belong to the millennial age group, which is predominantly aged 19-28 years, has an education mostly undergraduate, and is active in using mobile banking more than ten times a month. Word of mouth transmitted by others and spread into a material consideration and essential factor to become loyal users, especially in the mobile banking application provided by banks because it is related to personal and financial data of customers. For the questionnaire in which the average respondent agreed to the statements for the word of mouth where the statement "the volume of recommendations regarding mobile banking is very large" (WOM1) gets

the highest results with an average value of 4.309. A good and positive word of mouth will increase the loyalty of millennials, and vice versa, if a word of mouth and negative contagion which is received will undoubtedly reduce the loyalty of millennials. The results of this study are in line with research by Melewar, et al. (2017), who found that Word of Mouth has a significant influence on customer loyalty. The more positive and synergistic a Word of Mouth will result in superior brand loyalty. Loyalty from millennial generation will also be created with positive feedback received and consistent with the results of the questionnaire statement "I am willing to continue to use mobile banking" (LY5), which gets the highest yield with an average value of 4,461. So banks need to maintain the dissemination of information related to their products and services. It can influence customers' perceptions and expectations during the search for knowledge and the subsequent purchase process. It affects their attitude of loyalty during the evaluation of the reuse of products or services offered to them.

The result of hypothesis 6 is trust has a positive and significant effect on the loyalty of millennial generation on the mobile banking application of the four biggest banks in Indonesia. Respondents in this study belong to the millennial age group, which is predominantly aged 19-28 years, has an education mostly undergraduate, and is active in using mobile banking more than ten times a month. Trust is a major factor in creating and maintaining millennial generation loyalty, especially in the mobile banking application provided by banks as it relates to customers' personal and financial data. For the questionnaire where the average respondent answered agreeing to statements of trust where the statement "I believe mobile banking is provided to meet the needs and desires of customers" (TR5), which gets the highest results with an average value of 4.504. The mobile banking application provided is essential to meet the needs and desires of customers. If the level of trust is higher, then the millennial generation loyalty will increase, and vice versa, if the trust is getting lower, then the millennial generation loyalty will also decrease. The results of this study are in line with previous studies. Kananukul et al. (2015) state that trust is one of the most critical antecedents for loyalty, consistent with the concept of trust in the theory of commitment-trust. Palacios-Marques et al. (2016) and Ruefenacht (2018) who found a positive effect of trust on loyalty and Akhgari et al. (2018) found positive trust and significantly predicted loyalty. Jimenez (2016) said that trust is a key variable in the development of e-commerce and the generation of customer loyalty. Susanty et al. (2017), trust is an essential factor in building loyalty, especially in mobile banking, because loyal customers will increase the market share, profitability, and overall growth of each service provider (Asmy et al., 2019). Fauzi and Suryani (2018), who examined at Islamic Banks in Indonesia, found that customer loyalty would increase significantly if Indonesian Islamic banks could first increase customer confidence. Loyalty from the millennial generation will also be created with the trust that is consistent with the results of the questionnaire statement "I am willing to continue using mobile banking" (LY5), which gets the highest results with an average value of 4,461. Therefore, trust is crucial to building and creating millennial generation loyalty in the four most extensive mobile banking application in Indonesia.

## **Conclusion**

Based on the results of the hypothesis test, it was seen demonstrated as a positive and significant impact of corporate image on trust. The effect of corporate image on loyalty likewise proved positive and noteworthy. In like manner, the impact of security on trust demonstrated positive and noteworthy. Theories test results also affirm the positive and noteworthy effects of word of mouth on trust and the positive and critical effect of word of mouth on loyalty. Indeed, the significance of trust in loyalty likewise end up being particular and critical. In this manner, the

components of trust intervened and expanded the connection between corporate image, application security, and word of mouth on loyalty.

### **Academic and practical implications**

Based on the research results, what needs to be considered is a millennial generation, which is one of the marketing targets that can make a significant contribution to the use of mobile banking. Corporate image, application security, word of mouth, and trust are factors that can influence the loyalty of millennial generation on the mobile banking application of the four largest banks in Indonesia. This research is expected to be a reference for future researchers to research trust and loyalty variables.

The advice that can be given to the four largest banks in Indonesia and other banks is known as the corporate image, application security, and word of mouth positively and significantly affect the loyalty of millennial generation on mobile banking applications through trust as a mediator. It becomes important and foremost for banks to maintain an excellent corporate image and get a positive transmission because, in this digitalization era, information can spread quickly between friends, relatives, family, and through the internet, digital media, and social media. Banking also needs to include a guaranteed level of application security in the mobile banking application provided to gain the trust of users and be able to foster and increase their loyalty. However, there are still other factors that can influence the millennial generation loyalty on the mobile banking application.

### **Limitations and future research directions**

Limitations of this study are in terms of gathering respondents. Respondents in this study were obtained randomly through the distribution of online questionnaires. The researcher cannot confirm that the respondents in this study cover the entire millennial generation of mobile banking users in the four biggest banks in Indonesia. Researchers say so because the respondents in this study amounted to 395 of the total 90 million millennial population of Indonesia. Another limitation of this study is the limited time for collecting questionnaires from January 10 to February 26, 2019, in less than one month.

In future research, it is expected to add other variables to identify more deeply the loyalty of the millennial generation. The company image variable, application security, hardworking, and trust are variables that affect loyalty positively and significantly. Still, other variables can create millennial generation loyalty, such as advertising, satisfaction, service quality, and risk perception.

### **References**

- Abdillah, W., & dan Jogiyanto, H.M. (2015). *Partial Least Square (PLS), Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis (Partial Least Square (PLS), Alternative Structural Equation Modeling (SEM) in Business Research)*. CV Andi Offset, Yogyakarta.
- Akhgari, M., Bruning, E. R., Finlay, J., & Bruning, N. S. (2018). Image, Performance, Attitudes, Trust, and Loyalty in Financial Services. *International Journal of Bank Marketing*, 36(4), 744-763.
- Amin, M., Isa, Z., & Fontaine, R. (2013). Islamic Banks: Contrasting The Drivers of Customer Satisfaction on Image, Trust, and Loyalty of Muslim and Non-Muslim Customers in Malaysia. *International Journal of Bank Marketing*, 31(2), 79-97.



- Askariazad, M. H., & Babakhani, N. (2015). An Application of European Customer Satisfaction Index (ECSI) in Business to Business (B2B) Context. *Journal of Business & Industrial Marketing*, 30(1), 17-31.
- Asmy, M., Amin, Md F. B., Thaker, H.B.M.T., & Pitchay, A. B. A. (2019). What Keeps Islamic Mobile Banking Customers Loyal? *Journal of Islamic Marketing*, 10(2), 525-542.
- Aziz, M. (2018). Demi Semangat Kebhinekaan Generasi Millennial (For the Spirit of Millennial Generation Diversity). Retrieved from <https://nasional.kompas.com/read/2018/03/10/21305651/demi-semangat-kebhinekaan-generasi-millennial/>.
- Boonlertvanich, K. (2019). Service Quality, Satisfaction, Trust, and Loyalty: The Moderating Role of Main-Bank and Wealth Status. *International Journal of Bank Marketing*, 37(1), 278-302.
- Curtis, S. R., Carre, J. R., & Jones, D. N. (2018). Consumer Security Behaviors and Trust Following a Data Breach. *Managerial Auditing Journal*, 33(4), 425-435.
- Dapas, C.C., Sitorus, T., Purwanto, E., & Ihalauw, J.J.O.I. (2019). The Effect of Service Quality and Website Quality of Zalora.com on Purchase Decision as Mediated by Purchase Intention. *Quality - Access to Success*, 20(169), 87-92.
- Ester (2016). MengenalGenerasi Millennial (Get to know the Millennial Generation). Retrieved from [https://www.kominfo.go.id/content/detail/8566/mengenal-generasi-millennial/0/sorotan\\_media](https://www.kominfo.go.id/content/detail/8566/mengenal-generasi-millennial/0/sorotan_media).
- Esterik-Plasmeijer, P.W.J.V., & Raaij. W. F.V. (2017). Banking system trust, bank trust, and bank loyalty. *International Journal of Bank Marketing*, 35(1), 97-111.
- Fauzi, A. A., & Suryani, T. (2019). Measuring The Effects of Service Quality by Using CARTER Model Towards Customer Satisfaction, Trust, and Loyalty in Indonesian Islamic Banking. *Journal of Islamic Marketing*, 10(1), 269-289.
- Fauzia, I. Y. (2016). Pemanfaatan E-Commerce dan M-Commerce dalamBisnis di KalanganWirausahawanPerempuan (Utilization of E-Commerce and M-Commerce in Business among Women Entrepreneurs). *Journal of Business and Banking*, 5(2), 237-256.
- Febrianta, A., &Indrawati. (2016). Influence of Mobile Banking Service Quality to Customer Satisfaction Bank BCA in Bandung. *e-Proceeding of Management*, 3(3), 2879-2885.
- Ghozali, I. (2017). *Model Persamaan Struktural, Konsep dan Aplikasi dengan Program AMOS 24, Update Bayesian SEM (Structural Equation Model, Concept and Application with AMOS 24 Program, Bayesian SEM Update)*. Diponegoro University Publisher Agency, Semarang.
- Gürlek, M., Düzgün, E., &Uygur, S. M. (2017). How Does Corporate Social Responsibility Create Customer Loyalty? The Role of Corporate Image. *Social Responsibility Journal*, 13(3), 409-427.
- Hafez, Md. (2018). Measuring the Impact of Corporate Social Responsibility Practices on Brand Equity in The Banking Industry in Bangladesh: The Mediating Effect of Corporate Image and Brand Awareness. *International Journal of Bank Marketing*, 36(5), 806-822.
- Hajli, N., Wang, Y., & Lin, X. (2014). Social Word of Mouth: How Trust Develops in the Market. *International Journal of Market Research*, 56(5), 673-689.
- Handi, H., Hendratono, T., Purwanto, E., & Ihalauw, J.J.O.I. (2018). The Effect of E-WOM and Perceived Value on the Purchase Decision of Foods by Using the Go-Food Application as Mediated by Trust. *Quality Innovation Prosperity*, 22(2), 112-127.
- Hestanto (2018). Mobile Commerce. Retrieved from <https://www.hestanto.web.id/mobile-commerce/>

- Husin, M. Md., Ismail, N., & Rahman, A.A. (2016). The Roles of Mass Media, Word of Mouth and Subjective Norm in Family Takaful Purchase Intention. *Journal of Islamic Marketing*, 7(1), 59-73.
- IDS (2017). Inilah 5 Aplikasi Mobile Commerce Terbaik di Indonesia (These are the 5 Best Mobile Commerce Applications in Indonesia). Retrieved from <https://idseducation.com/articles/5-top-aplikasi-mobile-commerce/>.
- Jalilvand, M. R., Vosta, L.N., Mahyari, H. K., & Pool, J. K. (2017). Social Responsibility Influence on Customer Trust in Hotels: Mediating Effects of Reputation and Word-Of-Mouth. *Tourism Review*, 72(1), 1-14.
- Jauw, A.L.J., & Purwanto, E. (2017). Moderation Effects of Cultural Dimensions on the Relationship between E-Service Quality and Satisfaction with Online Purchase. *Quality - Access to Success*, 18(157), 55-60.
- Jimenez, N., San-Martin, S., & Azuela, J. I. (2016). Trust and Satisfaction: The Keys To Client Loyalty in Mobile Commerce. *Academia Revista Latinoamericana de Administracion*, 29(4), 486-510.
- Kananukul, C., Jung, S., & Watchravesringkan, K. (2015). Building Customer Equity Through Trust in Social Networking Sites: A Perspective from Thai Consumers. *Journal of Research in Interactive Marketing*, 9(2), 148-166.
- Karno, C. G., & Purwanto, E. (2017). The Effect of Cooperation and Innovation on Business Performance. *Quality - Access to Success*, 18(158), 123-126.
- Katadata (2018). 2018, Jumlah Penduduk Indonesia Mencapai 265 Juta Jiwa (2018, Total Population of Indonesia Reaches 265 Millions). Retrieved from <https://databoks.katadata.co.id/datapublish/2018/05/18/2018-jumlah-penduduk-indonesia-mencapai-265-juta-jiwa>
- Kaur, H., & Soch, H. (2018). Satisfaction, Trust and Loyalty: Investigating the Mediating Effects of Commitment, Switching Costs and Corporate Image. *Journal of Asia Business Studies*, 12(4), 361-380.
- Keiningham, T.L., Rust, R.T., Lariviere, B., Aksoy, L., & Williams, L. (2018). A Roadmap for Driving Customer Word-Of-Mouth. *Journal of Service Management*, 29(1), 2-38.
- Khan, I., & Rahman, Z. (2016). E-Tail Brand Experience's Influence on E-Brand Trust and E-Brand Loyalty. *International Journal of Retail & Distribution Management*, 44(6), 588-606.
- Lee, J., & Lee, Y. (2018). Effects of Multi-Brand Company's CSR Activities on Purchase Intention Through A Mediating Role of Corporate Image and Brand Image. *Journal of Fashion Marketing and Management: An International Journal*, 22(30), 387-403.
- Li, S., Theo, T., & Honglei L. (2016). The Internet of Things: A Security Point of View. *Internet Research*, 26(2), 337-359.
- Listiorini (2018). Kumpulan Aplikasi M-Banking dari Bank di Indonesia (The Collection of M-Banking Applications from Banks in Indonesia). Retrieved from <https://carisinyal.com/aplikasi-m-banking/>.
- Matute, J., Polo-Redondo, Y., & Utrillas, A. (2016). The Influence of EWOM Characteristics on Online Repurchase Intention: Mediating Roles of Trust and Perceived Usefulness. *Online Information Review*, 40(7), 1090-1110.
- Melewar, T. C., Foroudi, P., Gupta, S., Kitchen, P.J., & Foroudi, M.M. (2017). Integrating Identity, Strategy, and Communications for Trust, Loyalty, and Commitment. *European Journal of Marketing*. 51(3), 572-604.

- Mostafa, R. B., Lages, C. R., Shabbir, H. A., & Thwaites, D. (2015). Corporate Image A Service Recovery Perspective. *Journal of Service Research*, 18(4), 468-483.
- Naumovska, L. (2017). Marketing Communication Strategies for Generation Y – Millennials. *Business Management and Strategy*, 8(1), 123-133.
- Nurhadi, Z. F. & Kurniawan, A. W. (2017). Kajian Tentang Efektivitas Pesandalam Komunikasi (Study of the Effectiveness of Messages in Communication). *Journal of communication*, 3(1), 90-95.
- Omoregie, O.K., Addae, J.A., Coffie, S., Ampong, G.O.A., & Ofori, K.S. (2019). Factors Influencing Consumer Loyalty: Evidence From The Ghanaian Retail Banking Industry. *International Journal of Bank Marketing*, 37(3), 798-820.
- Palacios-Marques D., Guijarro, M., & Carrilero, A. (2016). The Use of Customer-Centric Philosophy in Hotels to Improve Customer Loyalty. *Journal of Business & Industrial Marketing*, 31(3), 339-348.
- Purwanto, E. (2014). The effect of consumer ethnocentrism on perceived domestic product quality and purchase intentions among young consumers in Jakarta, Indonesia. *International Journal of Asian Social Science*, 4(9), 1003-1012.
- Purwanto, E. (2016). The Effect of Cosmopolitanism on Perceived Foreign Product and Purchase Intentions: Indonesia Case. *Quality - Access to Success*, 17(155), 94-98.
- Ruefenacht, M. (2018). The Role of Satisfaction and Loyalty for Insurers. *International Journal of Bank Marketing*, 36(6), 1034-1054.
- Sadchalis, R. (2015). Mobile Commerce (M-Commerce). Retrieved from <https://rahmatsadchalis15.blogspot.com/2015/06/mobile-commerce-m-commerce.html/>.
- Shi, W., Tang, L., Zhang, X., Gao, Y., & Zhu, Y. (2016). How does Word of Mouth Affect Customer Satisfaction? *Journal of Business & Industrial Marketing*, 31(3), 393-403.
- Sitanggang, L. M. S. (2018). 11 Bank Terbesar Tanah Air Kuasai 63% AsetPerbankan (11 Largest Banks in the Country Control 63% of Banking Assets). Retrieved from <https://keuangan.kontan.co.id/news/11-bank-terbesar-tanah-air-kuasai-63-aset-perbankan>.
- Stewart, H., & Jürjens, J. (2018). Data Security and Consumer Trust in Fintech Innovation in Germany. *Information & Computer Security*, 26(1), 109-128.
- Susanty, A., Bakhtiar, A., Jie, F., & Muthi, M. (2017). The Empirical Model of Trust, Loyalty, and Business Performance of The Dairy Milk Supply Chain: A Comparative Study. *British Food Journal*, 119(12), 2765-2787.
- Sutiono, M.M., Hendratono, T., & Purwanto, E. (2019). Identification of Factors Influencing Physician Prescription Loyalty, *International Journal of Scientific & Technology Research*, 8(09), 1339-1345.
- Tabrani, M., Amin, M., & Nizam, A. (2018). Trust, Commitment, Customer Intimacy, and Customer Loyalty in Islamic Banking Relationships. *International Journal of Bank Marketing*, 35(5), 823-848.
- Thakur, R. (2014). What Keeps Mobile Banking Customers Loyal? *International Journal of Bank Marketing*, 32(7), 628-646.
- Tjiu, M., & Purwanto, E. (2017). Guanxi and the leader-member exchange in the Chinese supervisor and subordinate relationship. *Journal of Applied Economic Sciences*, 12(8(54)), 2218 – 2232.
- Tran, M.A., Nguyen, B., Melewar, T.C., & Bodoh, J. (2015). Exploring The Corporate Image Formation Process. *Qualitative Market Research: An International Journal*, 18(1), 86 – 114.

- Widyastuti, R. S., & Armanto, B. (2013). Kompetisi Industri Perbankan Indonesia (Indonesian Banking Industry Competition). *Bulletin of Monetary Economics and Banking*. 15(4), 417-439.
- Zatwarnicka-Madura, B., Stecko, J., & Mentel, G. (2016). Brand Image VS. Consumer Trust. *Actual Problems of Economics*, 8(182), 237-245.