

The Influence of Service Quality and Advertising Messages on Intention to Use Mobile Banking Service: (Case Study in BPR-KS Bandung)

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Abstract: Bank Perkreditan Rakyat Karyajatnika Sadaya (BPR-KS) is a Bank which have made an introduction of mobile banking services in February 2012, the introduction was due to this company faces a trend regarding product marketing services, that is mobile banking. Regarding this mobile banking, the company uses media campaign as a mean to inform the presence of these services to customer. BPR-KS Mobile banking advertising has been done in several media such as "Pikiran Rakjat" - an outstanding newspaper in Bandung, Megatron screen, Brochure and Flyer, which are available at every BPR-KS branches in Bandung. However, the performance is not in accordance with management's expectations, after the launching, until 2013, only 1,290 out of 50,000 customers or 0.384% who makes registration and transactions through mobile banking. The Authors assumed that the low of using mobile banking is due to service quality and advertising messages of the mobile banking. This study aimed to examine the effect of service quality and advertising messages on intention to use mobile banking in BPR-KS. This research shows that Quality of service and advertising messages both together influence the intention to use mobile banking services BPR-KS, but the variance contribution is only 11.22%. The Authors also made some recommendations regarding the research problem identified.

Keywords: Service Quality, Advertising messages, intention, and mobile banking

1. Introduction

Bank Perkreditan Rakyat Karyajatnika Sadaya (BPR-KS) is a one of The Indonesia Banks, which have made the introduction of mobile banking services; it is introduced in February 2012. BPR-KS Mobile banking advert has done in several media such as newspaper "Pikiran Rakyat" an outstanding newspaper in Bandung, Megatron screen, Brochure and Flyer that are available at any branch specifically in BPR KS branch in Bandung. The sample of brochure and advertising are presented in figure 1 to 3. Along with the development of technology and understanding of Indonesian community towards smart phones technology such as Android, BlackBerry, iPhone, and other mobile phone platforms whom already have the service to access the Internet directly from their cell phone, then this service is a service alternative to ease the present transaction banking services including mobile-banking, which was first introduced in Indonesia by BCA (Bank Central Asia).

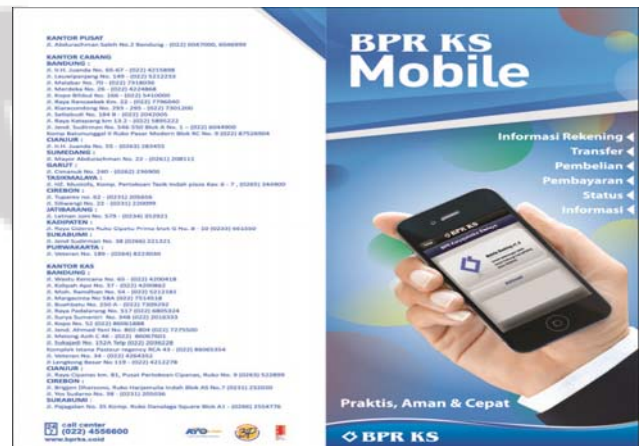


Figure 2: BPR-KS mobile banking brochure



Figure 1: BPR-KS Mobile banking advertising



Figure 3: BPR-KS mobile banking facilities and features flyer

Mobile banking services in BPR-KS began in January 2012, customers who register and do the activation on mobile-banking applications until the second quarter of 2012 is 1.920 users, while customer data is recorded on customers' core banking system is 500,000, so that the ratio of activated mobile-banking users to recorded customers is 0.384%. It indicates that the intention to use mobile banking services is low. The low of customer's intention to use mobile banking services which expressed in registration of mobile-banking is a concern of managers, especially to create a sales or transactions through mobile-banking services, since the transactions costs through mobile banking is lesser than manual system, especially regarding the human resources cost.

Table 1: BPR Karyajatnika Sadaya (BPR-KS) Mobile-Banking register in 2012

Month	BB	Android	iPhone	Total	Difference	Percentage
Jan	28	16	7	51	-	-
Feb	217	74	17	308	257	504%
March	97	33	8	138	-170	-55%
April	304	58	10	372	234	170%
May	268	96	12	376	376	101%
June	145	77	20	242	-134	-36%
July	137	76	19	232	-10	-4%
August	126	57	18	201	-31	-13%
Sept	-	-	-	-	-201	-100%
Oct	-	-	-	-	-	-
Nov	-	-	-	-	-	-
Dec	-	-	-	-	-	-
Total	1322	487	111	1920	-	-
%	68.85%	25.36%	5.78%	100%	-	-

Source: Information Technology Data Center Department of BPR KS, 2012

Table 1. Shows a decline trend in the number of customers who register mobile banking, especially in May to August 2012. On the other hand, Micro and Retail Banking Director of Bank Mandiri Budi G. Sadikin (www.analisadaily.com) revealed that in Indonesia - in the last five years the use of mobile banking-by-banking customers increased significantly with an average increase of 135.3% per year. In 2003 a new mobile banking users about 315 thousand people, but four years later (2007) to 8.2 million people. In addition, in 2008 is expected to increase by 50% to approximately 12.32 million people. Currently, almost all banks are applying mobile-banking services. Bank Mandiri for example, targets 1 million users active "mobile banking" service at the end of 2012 through the application of "self-mobile" that can be used through a smart telephone, iPhone and Android, mobile banking users currently consists of Bank Mandiri as many BlackBerry users (64%), Android (23%) and iPhone (13%). "Volume of mobile-banking transactions jumped by 42 percent in the January-March period, amounting to 8, 7 billion with 46.6 million users," (see Table 2)

Table 2: Mandiri Bank Mobile banking transactions condition in 2012

No	Type	Percentage	Users Total	Total
1	Android	23%	46.6 million	10.718.000
2	BlackBerry	64%		29.824.000
3	iPhone	13%		6.058.000
			Total	46.600.000

(Source: www.analisadaily.com)

Comparing Table 1 to Table 2 shows that BPR-KS mobile banking programme is not as success as other bank (Bank Mandiri). This gives an overview of the need for research on service quality, advertising message, and intention to use mobile banking in BPR-KS, since the authors assumed that the low of intention to use mobile banking in BPR-KS due to service quality and advertising message. The assumptions are based on Lonial *et al* (2010) and Salazar *et al.* (2004) whom found no significant relationship between service quality and repatronage intention in hospital patient, and Khan and Khan (2012) who found that Ad does not determine the purchase intention. So that the BPR-KS mobile banking phenomenon is assumed in line with Lonial (2010) and Khan and Khan (2012) research, however, the Lonial (2010) finding is contrary to Salazar *et al.* (2004), Taylor and Baker (1994), and Cheng and Huang (2013) whom found the relationships between service quality and intentions. While the work of Khan and Khan (2012) is not in line with Pechmann and Knight (2002) whom found relationships between advertising message and behavior intention.

Based on difference between Lonial (2010) with Salazar *et al.* (2004), Taylor and Baker (1994), Cheng and Huang (2013), and also the difference between Pechmann and Knight (2002) with Khan and Khan (2012), the aim of this research is to verified the relationships between service quality and advertising, with intention to use mobile banking service. The research model is depicted in figure 4.

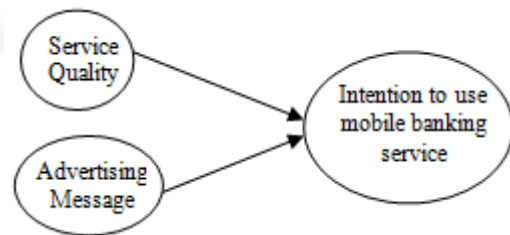


Figure 4: Research Model

2. Literature Survey

2.1 Service Quality and Intention to use mobile banking service

Product attributes is a main part of consumer products that are evaluated by (Assael, 1998: 226). Product attributes described by Assael (1998: 266) and Dharmmesta (1999) as packaging, quality, color, and other matters related with the product. Service attributes according to Assael (1998:92) is more difficult to evaluate by consumers compared to manufacturing product attributes. Service attributes that are difficult to evaluate by consumers is measured differently by some researchers. For example, the difference measurement attributes of product services performed by Parasuraman, *et al.* (1988) and Cronin and Taylor (1992). Parasuraman, *et al.* (1988) suggested the service quality, which has 5 dimensions, is the service attributes that evaluate by consumers.

Several previous researches investigate the relationships between service quality and intention to purchase or behave. Ahmed *et al.* (2011) found that there is positive relationship between elements of service quality and both customer satisfaction and repurchase intentions, except for the element

of empathy, which was found to have a negative relationship with satisfaction and repurchase intentions of customers. Research of Swaid and Wigand (2012) in multichannel retailing including “site-to-store” setting, found that the perception of service quality improves perceived value that in turn influences loyalty. Huang et al (2011) research on how and when service quality and satisfaction simultaneously influence purchase intentions, found the effects of different dimensions of service quality on purchase intentions, however the effects are not equal across satisfied and unsatisfied outpatients of 12 regional hospitals in Taiwan. On the other hand, Lonial (2010) found an insignificant relationship between service quality and behavior intention, and Salazar *et al.* (2004) found that 73.2% of the intention to recommend the hotel is explained by consumer satisfaction, but the service quality has no influence on the behavioral intention.

Fishbein and Ajzen (1975: 288) define intention to behave as a subjective probability someone to do a particular act. Fishbein and Ajzen (1975: 292) further explained that the intention associated with the four different elements, namely the behavior (behavior), object (target) the target behavior, the situation (situation) in which the behavior will be executed, and the time in which the behavior is raised.

Based on the difference of Lonial (2010) and salazar *et al.* (2004) versus Ahmed *et al.* (2011), Swaid and Wigand (2012), and the definition of intention to behave suggested by Fishbein and Ajzen (1975: 288), and the aim of this research to verified the difference, so than the first hypothesis of this research is:

H1: The perception of service quality influences intention to use mobile banking service

2.2 Advertising Message and Intention to use mobile banking service

Advertising is any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor (Kotler and Keller, 2009:512). The definition by Kotler and Keller (2009) expressed that advertising is a part of company campaign or communication to audience, in this case consumers. One of communication element is a message that evaluated by consumers and as a measure of consumer learning of the degree to which consumers accurately comprehend the intended advertising message (Schiffman and Kanuk 2000: 190). The suggestions made by Kotler and Keller (2009) and Schiffman and Kanuk (2000) revealed that message is one of important elements in communication or advertising; this can be seen from some previous research regarding advertising and intention.

Hyllegard, et al. (2011) found that consumer evaluation to advertisement is one of the variables that was strong predict of purchase intentions, the others are Attitude towards brand, subjective norm, and involvement in social causes. Burke et al. (1990) found that consumers' intentions to purchase any of the available brands of a product could be influenced by product-related announcements. Pechmann and Knight (2002) found that Subjects' beliefs and intentions about cigarette consumption were enhanced by the joint effects of advertising and peers. de Matos and Rossi (2006) found that behavioral intentions were significantly affected by CSR,

consumers' involvement with the message, perceived danger, product judgment and whether or not consumers had a car made by the brand considered.

Contrary to the some research mentioned above, Khan and Khan (2012) found that Ad does not determine the purchase intention. The difference between Khan and Khan (2012) and some previous research (Hyllegard, et al. 2011; Burke et al. 1990; Pechmann and Knight, 2002; and de Matos and Rossi, 2006) motivate the authors to verify the relationships between advertising message and intention to use mobile banking service, so that the second hypothesis of this research is:

H 2: The advertising message influences intention to use mobile banking service

3. Previous Work

On the previous work in paper of “The influence of coupon face value on service quality expectations, risk perceptions and purchase intentions in the dental industry”, Judith A. Garretson and Kennet E. Clow said that the influence of coupon face value on service quality expectations, perceived purchase risks, and purchase intentions was examined. The results indicate that while coupons positively affect the purchase intentions of dental services, the positive impact was negated by negative impacts on service quality expectations and perceived purchase risk. Further results and implications of the study for professional services are addressed

4. Methods

Analysis unit in this study is BPR KS mobile-banking users of Bandung. Until August 2012, the number of active users is 1920. (Source: Data Center-Information Technology Department BPR KS '2012). Sampling was conducted by collecting the responses from the respondents who filled out a questionnaire in 2 ways:

1. Distribution of 150 exemplars of self-administered hard copy questionnaires
2. Distribution of 52 exemplars of soft copy questionnaires via email

Random sampling was used as a data collecting method. 114 exemplars of questionnaires, which distributed via off-line way, are returned, while the on-line distributed questionnaires return was 12 exemplars. The size of the sample determined by Slovin formula (Nazir, 1999).

5. Results

Table 3: Regression Coefficient of service quality on intention to use mobile banking Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4,380	1,959		4,702	.000
Servqual	.363	.077	.389	3,469	.001
Message	.149	.043	.287		

a. Dependant Variable: Intention

Table 4: Model summary of regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579 ^a	.335	.324	3,09631

a. Predictors: (Constant), PI, KL

Table 3 shows that service quality has a significant influence on customer's intention to use mobile banking services, statistical analysis result that the coefficient regression is 0.363 for servqual and 0.149 for advertising message and both are have significant regression value with probability numbers are 0.000 and 0.001. The result concludes that the two hypotheses of this research are supported.

Table 4 shows that statistically, R square value of the regression is 0.335; predictors are PI=*Pesan iklan* (advertising messages), KL = *Kualitas Layanan* (service quality). From R square value we can count a determinant coefficient of the independent variables, that is $0.335^2 \times 100\% = 11.22\%$. It means that the contribution of variation in dependent variable (intention to use mobile banking) is determined by independent variables (service quality and advertising messages) variation at 11.22%.

6. Conclusion and Discussion

First Hypothesis, which states that a higher service quality will strengthen customers' intention to use mobile banking services BPR-KS, is supported. It is concluded that Service quality is significantly influences customers' intention to use mobile banking services BPR KS, it is seen from t value probability that smaller than 0.05.

The second Hypothesis, which states that advertising messages influence the customers' intention to use mobile banking services BPR-KS, is also supported. it can be seen from the number of significant p-value that is smaller than 0:05, so it can be concluded that advertising messages influence the customers' intention to use BPR-KS mobile banking services.

The main problem of this research - as identified in the first section of this paper - is that the performance of mobile banking facility is not in accordance with management's expectations, after the launching, until 2013, only 1,290 out of 500,000 customers or 0.384% whom registered and activated transactions through mobile banking. The cause of problem is assumed came from service quality and

advertising message, since some previous research show that intention to buy or to use service facilities were not caused by service quality and advertising. On the contrary, This research shows that intention to use mobile banking service is influenced by service quality and advertising messages, but contribution of the both variables is 11.22%.

This is an evidence that service quality launched and advertising message campaigned by BPR-KS (see figure 2-4) influenced the intention to use mobile banking, meaning in line with Hyllegard, et al. 2011; Burke et al. 1990; Pechmann and Knight, 2002; de Matos and Rossi, 2006; and Salazar *et al.*, 2004. However, it needs improvements, since the contribution is only 11.22%.

7. Managerial Implications

Based on conclusion and discussion above, the authors would like to recommend as follows:

The manager should improve the 5 dimensions of service quality, for example one dimension of service quality is the tangibility or physical evidence, it can be interpreted as a communication network that is used by customers to use mobile banking facilities, therefore the communication network traffic mobile banking should always be maintained, so it does not interfere the use of mobile banking services by customers, for example by extending or adding network bandwidth.

An advertisement, as seen in Figure 2.3 and 4 contain the messages that should be easily interpreted by consumers; this study suggests those advertising messages that exist in the brochure or other communication media needs to be fixed, since the contribution of the advertising message and the quality of service only by 11:22%. Some respondents whom are asked about mobile banking in BPR-KS revealed some things that need to be improved, namely: ease of words recall in advertising, image and appeal of the advertising message, the idea contained in the advertising message, and correct use of the letters.

8. Limitations

Several limitations of this study, which should be a concern for the further research, among others:

The study was conducted only on Bandung Brand BPR-KS customers, so that this study result had a small external validity, therefore, it is necessary to study more broadly to include other banks, however, the external validity is relaxed by the researchers through sampling random.

The data used in this study is cross-sectional and ex post facto; therefore, the results obtained can be a momentary condition and only apply for some time alone. This study examines service quality as a variable, whereas service quality is known to have five dimensions, each of which can be studied individually as variables. a more detailed review of service quality, namely by examining each dimension as the variable would be more useful for decision-making, so that further research would be better if examined service quality in detail, like Ahmed *et al.* (2011) did.

This study also examines the advertising message as a variable, whereas advertising message contains several elements that can be specified in more detail, for example, images, words, and colors of advertising messages each of which can be studied individually as variables. A more detailed review of advertising messages, by examining each element as a variable is more useful for decision-making, so that further research would be better if examined advertising message in detail.

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