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### Factors Positively Affecting Customer Loyalty of Online Banking Users of Employees in Bang Rak District in Bangkok

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### **Abstract**

The purpose of this paper was to examine the positively effect of structural assurance, personal need, personal innovativeness, facilitating condition, design, convenience, privacy and security concerns, as well as consumer engagement towards customer loyalty of online banking users of employees in Bang Rak district in Bangkok. Total samples of 252 employees of online banking users collected from January to February 2018. The data were analyzed by using Multiple Regression Analysis and the researchers found that consumer engagement ( $\beta$  = 0.333), personal need ( $\beta$  = 0.251), convenience ( $\beta$  = 0.233), and personal innovativeness ( $\beta$  = 0.229) respectively accounted for 65.6% positively affecting customer loyalty of online banking users of employees in Bang Rak district in Bangkok with statistical significant at .01.

Keywords: Online banking, Online banking users, Customer loyalty

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#### Introduction

Bank of Thailand or BOT started recording data for online banking since the year of 2010. Then, there has been a steady growth for the number of online banking users for both the Internet and mobile banking. The users for both of this services in general have continued to increase from its previous year until 2014. After 2014, the increase for the number of customers applied for mobile banking services was faster than the increase of the Internet banking customers. To illustrate, Internet banking services have increased of approximately 26% accounting for 10,159,971 users while mobile banking have increased of 435% accounting for 6,229,960 customers from 2013-2014 (Bank of Thailand, 2018). Today, the trend has changed as the high frequency usage and large customer base, the volume and value of mobile banking funds transfer still registered a remarkable growth suggesting that the majority of people started to recognize the benefits and were becoming more familiar with this channel of service (Banchongduang, 2018). Moreover, many banks also try to improve and develop their digital banking platforms as well as their infrastructure for online banking because online transactions are able to provide them opportunities to improve banks' operation cost efficiencies (AsianBankingandFinance, 2018).

However, in terms of the concept theories of *structural assurance*, in Internet banking environment was related to protective legal and technological mechanisms, encryption, promises/guarantees, insurances, regulations, privacy policy, third-party seals and other procedures in the Internet to assure users that Internet banking transactions could be conducted in a safe and secure manner (Simpe, Henry, Feehi, & Igor, 2017). Moreover, concept theories of *personal need or personal requirement* could be separated into four categories (Pousttchi & Schurig, 2004). First, technical category should be accessible in different kinds of devices and network operators and should adapt automatically. Second, usability category would be accessing the data without network disruption and having quick access to information. Third, design category referred to option to personalize data, view, and access more information and services if needed. Lastly, security requirements' category meant the data transmitted should be encrypted and authorized so only the entitled person could view and access the data. In addition, concept theories of *personal innovativeness* was "the willingness of an individual to try out any new information technology" as defined by Agarwal and Prasad (1998). The researchers also indicated that if those individuals were identified, they could act as the front runners giving their opinions to the new technology or as guiders to those such as mobile banking implementations.

Concept theories of *facilitating condition* referred to the external controls related to the adoption of environment such as the existence of trusting environment which affected the users' expectation in adoption of mobile services and technologies such as technical support as an external variable in system



usage and as anchors to inform the ease of use of mobile technologies (Xu & Gupta, 2009). Facilitating condition also referred to the new technologies adoption and diffusion as facilitating condition making it less difficult to the adoption behavior by sustaining usage while removing any obstacles to adoption (Venkatesh, Morris, Davis, & Davis, 2003). Moreover, concept theories of design or aesthetics were not only related to the design solutions such as selection of colors, layouts, styles, and icons, which could help the consumers to guide through an application (Manon, Sandrine, Isabelle, & Lova, 2017; Tarute, Nikou, & Gatautis, 2017), but also stimulated certain emotions as well such as a sense of belonging and feelings of sameness through consumer brand identification. For concept theories of convenience; Holden, Kanetkar, Colwell, and Aung (2008) referred that if service offerings were similar in a homogeneous market; where the products and services were traded the same with few differences of designs or features then the greater service convenience may have more competitive advantage. Time and effort were the example of service convenience, which could impact on customer satisfaction and affected repurchase behavior for a service organization.

Furthermore, concept theories of privacy and security concerns was an important factor to many bank customers especially those who used electronic banking service to the extent that some customers were even discouraged from performing businesses with firms that did not enable customer privacy online. As a result, ensuring customer privacy was therefore a way to which banks could build customers' trust in bank (Chen & Barnes, 2007). For concept theories of consumer engagement has been studied in a number of disciplines since the beginning of 21st century (Brodie, Ilic, Juric, & Hollebeek, 2013). It was highly related to the change of social, economic, and technological in the market which could cause changes in consumer behavior. According to Cheung, Lee, and Jin (2011), the multidimensional perspective suggested that the best representation of consumer engagement construct was combining of different dimensions which was to include cognitive, emotional, and behavioral dimensions which have been part of various studies related to consumer engagement. As an example, the browsing of mobile environment enabled users to gain more different experience which was created by a variety of features of visual and audio senses via mobile application. Features of application referred to the use of different multimedia aspects, for example, graphics, icons, and animation (Eshet, Bouwman, Zhao, & Balagué, 2015). Lastly, concept theories of customer loyalty were defined as customers' intention to revisit the website of Internet banking in the future (Ramseook-Munhurrun & Naidoo, 2011; Isa, Amin, & Fontaine, 2013). In Internet banking industry, customer loyalty meant the likelihood of customers to continue using specific website, routinely visited it, showed the desire to visit again, and stayed at the site for long time (Anderson & Swaminathan, 2011).

Therefore, in order to increase competitive advantage for online banking services of many banks today, the researchers aim to examine the positively effect of structural assurance, personal need, personal



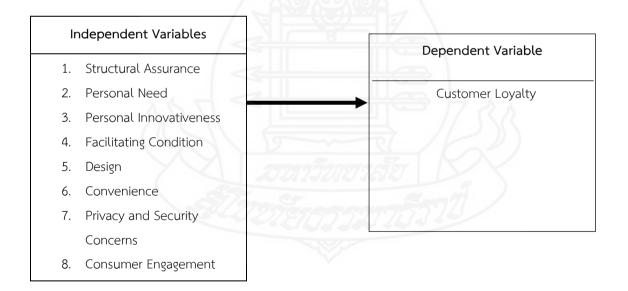
innovativeness, facilitating condition, design, convenience, privacy and security concerns, as well as consumer engagement towards customer loyalty of online banking users of employees in Bang Rak district in Bangkok. Moreover, the result of this research would be able to benefit for banking industry in order to maintain the customers, improve, and develop for more digital services in the future.

### Objective of Study

The objective of this study is to examine the positive factors that affect to customer loyalty of online banking users of employees in Bang Rak District in Bangkok.

It was hypothesizes that structural assurance, personal need, personal innovativeness, facilitating condition, design, convenience, privacy and security concerns, as well as consumer engagement had positive impact towards customer loyalty of online banking users of employees in Bang Rak District in Bangkok.

### Conceptual Framework





### Research Methodology

The applied methodology was based on the quantitative approach which included the survey method and the data collection was through questionnaires. Population and sample selection of the research were chosen by all kinds of employees who work in Bang Rak District area in Bangkok and used online banking via mobile applications or websites. The data were collected from the respondents who used online banking only during January to February 2018 and the sample size was firstly calculated from 40 pilot questionnaires by using G\*power version 3.1.9.2, created by Cohen (1977) and approved by several researchers such as Erdfelder (1996) and Wiratchai (2012). The calculation was with the Power (1- $\beta$ ) of 0.9, Alpha ( $\alpha$ ) of 0.1, Number of Test Predictor of 8, Effect Size f² of 0.06581657 (Calculated by Partial R² of 0.06175225). As the result of G\*power calculation, the minimum number of the total sample size was 252 (Cohen, 1977). Therefore, the number of survey collection from participants were a total of 252 set of questionnaires. After collecting data, and analyzed by using SPSS statistics version 25, the Cronbach's Alpha Coefficient of each factor was computed and had result value between 0.67-0.892. All of alpha coefficient was passed the suggested level of 0.65 (Nunnally, 1978) and had proven to be reliable. Research Results

The majority of respondents were females with the age between 24-29 years old. They were singles and had Bachelor degrees. They were employees in private companies and had the range of income between 15,001 to 30,000 baht per month. Majority of them used online banking via Kasikorn Bank (K-Cyber banking and K Plus) in order to transfer money between their accounts or transfer to other accounts several times per week. Their accessing time via online banking was less than or equal to 5 minutes, and the funds for each transaction were between 501-1,500 baht.

In addition, based on hypothesis, the analysis results could be concluded that there were four accepted hypotheses, which were consumer engagement ( $\beta$  = 0.333), personal need ( $\beta$  = 0.251), convenience ( $\beta$  = 0.233), and personal innovativeness ( $\beta$  = 0.229) respectively had positive effect on customer loyalty at statistically significant level of .01. Moreover, all of them were shown to be positively affecting to customer loyalty towards online banking at 65.6% while the rest at 34.4% were not applied in this research. Also, the result of Variance Inflation Factor (VIF) values of each independent variable were not exceeded by 4, which referred to there had no Multicollinearity among independent variables as well as the standard error was ±0.231 by the following equation; Y (Customer Loyalty) = -0.023 + 0.333 (Consumer Engagement) + 0.251 (Personal Need) + 0.233 (Convenience) + 0.229 (Personal Innovativeness) as shown in Table 1:



Table 1: Multiple Regression Analysis (Modified Model)

Dependent Variable : Customer Loyalty, $R = 0.810$ , $R^2 = 0.656$ , Constant(a) = -0.023					
Independent Variables	β	Std. Error	I	<u>Sig</u>	<u>Tolerance</u> <u>VIF</u>
(Constant)		0.231	-0.098	0.922	
Structural Assurance (SA)	-0.012	0.041	<b>-</b> 0.239	0.811	0.602 1.662
Personal Need (PN)	0.251**	0.063	4.170	0.000	0.390 2.565
Personal Innovativeness (PI)	0.229**	0.046	4.355	0.000	0.513 1.949
Facilitating Condition (FC)	0.064	0.056	1.232	0.219	0.529 1.890
Design (D)	-0.125	0.058	<b>-</b> 2.342	0.020	0.496 2.017
Convenience (C)	0.233**	0.063	4.380	0.000	0.502 1.993
Privacy and Security Concerns	0.047	0.033	1.117	0.265	0.798 1.254
(PSC)					
Consumer Engagement (CE)	0.333**	0.053	6.562	0.000	0.551 1.816

<sup>\*\*</sup>significant at the .01 level

### Discussion

Based on the hypothesis that structural assurance, personal need, personal innovativeness, facilitating condition, design, convenience, privacy and security concerns, as well as consumer engagement had positive impact towards customer loyalty of online banking users of employees in Bang Rak District in Bangkok, the analysis results could be concluded that there were only four independent variables; consumer engagement, personal need, convenience, and personal innovativeness had respectively positive effect on customer loyalty at 65.6%. The results supported the previous researches that consumer engagement had influence to users' intention for continuous usage of online applications as it was ingrained in customers' behavior that they were more or less taken for granted (Tarute, Nikou, & Gatautis, 2017). Moreover, banks had to make sure that the expectations of online banking were met customers' need accordingly as they were paying more emphasize on the efficiency of applications (Muslim, 2016). Also, consumer adoption referred to personal innovativeness and service convenience had impact on customers' satisfaction and affected to repurchase behavior, so, it was important to identify those people who were



more innovative than others, more likely to use and adopt the new technology. The banks should launch campaigns targeting those identified segments (Madhurima & Aarti, 2017).

#### Recommendations

For managerial implication, the results of this research should benefit banking industry to continue and improve their online banking services for their loyal customers by emphasizing on consumer engagement, personal need, convenience, and personal innovativeness respectively. For academic implication, theories of customer loyalty had been extended with theories of consumer engagement, personal need, convenience, and personal innovativeness. Future research may focus on a larger-scale of employees in different areas in order to expand understandings about customer loyalty towards online banking from employee users.

### References

- Agarwal, R., & Prasad, J. (1998), A Conceptual and Operational Definition of Personal Innovativeness in the Domain of Information Technology. *Journal of Information Systems Research*, 9(2), 204-215.
- Anderson, R., & Swaminathan, S. (2011), Customer satisfaction and loyalty in e-markets: A PLS path modeling approach. *The Journal of Marketing Theory and Practice*, 19(2), 221-234.
- AsianBankingandFinance. (2018). Thailand's digital banking shift to boost banks' revenue.

  Retrieved on 20 May 2018, from https://asianbankingandfinance.net/banking
  technology/news/thailands-digital-banking-shift-boost-banks-revenue
- Banchongduang, S. (2018). The dawn of digital banking: As financial services compete to lower fees on mobile transactions, customers weigh the costs of the new payment trend.

  Retrieved on 25 May 2018, from
- https://www.bangkokpost.com/news/specialreports/1450247/the-dawn-of-digitalbanking Bank of Thailand. (2018). *PS PT 009 Use of Mobile Banking and Internet Banking 1/*.

Retrieved on 19 June 2018, from

http://www2.bot.or.th/statistics/BOTWEBSTAT.aspx?reportID=688&language=ENG Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, 66(1), 105-114.



- Chen, Y. H., & Barnes, S. (2007). Initial trust and online buyer behaviour. *Industrial Management & Data Systems*, 107(1), 21-36.
- Cheung, C., Lee, M., & Jin, X. (2011). Customer Engagement in an Online Social Platform: A Conceptual Model and Scale Development (Vol. 4).
- Cohen, J. (1977). Statistical Power Analysis for the Behavioral Sciences. New York: Academic Press.
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program.

  Behavior Research Methods Instruments & Computers, 28(1), 1-11. doi:10.3758/BF03203630
- Eshet, E., & Bouwman, H. (2015). Addressing the Context of Use in Mobile Computing:

  A Survey on the State of the Practice. *Interacting with Computers*, 27(4), 392-412.

  doi:10.1093/iwc/iwu002
- Holden, A. L., Kanetkar, V., Colwell, S. R., & Aung, M. (2008). Toward a measure of service convenience: Multiple-item scale development and empirical test. *Journal of Services Marketing*, 22(2), 160-169.
- Isa, Z., Amin, M., & 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.
- Kwame Simpe, O., Henry, B., Abednego Feehi, O., & Igor, G. (2017). Examining customers' continuance intentions towards internet banking usage. *Marketing Intelligence & Planning*.
- Madhurima, D., & Aarti, A. (2017). Factors impacting the adoption of m-banking:

  Understanding brand India's potential for financial inclusion. *Journal of Asia Business Studies*, 11(1), 22-40.
- Manon, A., Sandrine, P., Isabelle, B., & Lova, R. (2017). Mobile banking service quality and customer relationships. *International Journal of Bank Marketing*, 35(7), 1066-1087. doi:10.1108/IJBM-10-2015-0150
- Muslim, A. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, 34(3), 280-306.
- Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill.
- Pousttchi, K., & Schurig, M. (2004, 5-8 Jan. 2004). Assessment of today's mobile banking applications f rom the view of customer requirements. In *Paper presented at the 37th Annual Hawaii International Conference on System Sciences 2004*, Big Island, HI, USA.
- Ramseook-Munhurrun, P., & Naidoo, P. (2011). Customers' Perspectives of Service Quality in Internet Banking. *Services Marketing Quarterly,* 32(4), 247-264.
- Tarute, A., Nikou, S., & Gatautis, R. (2017). Mobile application driven consumer engagement. *Telematics* and *Informatics*, 34(4), 145-156.



- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003), User acceptance of information technology: toward a unified view, *The Journal of MIS Quarterly,* 27(3), 425-478.
- Wiratchai, N. (2012). Interested sample size and statistical analyzes determination. Bangkok: National Research Council of Thailand.
- Xu, H., & Gupta, S. (2009). The effects of privacy concerns and personal innovativeness on potential and experienced customers' adoption of location-based services, 19.
- Zhao, Z., & Balagué, C. (2015). Designing branded mobile apps: Fundamentals and recommendations. *Business Horizons*, 58(3), 305-315.

