

Determinants of Online Islamic Banking Use in Almadinah, Saudi Arabia

ABSTRACT

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The purpose of the study is to examine the frequency of online Islamic banking use among customers in Almadinah city, Saudi Arabia. In addition, determinants that influence the adoption of online banking were also investigated. A total of 319 Islamic banking customers were surveyed using a structured questionnaire. Data were analyzed using the Chi square test and logistic regression analysis. The frequency of online Islamic banking users was 78.6%. Factors that found to influence online banking use were age, quality of provided services and easiness of use. The study findings might provide feedback for the Islamic banking sector in the city to enhance its performance in the highly competitive market.

Keywords:online, Islamic, Banking, Internet, Almadinah

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INTRODUCTION

Online (also known as electronic or internet) banking system becomes a competitive area for both Islamic and traditional banks. The systems offer a wide range of financial services to customers that include money transfers, bill payments, management of investment, credit and personal accounts, electronic purchases, account statements and others (Amin, 2007). Online banking is of great advantages to both banks and customers. It enables the customers to perform banking transactions from anywhere in the world and at any time. With respect to the bank, online systems significantly decrease cost of the provided services and improves its competitiveness.

Islamic banking in Saudi Arabia is well established as the first Islamic bank was established in 1985 (Aldarabseh, 2019a, Aljasser and Sasidhar, 2015). Currently, several Islamic banks are operating in the country (Lone et al., 2017). This includes full-fledged Islamic banks and conventional banks with Islamic windows (Alabdan, 2017, Aldarabseh, 2019b, Khokhar and Sillah, 2014). Studies that examine the frequency of use of online banking among Islamic financial institutions, and factors that might impact such use are limited. The history and diversity of Islamic banking in Saudi Arabia make the country an ideal place to conduct the present study. Therefore, current study aimed at investigating the frequency of online Islamic banking use among customers in Almadinah city, Saudi

Arabia. In addition, factors that influence adoption of online Islamic banking services were also examined. The study findings might provide feedback for the Islamic banking sector in the city to enhance their performance in the online banking field.

THEORETICAL REVIEW

Islamic banking was established in Saudi Arabia in 1985 (Aljasser and Sasidhar, 2015). Many full-fledged Islamic banks as well as traditional ones that offer Islamic banking services are currently operating in the Kingdom (Lone et al., 2017). In Saudi Arabia, online banking services were offered to customers during the year 2001 (Ben-Jadeed and Molina, 2004). During that time, factors such as income level and education of customers were found to contribute to the adoption of online banking services (Al-Ashban, 2001). A study that included 222 participants and examined customers' views about the quality of online banking in Saudi Arabia in 2016 showed that the intention to use online banking was influenced by perceived value and privacy (Awan et al., 2016).

In a study that was conducted in Riyadh, the Capital of Saudi Arabia, and involved 100 customers of three banks, tangibles and reliability were found to significantly influence customers' satisfaction with online banking system (Almotairi et al., 2013). A qualitative study that aimed at investigating Saudi women's perspective about the use of online banking system in Riyadh showed that easiness, accessibility, and security were strong determinants of such use (Alabdan, 2017). The security issue was also highlighted in an interview of 220 innovator from the Arabian Gulf region that examined their attitudes regarding online Islamic bank marketing (Elbeck, 2010).

Factors that contribute to customer's intention to use of mobile technology as part of online banking services were investigated by recruitments of 403 customers from three major Saudi cities (Riyadh, Jeddah and Dammam). The study found that technology and benefits are influential factors that affect the use of mobile banking services (Alsheikh and Bojie, 2014). In a recent study, factors such as performance expectancy, cost, facilitating conditions, motivations, easiness of used systems, the quality of provided services were found to be related to use of mobile banking services in Saudi Arabia (Baabdullah et al., 2019).

In Malaysia, it is now almost two decades since the introduction of online Islamic banking systems in the country, which was offered for the first time in Bank Islam Malaysia during the year 2001 (Vijayan and Shanmugam, 2003). Using "partial least squares" approach, parameters that influence the use of mobile banking and included 250 customers showed that benefits and perceived risks were detrimental in the use of such services in Malaysia (Asmy, 2019a). A similar study showed that customer satisfaction and trust were among factors that influence adoption of Islamic online banking services (Asmy, 2019b). In a survey study that included 200 customers of Islamic banks in Kuala Lumpur, the strong influence of the quality of provided services and customer motivations on the use of online banking was reported (Deng et al., 2015). However, factors such as organizational support and social aspects were not relevant determinants that related to customers' attitudes towards Islamic online banking (Deng

et al., 2015). Finally, in a study that was conducted in 2008 and involved 324 customers, the use of online banking services was found to be influenced by privacy, safety, level of satisfaction, accessibility, easiness, the speed, quality of services, and cost (Poon, 2008).

In Pakistan, several studies were conducted in the online banking field. A study that was conducted in 2019 used "unified theory of acceptance and use of the technology model" to examine factors that influence adoption of mobile banking in Islamic banks of Pakistan. Among detrimental factors were the performance expectancy, easiness of use, effort expectancy, and benefits (Syed, 2019). Another study by the same group and conducted in Karachi city showed a significant influence of assurance, tangibility, reliability and responsiveness on the satisfaction level of provided online Islamic banking services (Syed, 2015). Gender differences in the adoption of mobile banking were reported by a study that included 243 customers. The intention of men customers to use online Islamic banking was significantly influenced by the benefits and perceived self-expression. On the other hand, the intention of women customers to use online Islamic banking was significantly influenced by the lack of information technology knowledge and trust (Haider, 2018). In 2003, a study that included 292 customers showed that adherence of Islamic banks to Sharia was positively correlated with perceived quality and satisfaction to provided online banking services (Butt, 2013). Furthermore, perceived online service quality enhances customer e-satisfaction and their loyalty towards the bank.

In a Thailand study, attitude toward the use of Islamic online banking services was investigated. Islamic banks' customers in Bangkok city had positive attitudes toward adoption of online banking services. In addition, online banking use was influenced by the perceived usefulness and easiness of access (Echchabi, 2018). A study from Sudan in 2016 explored the attitude toward mobile banking and online banking using "technology acceptance model". The study showed the benefits and ease of access and the quality of provided services influenced mobile banking use, whereas benefits, easiness of access and credibility of the systems influenced online banking use (Fathelrahman, 2016). A Jordanian study that conducted in 2017 examined factors associated with the use of internet services in Islamic banks using a conceptual research model. The study findings showed the strong influence of knowledge, social impact, benefits, customer education and information technology support on the use of online services provided by Islamic banks (Alhawamdeh and Bardai, 2017).

Finally, two studies from Oman have examined online Islamic banking system. A study that investigated the intention of 300 customers to adopt online banking services showed that self-efficacy, easiness of use, and facilitating conditions were major determinants of online Islamic banking use in Oman (Echchabi et al., 2019). A similar study showed strong impact of the quality of offered services, trust, and benefits on the adoption of online banking services in the country (Sharma, 2015).

METHODOLOGY

Factors that influence the adoption of online Islamic banking systems were investigated using a structured questionnaire and a cross-sectional design as previously described (Aldarabseh, 2019a). The study was conducted in AlmadinahAlmunawara/Saudi Arabia,

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the largest city in Almadinah district. The city has about 2 million individuals and is considered the forth in the Kingdom in term of population. Many full-fledged Islamic banks and several traditional banks with Islamic windows operate in the city. A total of 319 participants filled the questionnaire and from which 280 were valid for analysis. Participants were from both gender, 18 years in age or older, and customers of Islamic banks in the city. The questionnaire was anonymous to ensure privacy and confidentiality of participants. In addition, the study was conducted in accordance with the Helsinki Declaration of research ethics that include human research participants.

The study instrument was constricted based on similar studies that was conducted in other countries (Fathelrahman, 2016, Butt, 2013, Syed, 2015). The language of the instrument was Arabic and it was pilot tested to insure its clarity and validity. Modification of instrument continued until at least 95% concordance in all its items was achieved. The questionnaire asked general questions about participants such as: age, sex, participants' background, years as a customer with Islamic banks, social status, monthly income, employment sector and others. The second part of the questionnaire asked about adoption of online banking services, easiness of use, satisfaction level, and the quality of provided services. The last part asked about compliance of online services with Islamic Sharia'. The Arabic version of the questionnaire is available upon request from the corresponding author. An introductory page that explained study objectives, investigator's contact information and study procedures was attached to the instrument. The distribution of the questionnaire occurred during the period: December/2018-March/2019.

The SPSS statistical software was used for data analysis. Cross tabulation and Chi Square test were used to examine the relationships between demographics/determinants and online banking services. A logistic regression model to infer factors that have the most influential effect on the adoption of online banking system followed cross-tabulation analysis. A P value of < 0.05 was the threshold of statistical differences.

RESEARCH RESULTS

A total of 280 questionnaires were included in the analysis. About one-third (36.8%) of participants were very young (18-29 years old). The majority of participants (Table 1) were female (55%), single (61.4%), university degree holder (62.1%), work in the private sector (52.5%), and has a monthly income of less than 5 thousand Riyal (58.9%). About one-third (37.9%) had a duration with Islamic banking of less than 5 years, whereas about 15% had a duration of more than 15 years. A total of 70% of participants believe that Islamic banks in Almadinah adhere to Sharia principles (Table 1).

Factor	Total: N(%)	Use of Electronic Services: N(%)		P value
	N= 280			
		Yes	NO	
Age of Participants				0.002
18 - 29	103(36.8)	88(85.4)	15(14.6)	
30 - 39	85(30.4)	72(84.7)	13(15.3)	
40 -49	58(20.7)	38(65.5)	20(34.5)	
> 50	34(12.1)	22(64.7)	12(35.3)	
Gender of Participants				0.028
Male	126(45.0)	91(72.2)	35(27.8)	
Female	154(55.0)	129(83.8)	25(16.2)	
Married				0.767
Yes	108(38.6)	86(79.6)	22(20.4)	
No	172(61.4)	134(77.9)	38(22.1)	
Education				0.020
Secondary school	86(30.7)	62(72.1)	24(27.9)	
Two-years College	20(7.1)	12(60.0)	8(40.0)	
Bachelor (BSC/BA)	139(49.6)	115(82.7)	24(17.3)	
Higher Education	35(12.5)	31(88.6)	4(11.4)	
Employment		- 、 ,		0.380
Government	133(47.5)	106(79.7)	27(20.3)	-
Private	147 (52.5)	114(77.6)	33(22.4)	
Monthly income (Riyal)				0.249
< 5 thousands	165(58.9)	130(78.8)	35(21.2)	
5-10 thousands	43(15.4)	30(69.8)	13(30.2)	
> 10 thousands	72(25.8)	60(83.3)	12(16.7)	
Customer duration	, () ,			0.106
(years)				
< 5	106(37.9)	90(84.9)	16(15.1)	
Between 5 - 10	78 (27.9)	57(73.1)	21(26.9)	
11-15	53(18.9)	43(81.1)	10(18.9)	
>15	43(15.4)	30(69.8)	13(30.2)	
Compliance with Sharia				0.116
Agree	196(70.0)	149(76.0)	47(24.00	
Disagree	84 (30.0)	71(84.5)	13(15.5)	
Satisfaction level				0.001
Satisfied	233(83.2)	193(82.8)	40(17.2)	
Not Satisfied	47(18.8)	27(57.5)	20(42.5)	
Easiness of use				0.001
Agree	228	192(84.2)	36(15.8)	
Disagree	52	28(53.8)	24(46.2)	

Table 1. Determinants of Islamic banking electronic services use among customers in Saudi Arabia.

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Table 1 shows cross-tabulation analysis of determinants of online Islamic banking use among participants. Young participants (less than 40 years old) use online banking services at a higher frequency than older ones (P = 0.002). In addition, the frequency of female participants who use online services (78.5%) was significantly higher (P = 0.028) than male participants (72.2%). Moreover, participants with university education were more online banking users than college/secondary school educated ones (P = 0.020). Furthermore, satisfaction level and ease of use were strongly associated with online banking (P = 0.001). With respect to other factors such as marital status, type of employment, monthly income, duration with Islamic banks, and compliance with Sharia, no association between such factors and use of online services was observed (P > 0.05).

Table 2 showed logistic regression determinants of online Islamic banking use among participants. The results showed that age, satisfaction level, and ease of use were the most important determinants of adoption of online Islamic banking (P < 0.05). However, none of the other examined determinants were found to be significant as inferred from the regression model (P > 0.05).

The study was conducted in Saudi Arabia that hosts the biggest Islamic banks in the world such Al-Rajhi bank. Thus, Saudi Arabia is an ideal country to conduct Islamic banking studies. The results of the current study showed a high frequency of online Islamic banking use (about 78.5%). This high frequency might be due to the increase use of new technologies such as internet applications and smart phones. This is supported by a study from Jordan that showed a strong association between information technology knowledge and the use of online services provided by Islamic banks (Alhawamdeh and Bardai, 2017). However, about 21.5% of customers were not using online banking services. Age of customer, satisfaction level, and ease of use were strongly associated with the adoption of online banking use. Thus, Islamic banks should enhance the quality of their services to satisfy their customers by using more friendly online systems to attract their customers.

Among the determinants detected in the current study was satisfaction level. This is in agreement with a previous study from Sudan that showed an association between customer satisfaction and the adoption of online Islamic banking (Fathelrahman, 2016). Similarly, two Malaysian studies showed a strong influence for customer satisfaction on the adoption of Islamic online banking services (Asmy, 2019b, Poon, 2008). In addition, a study from Oman showed strong impact of the quality of offered services on the adoption of online banking services (Sharma, 2015). Thus, studies from several countries stressed on the importance of customer satisfaction on the adoption of online banking services.

The study also showed a strong association between easiness of online systems and the adoption of online Islamic banking. A similar study from Sudan showed that easiness of access was among determinants of online Islamic banking use (Fathelrahman, 2016). A recent study from Pakistan also highlighted the importance of ease of use as an influential factor for online banking use (Syed, 2019). Findings from Thailand (Echchabi et al., 2019) also support the importance of ease of use on the adoption of Islamic online banking services. Thus, it is important to use friendly online banking systems to attract customers to adopt such services.

Parameter	Odds Ratio	95% Confidence	P value	
		Interval		
Age of Participants				
18 - 29	Reference			
30 - 39	0.205	0.055-0.768	0.019	
40 -49	0.385	0.124-1.197	0.099	
> 50	1.493	0.520-4.287	0.456	
Gender of Participants				
Male	Reference			
Female	1.020	0.507-2.049	0.956	
Married				
Yes	Reference			
No	0.798	0.331-1.882	0.593	
Education				
Secondary school	Reference			
Two-years College	0.291	0.070-1.211	0.090	
Bachelor (BSC/BA)	0.840	0.163-4.322	0.835	
Higher Education	0.828	0.259-2.645	0.751	
Employment				
Government	Reference			
Private	0.548	0.085-3.524	0.527	
Monthly income (Riyal)				
< 5 thousands	Reference			
5-10 thousands	0.688	0.073-6.476	0.744	
> 10 thousands	0.944	0.117-7.589	0.957	
Customer duration				
(years)				
< 5	Reference			
Between 5 - 10	2.37	0.676-8.319	0.177	
11-15	1.66	0.541-5.133	0.374	
>15	0.791	0.222-2.811	0.717	
Compliance with Sharia				
Agree	Reference			
Disagree	0.867	0.421-1.786	0.699	
Satisfaction level				
Satisfied	Reference			
Not Satisfied	0.32	0.09-0.69	0.004	
Easiness of use				
Agree	Reference			
Disagree	0.41	0.21-0.83	0.01	

Table 2. Logistic regression of determinants of Islamic banking electronic services use among customers in Saudi Arabia.

CONCLUSION

The frequency of online Islamic banking users in Almadinah city, Saudi Arabia was 78.5%. Among factors that found to influence online banking use were age, quality of provided services and easiness of use. This is in agreement with several studies that conducted in other countries such as Oman, Pakistan, Malaysia, Jordan and Thailand. The study findings might provide feedback for the Islamic banking sector in the city to enhance its performance in the highly competitive market. Among the limitations of the current study is the relatively small sample size and the conduction of the study in one city, which is Almadinah. Thus, inclusion of more customers and expanding the study to include other cities in Saudi Arabia are strongly recommended in the future studies.

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