Identification of The Dimensions of Bank 4.0 Experiential Quality Based on Millennial Customer Perceptions

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Abstract

The development of the Bank 4.0 industry that is reflected through increased experiential quality, which is started with the identification of the dimensions of Bank 4.0 experiential quality is getting popularity for millenial. This research attempt to discover the dimensions of Bank 4.0 experiential quality based on perceptions of millennial customers. Bu surveying 673 millenials and adjusted to the characters of Bank 4.0 and millennial generation this study aims to theoretical and empirically testing the hyotehesis by using SMPLS. Results revelaed that functional quality, convenience, innovations, trust, value, risk mitigation, and security have been empirically proven as dimensions of Bank 4.0 experiential quality based on millennial customer perception.This research was only conducted in the city of Malang, so that research with larger demographic and geographic data sets is needed in order to describe the perceptions of millennial customers more accurately. Further research can be developed with new dimensions that may emerge along with the development of Bank 4.0 in both commercial banks and fintech companies.

Introduction

After the 2008 monetary crisis, banks struggled to cover losses and tried to make profits by continuing to innovate and improve efficiency in various posts (Monferrer-Tirado et al, 2016). The efficiency initiatives that were taken by banks included reducing the cost of human resources, reducing operational costs, and increasing the efficiency of waiting time. The three efficiency posts can be realized at the same time with the application of digital banking (Amin, 2016). The banks also continue to evolve and compete with each other to apply the latest systems and technologies that are believed to increase efficiency. Moreover, the development of smartphones is also increasingly encouraging customer needs for banking services that are convenient, secure, integrated, mobile, real-time, and accessible wherever and whenever. The banking platform (include Indonesian banking), evolved from the Bank 1.0 phase (the most conventional phase),

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Bank 2.0 (the era of the emergence of the Automatic Teller Machine), Bank 3.0 (the digital banking era), and at present, the evolution of the banking platform has entered the era of Bank 4.0 (King, 2018). Along with the increasingly sophisticated smartphone devices, the development of Bank 4.0 in Indonesia is unstoppable. Even since 2017, the penetration of smartphone-based financial transactions has exceeded conventional bank transactions (MDI & Mandiri Sekuritas, 2017). Bank Indonesia (2019) stated that 93% of banking transactions had been conducted via e-channel, of which 80% were via smartphones. The development of Bank 4.0 in Indonesia has not only changed the habits in financial transactions, but has also changed people's lifestyles. Cash transactions are becoming obsolete, replaced by fully application-based digital payment services. On the one hand, Bank 4.0 is eagerly awaited and welcomed, especially by the millennial generation, but on the other hand, the development of Bank 4.0 also raises new problems and concerns (King, 2018). In 2019, there were 543 illegal fintechs and 1330 online lending complaints (OJK, 2019). The most problems and complaints relating to Bank 4.0 are fraud, stolen cash, legality, hacking, and data theft (OJK, 2019). If those problems are not resolved immediately, they will raise serious concerns that threaten the sustainability of Bank 4.0 in Indonesia. To help the development of the Bank 4.0 industry that is reflected through increased experiential quality, which is started with the identification of the dimensions of Bank 4.0 experiential quality, this research was conducted.

Millennial customers were chosen as the subjects of this research with several considerations. First, Bank 4.0 is synonymous with contemporary technology, which is compatible with the characteristics of millennial generation, namely 'digital native' (Prensky, 2001) and 'being technologically savvy' (Korobka, 2018). Second, studying and knowing millenial customers' opinions based on their reactions to and interactions with Bank 4.0 services today are very important to understand their experiences and their impact on the development of Bank 4.0 in the future.

Theoretical Foundation and Hypothesis Development

Bank 4.0

King (2018) defined Bank 4.0 as an embedded, ubiquitous banking delivered in real-time through the technology layer. This banking is dominated by real-time, contextual experiences, frictionless engagement and a smart, AI-based advice layer and is largely digital omni-channel with zero requirements for physical distribution. Bank 4.0 is very different from digital banking where an online system is only limited as an alternative distribution channel for banks and physical encounters between banks and customers are absolutely necessary. Bank 4.0 is more than a place for storing money, means of payment, and credit utilities. Bank 4.0 is about the ability to access the utility of banking wherever and whenever you need a money solution, in real time, tailored to your unique behaviors (King, 2018).

Millenial Customer

Millennials are demographic cohort that directly follows Generation X, pinned to individuals who reach adulthood around the turn of the 21st century (Zemke et al., 2000). Some experts have researched into millennial generation (for example: Kaifi et al., 2012; Andert, 2011; Prensky, 2001), but there is no standard definition that describes this generation. In this study, the millennial generation refers to the generation born during the period of 1980 to 2004, who grow

up and is familiar with computers, online connected networks, social media, such as YouTube, Facebook, Twitter, Groupon, Foursquare, Instagram, and Tumblr (Burstein, 2013), and they are "digital natives" (Prensky, 2001 and King, 2018).

They tend to easily adjust to new programs, operating systems (OS), and devices. Some experts identify millennial characteristics as: confident, connected, open to change (Lenhart et al.,2010); creative, connected, and confident (Ali dan Purwandi, 2016); technologically savvy, civic-oriented, conscious, global citizens, entrepreneurial, flexible, pragmatic idealists, authentic, transparent, progressive, confident, team-oriented, multi-taskers, impatient, adventurous (Korobka, 2018); mobile first, networks, expecting personalization, passionate about values (Lenhart et al, 2015; Fromm & Garton, 2013; Smith, 2011); digital native (Prensky,2001).

Customer Experience

Customer experience is customer's cognitive and affective assessment of all direct and indirect encounters with the firm relating to their purchasing behavior (Klaus and Maklan, 2013). Some experts have observed the dimensions of experience, including: sensory, affective, intellectual, and behavioral (Brakus et al., 2009); environment, benefits, accessibility, convenience, utility, incentive and trust (Knutson et al., 2007); sense, feel, think, act, relate (Schmitt, 1999); hedonic, interactive, novelty, comfort, safety and stimulation (Otto et al., 1996); customer interaction, presence of other customers, employees, servicescape, convenience, customization, value addition, speed, core service, service process, marketing mix, online functional elements, online hedonic elements, online aesthetics (Garg et al., 2014). The many differences in the results of these studies, which mean that there has been no consensus among experts, are research gap, which opens up opportunities for researchers to examine the dimensions of Bank 4.0 experiential quality further.

The dimensions of the Bank 4.0 experiential quality based on millennial generation perceptions were obtained by constructing the experience dimensions from previous research, which were adjusted to the characteristics of Bank 4.0 and millennial customers. Figure 1 explains the flow of the dimensions of Bank 4.0 experiential quality based on the perspective of the millennial generation. The six dimensions that were constructed theoretically were functional quality, convenience, innovation, trust, value, risk mitigation and security, which would then be tested empirically in this research by using surveys. Furthermore, to prove this point of view, hypothesis testing was conducted as follows.
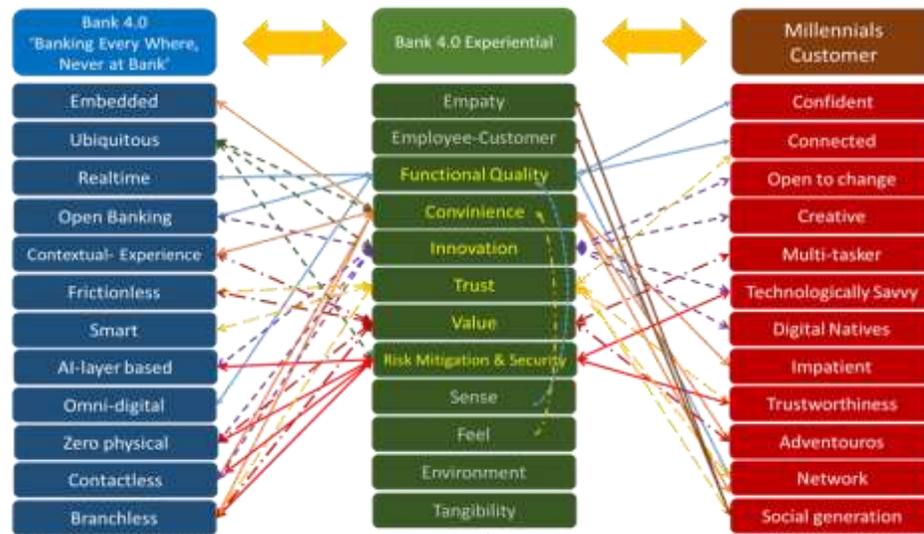
Figure 1. The flow of the Dimensions of Bank 4.0 Experiential Based on Millennial Perspective

Functional quality relates to aspects of functionality, activities, and interactivity components of Bank 4.0 (as Garg et al. (2014) argued regarding digital banking), which consist of attributes of: easy to navigate, interactive, clear, simple and intuitive interface, user-friendly (Mbama et al, 2018; Keisidou et al, 2013; Garg et al, 2014; Lee & Chung , 2009; Monferrer-Tirado et al, 2016). These attributes are related to the characteristics of Bank 4.0, namely, real-time, open banking, and omni-digital (King, 2018), and the characteristics of millennials, namely, being connected (Lenhart et al., 2010; Ali & Purwandi, 2016) and network (Lenhart, 2010). Hence, this research proposed:
H1. Functional quality is a dimension of Bank 4.0 experiential quality.

Meanwhile, convenience relates to convenience in using Bank 4.0 services whose attributes include comfort, speed, and being hassle-free (Mbama et al., 2018; Garg et al., 2014; Keisidou et al., 2013; Knutson et al., 2007; Karatepe et al., 2007). 2005; Klaus & Maklan, 2013; Jun & Palacios, 2016; Harrison et al, 2014). This dimension is closely related to the characteristics of Bank 4.0, namely, embedded, contextual

experience, contactless, and branchless, and also closely related to the characteristics of the millennial generation, which are impatient, flexible, open to change, expecting personalization, adventurous, and networking. Hence, this research proposed:
H2. Convenience is a dimension of Bank 4.0 experiential quality.

The next dimension is innovation, which is about the development of Bank 4.0 services, which indicates better service, improving uptake and experience through innovation, and providing recreation, entertainment and leisure (Mbama et al, 2018; King, 2018; Dootson et al, 2016; Rogers, 2003 ; Berry et al., 2010). This dimension relates to the characteristics of Bank 4.0, which are open banking, AI-based layer, zero physical distribution, contactless, and smart (King, 2018), and millennial generation characters, which are open to change, creative, progressive, technologically savvy, and digital natives (Lenhart et al., 2010; Prensky, 2001). Hence, this research proposed:
H3. Innovation is a dimension of Bank 4.0 experiential quality.

Trust is the level at which Bank 4.0 service proposition information is considered

trustworthy, as the opinion expressed by Keisidou et al, (2013) and Mbama et al, (2018) regarding digital banking. Trust attributes include: image, perceived protection of security, brand credibility, the quality of information, protection of privacy (Keisidou et al., 2013; Liang et al., 2009; Fathollahzadeh et al., 2011; Knutson et al., 2007; Mbama et al., 2007). 2018; Levy & Hino, 2016). These attributes are closely related to the characters of Bank 4.0, namely, frictionless, branchless and smart (King, 2018), and in accordance with the characters of millennial customers, namely, trustworthiness, transparent, connected, networking, and social generation (Lenhart, 2015; Fromm & Garton 2013; Smith, 2011). Hence, this research proposed:

H4. Trust is a dimension of Bank 4.0 experiential quality.

Value is a trade-off between costs and benefits (Dootson et al, 2016), with attributes, among others, saving money, saving time, usefulness, enjoyment, better online deal, added value (Knutson et al, 2007; Keisidou et al., 2013; Garg et al., 2014; Fathollahzadeh et al., 2011; Mbama et al., 2018). These items pertain to four Bank 4.0 characteristics, namely, contextual experience, frictionless, branchless, and zero physical distribution, and pertain to characteristics of millennial generation: passionate about values and adventures. Hence, this research proposed:

H5. Value is a dimension of Bank 4.0 Experiential quality.

Risk mitigation and security are the key factors affecting the quality of Bank 4.0 services (Jun & Palacios, 2016; Mbama et al, 2018) with attributes including: security, saving, being reliable, protection from fraud, and protection from cyber-attack (Martins et al, 2014; Mbama et al, 2018; Akinci et al, 2003; Hanafizadeh et al, 2014; Jun & Palacios, 2016; Otto & Ritchie, 1996). These items are closely related to the

characteristics of Bank 4.0, namely, AI-based layer, zero physical distribution, contactless, and branchless, and are closely related to the characters of millennial customers, namely, technologically savvy and trustworthiness. Hence, this research proposed:

H6. Risk mitigation and security are dimensions of Bank 4.0 Experiential quality.

Research Method

This research employed questionnaires that were distributed via social media. Before the main questionnaires were distributed, a pilot test was conducted first. Content validity was tested first by holding discussions with three banking experts, research practitioners, and academics to ensure that the questionnaire items were complete, not ambiguous, and can be understood by respondents. Research was conducted in Malang, Indonesia, with the consideration that Malang is one of the centers of education with 45% of the population being the millennial generation (Statistics Indonesia (BPS), 2020). Research was conducted in May 2020 and as many as 44 respondents participated in the pilot test. Based on the Spearman's rank correlation coefficient criteria > 0.5 and Cronbach's alpha value ≥ 0.70 (Ghozali, 2014), it can be concluded that the designed questionnaire had good validity and reliability, so that the main questionnaires were eligible to be distributed to target respondents.

Furthermore, the main questionnaires were distributed and as many as 688 respondents participated, but only 673 respondents met the criteria. The recommended sample size for marketing study tests is at least 200 (Malhotra, 2012), so that the sample size of 673 had met the minimum sample criteria. Partial least square was employed to analyze data with three-step analysis, namely: outer model, inner model, and hypothesis test. Outer model is for describing the

relationship between indicator blocks and their latent variables by conducting a test for 3 indicators called convergent validity, discriminant validity, and uni-dimensionality. Meanwhile, inner model is for predicting causality between latent variables or testing a hypothesis by conducting test for 3 indicators, namely: coefficient of determination (R2), predictive relevance (Q2), and Goodness of Fit Index (GoF). The third step was hypothesis test, which in this research, the confidence level was set at 95%. A 5-point Likert scale was used for measurement. Respondents specified their level of agreement to a statement typically in five points from 1 (strongly disagree) to 5 (strongly agree).

Discussion

Respondent's Profile
The demographic profile of the respondents is as follows: 60% of respondents were women, 57% of respondents aged 16-20 years, 85% of the marital status of respondents was single, 70% of respondents were high school graduates, 59% of respondents were Instagram active users, and 49% of respondents were OVO customers. A more comprehensive demographic profiles are shown in Table 1.

Outer Model Evaluation
Outer model evaluation was conducted by testing convergent and discriminant validities and unidimensionality of each item. Convergent analysis was tested by outer loading, which is said to be valid if the outer loading value for each item is above 0.7 and the Average Variance Extracted (AVE) score is above 0.5 for each construct (Hair et al., 2014).

Table 1. Respondent Profile and Frequency Information

Variable	Criteria	Frequency	Percentage
Gender	Male	270	40.12
	Female	403	59.88
Age	16-20	381	56.61
	21-25	163	24.22
	26-30	58	8.62
	31-35	29	4.31
	36-40	42	6.24
Marital Status	Single	569	84.55
	Married	104	15.45
Educational level	Junior High School	1	0.15
	Senior High School	468	69.54
	College	13	1.93
	University	177	26.30
	Postgraduate	12	1.78
	Doctorate	2	0.30
Most used social media	Facebook	24	3.57
	Instagram	396	58.84
	Twitter	88	13.08
	YouTube	119	17.68
	Others	46	6.83
Most used Bank 4.0 aplication	BRIMO	46	6.84
	DANA	45	6.69
	GoPay	150	22.29
	Jenius	21	3.12
	LinkAja	38	5.65
	OVO	331	49.18
	Others	42	6.23

Based on the test results in this research, outer loading varied between 0.742 and 0.922 and AVE scores varied between 0.605 and 0.821. The outer model test results are shown in Table 2. The second step was to test discriminant validity, where the model is said to meet the criteria if the square root of AVE is greater than correlations between constructs (Fornell and Larker, 1981). Table 3 shows a comparison of the square root of AVE (which is in parentheses) and the correlation with other constructs. The results proved that the model in this research did not have discriminant validity issues. Unidimensionality test employed composite reliability to ensure that the constructs used are unidimensional. The model is said to have no unidimensionality issues if the constructs have composite reliability above 0.7 (Chin, 2010). Table 2 shows that composite reliability varied between 0.860 and 0.932, so it can be said that all constructs were unidimensional.

Inner Model Evaluation

The next model test was the inner model evaluation, which was conducted by examining the coefficient of determination (R2), predictive relevance (Q2), and GoF. The first test was by using the coefficient of determination, which is categorized into three classes: 0.19 (weak), 0.33 (moderate), and 0.67 (substantial) (Chin et al., 2008). Based on PLS estimates, coefficients of determination for functional quality, convenience, innovation, trust, and value were perceived to be substantial (R2 between 0.700 and 0.802), while risk mitigation and security were perceived to be between moderate and substantial (R2 = 0.497). The second inner model test was conducted by using Stone-Geisser test of predictive relevance (Q2), which explains how to measure the level of well-observed values which are restructured by the model and its parameters (Chin, 2010). Endogenous constructs are said to have predictive relevance if Q2 is greater than 0 (Hair et al., 2014). In this research, Q2 values varied between 0.268 and 0.387. Because the Q2 values were greater than 0, it meant all constructs had predictive relevance. Meanwhile, the third inner model test employed GoF. A GoF value of 0.10 is considered small, while a GoF value of 0.25 is considered medium and 0.36 is considered large. In this research, the GoF value was 0.682, which meant the GoF value was considered large. Based on R2, Q2, and GoF evaluations, it can be concluded that the proposed structural model was robust, so that hypothesis testing could be conducted.

Table 2. Outer Loading, AVE, Composite Reability

Variabel	Item	Outer Loading	AVE	CR
Functional Quality (FQ)	(FQ1) Interactive	0,742	0.605	0,884
	(FQ2) Clear Information	0,781		
	(FQ3) Easy to navigate	0,830		
	(FQ4) Easy to do business online	0,702		
	(FQ5) Simple and intuitive interface	0,828		
Convenience (CON)	(CON1) Comfort	0,863	0.735	0,892
	(CON2) Speed	0,860		
	(CON3) Hassle-free	0,848		
Innovation (INO)	(INO1) Better services	0,870	0.738	0,894
	(INO2) Improving uptake and experience through innovation	0,869		
	(INO3) Investment in R&D	0,838		
Trust (TR)	(TR1) Choosing	0,785	0.672	0,860
	(TR2) Using and staying with bank due to brand and trustworthiness	0,845		
	(TR3) Protection of privacy	0,828		
Value (VAL)	(VAL1) Save money	0,723	0.679	0,913
	(VAL2) Save time	0,867		
	(VAL3) Usefulness	0,855		
	(VAL4) Enjoyment	0,865		
	(VAL5) Better deal online	0,800		
Risk Mitigation and Security (RS)	(RS1) Security	0,888	0.821	0,932
	(RS2) Fraud	0,922		
	(RS3) Cyber-attack	0,909		

Table 3. The Comparison Between Square Root of AVE and Correlations

	Convinience	Functional quality	Innovation	Risk mitigation & security	Trust	Value
Convinience	(0.857)					
Functional quality	0.771	(0.778)				
Innovation	0.744	0.713	(0.859)			
Risk mitigation & security	0.506	0.476	0.535	(0.906)		
Trust	0.645	0.630	0.687	0.701	(0.820)	
Value	0.725	0.748	0.755	0.507	0.674	(0.824)

Hypothesis Test

Hypotheses 1 to 6 stated that functional quality, convenience, innovation, trust, risk mitigation and value are dimensions of the Bank 4.0 experiential quality. Decision on hypothesis acceptance in this research was made with the provisions of values of t-distribution table (two-tailed) specified in this research, which was 1.96 for a

significance level of 0.05. PLS score calculation shows that all t-statistics were less than 1.96, with p-values less than 0.05 and 95% confidence interval. This result was enough to reject H0. In conclusion, these results supported Hypotheses 1 to 6. A summary of the hypotheses tests is shown in Table 4.

Tabel 4. Hypothesis Test

Hipotesis	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
H1	*Bank 4.0 Experiential → Functional Quality*	0.875	0.875	0.010	87.059	0.000*
H2	*Bank 4.0 Experiential → Convenience*	0.867	0.867	0.011	81.171	0.000*
H3	*Bank 4.0 Experiential → Innovation*	0.873	0.873	0.010	88.339	0.000*
H4	*Bank 4.0 Experiential → Trust*	0.836	0.837	0.012	68.924	0.000*
H5	*Bank 4.0 Experiential → Value*	0.895	0.895	0.009	102.138	0.000*
H6	*Bank 4.0 Experiential → Risk Mitigation & Security*	0.705	0.705	0.021	34.180	0.000*

* Significant at p value < 0,05

Conclusion

The main purpose of this research was to answer the problems that were constructed systematically in research questions. Based on the theories and assumptions that were made and empirical data that were successfully collected, the results of the research and their implications can be obtained and will be explained in this section.

Functional quality was found as a dimension of Bank 4.0 experiential quality. The results of this research supported previous research, which stated that functional quality influenced the use of mobile banking (Lee & Chung, 2009) and had a positive effect on customer experience (Garg et al, 2014; Mbama et al, 2018). Reflective indicators of functional quality, namely interactive, clear, user friendly, providing convenience, and flexibility, supported the findings of previous research (Mbama et al, 2018; Keisidou et al, 2013; Garg et al, 2014; Lee & Chung, 2009; Monferrer-Tirado et al, 2016). Although Bank 4.0 is a sophisticated technology, Bank 4.0 developers should design a funky, simple, user friendly, and attractive interface for millennial customers.

Convenience and its inherent attributes, namely, comfort, speed, and being hassle-free, were found as positive dimensions of Bank 4.0 experiential quality. This finding supported previous research, which stated that convenience had a positive effect on customer experience (Garg et al, 2014; Klaus & Maklan, 2013), which was related to offline and online activities (Garg et al, 2014. The results of this research refuted the results of research conducted by Mbama et al (2018) on digital banking in the UK, which did not find a significant positive relationship between convenience and experience. This research showed that convenience can be improved through flexible 'customized platforms' and applications that can shorten financial transaction time.

Innovation and its inherent attributes, namely, better services, improving uptake and experience through innovation, and investment in R&D, were found as dimensions of Bank 4.0 experiential quality. These results supported previous research, which stated that innovation positively affected experience (Oh & Teo, 2010). This result refuted the results of research conducted by Mbama et al (2018) on digital banking in the UK, which did not find a

significant relationship between innovations and experience.

Strategies that can be proposed to improve innovations include expanding payment networks, instant credit, automatic scheduled transfers, personal financial statement menus, personal cash management, etc.

Trust and its inherent attributes, namely, choosing, using and staying with the bank due to brand and trustworthiness and protection of privacy, were also found to be positive dimensions in Bank 4.0 experiential quality. The results of this research supported previous research, which stated that trust affected the choice of bank customers (Liang et al, 2009; Fathollahzadeh et al, 2011; Knutson et al, 2007). This research refuted the research conducted by Mbama et al (2018) on the digital banking sector in the UK, which did not find a significant positive relationship between brand trust and customer experience. Bank 4.0 can increase trust by keeping promises, fast responding to customer complaints, and maintaining a positive image.

Value was found as a dimension of Bank 4.0 Experiential Quality based on millennial customer perceptions. This finding confirmed previous research, which stated that value was a key factor for banks (Keisidou et al., 2013; Liang et al., 2009; Garg et al., 2014; Fathollahzadeh et al., 2011) and value had a positive effect on customer experience (Mbama et al., 2018; Keisidou et al., 2013; Garg et al., 2014; Fathollahzadeh et al., 2011; Liang et al., 2009; Chang & Lin, 2015; Dootson et al., 2016). This research also discovered that value was the most dominant dimension in Bank 4.0 experiential quality. To increase value, Bank 4.0 can work on it by offering

transaction costs that are relatively cheaper than the transaction costs of conventional banking and providing bonuses, rewards, marketing gimmicks, and other additional benefits. However, Bank 4.0 must calculate carefully the costs and benefits so as not to get trapped into cash burn strategy like most start-up companies. This was consistent with the findings of this research that the 'saving time' attribute was stronger than 'saving money' attribute. So, in order to increase value, Bank 4.0 should focus more on initiatives to increase transaction speed, not just on price wars and excessive discounts.

Risk mitigation and security were found as dimensions in Bank 4.0 experiential quality. The results of this research supported previous research, which discovered that risk perception affected the use of digital banking in several countries (Martins et al., 2014; Akinci et al., 2003) and that there was a negative relationship between risk perception and customer experience, which meant that increased risk in digital banking would reduce the level of customer experience (Mbama et al, 2018). Risk mitigation and security were the weakest dimensions in Bank 4.0 experiential quality. This finding was in accordance with the characteristics of millennial customers who are progressive, confident, impatient, adventurous (Korobka, 2018). They are the generation who dare to take risks or in other words, risk factors are not the first consideration in choosing Bank 4.0 services.

This research founded six attributes that were empirically proven to be the dimensions of Bank 4.0 experiential quality. The results of this research contribute to the development of knowledge about experience (Garg and Rahman, 2014; Otto and Ritchie, 1996; Hosany and Gilbert, 2009; Brakus, Schmitt and Zarantonello, 2009; Knutson, Beck, Kim, and Cha, 2007; Schmitt, 1999 ;

Nigam, 2012); electronic banking (Amin, 2016; Mbama et al., 2018; King, 2018; Lee and Chung, 2009; Martins et al., 2016); millennials customer (Ali and Purwandi, 2016; Burstein, 2013; Fromm and Garton, 2013; Lenhart et al.,2010).

Limitations and Future Research

To obtain research data, questionnaires were distributed via WhatsApp group(s). During data collection process, there were problems that commonly occur in questionnaire instrument, such as low response rates and lack of anonymity (Ritter & Sue, 2007). Also found were problems where the data were invalid because the questionnaires were not filled out correctly or the answers did not reflect the millennial profile. The questionnaires employed closed-ended questions that can limit respondents from giving their own opinions, meaning that the answers given did not fully reflect their opinions. The sampling method was purposive sampling, which is a cost-effective way of collecting data, but can be exposed to the risk of under-represented groups of respondents. Demographic distribution was still limited in the Malang region. By online method, this survey could actually be conducted in a wider area with a larger sample size, but in the face of time and resource constraints, it was not possible. The location of this research needs to be extended to several regions in Indonesia. With the help of social media, it is very possible to do. The proportion of financially independent millennial respondents also needs to be increased in order to be a counterbalance and produce more comprehensive research. This research may also be developed by a mixed method, which is by conducting interviews with the officials of Bank 4.0 (commercial banks and fintech companies), regulators, and customers so that a comparison can be obtained. Further research can be developed with new dimensions that may emerge along with the development of Bank 4.0. The conceptual framework of this research can be applied by Bank 4.0 actors (in both commercial banks and fintech companies) by using their customer database to develop marketing strategies and verify how the experiential quality of bank performance is. The framework model will be useful for predicting future sales and profitability of Bank 4.0. The framework can also be adopted, replicated, or applied to other financial businesses, for example: pawnshops, multifinance, and insurance companies. Those three businesses are mostly still running their activities conventionally. If they do not immediately adopt platform 4.0, it is feared they will be gradually left behind. The experiential dimensions in the three businesses must, of course, be adjusted to the characteristics of each business. It opens up opportunities for further researchers to develop other dimensions.

Notes on Contributors

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