



Empirical Study on Adoption of Islamic Banking System Using Quantitative Method A Case Study of Afghanistan

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Abstract: Although the background of the banking system goes back as far as 1933, Islamic finance is still new in Afghanistan. The history of the first full-fledged Islamic bank began as recently as 2018 with the conversion of Bakhtar Bank, a conventional bank, to the Islamic Bank of Afghanistan (IBA). There have been numerous studies done worldwide, but no empirical study has examined the subject of Islamic banking adoption in the specific context of Afghanistan. Therefore, this present study investigates the adoption of Islamic banking in Afghanistan, using a case study of Herat province, based on Rogers' (1983) Diffusion of Innovation Theory, to determine the impact of awareness, product knowledge, religiosity, relative advantage, compatibility, and complexity on the adoption of Islamic banking. A quantitative approach to the stratified convenience sampling method was used in this study. Questionnaires were distributed to 334 bank customers and the responses analyzed using SPSS v22. The multiple regression analysis finding indicated that product knowledge, relative advantage, and religiosity significantly and positively influenced the adoption of Islamic banking. It is suggested that the government and financial institutions should support Islamic banking with beneficial policies and initiatives to enhance the knowledge of the public about the significance of Islamic banking activities.

Keywords: Diffusion of innovation theory, Islamic banking, Adoption, Afghanistan

JEL Classification: C12, G21, O31



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Introduction

Islamic banking as a novel and alternative banking option in the global financial system has emerged since 1970 and has grown at an average annual rate of 14 – 18% over the past four decades, and even penetrated to western countries. The establishment of Islamic Financial Institutions (IFIs) has been increasing, and currently, they can be found in more than 75 countries (Yahaya, Hamid, Idris, & Haji-Othman, 2016).

One of the Da Afghanistan Bank's (Central Bank of Afghanistan) commitments is to promote Islamic banking in Afghanistan by establishing a legal and regulatory framework for Islamic banks. Towards this end, Da Afghanistan Bank (DAB) recently issued specific Islamic banking regulations that include Islamic Banking Regulations, product outlines, Shariah parameters, guidelines, and other regulations (Da Afghanistan Bank, 2019).

To date, DAB has issued licenses for numerous Islamic banking windows of conventional banks, which now offer Islamic banking products and services. However, the existence of Islamic banking windows is not enough to meet the national demand. There is an urgent need for Full-Fledged Islamic Banks (FFIBs) in Afghanistan. Hence, following the "Regulation for Conversion of a Conventional Bank into an Islamic Bank", DAB set comprehensive guidelines and criteria for such conversion (Da Afghanistan Bank, 2018).

The Afghan banking system has faced many challenges in terms of regulations, modernizing, and a low number of depositors and borrowers, etc., since the first bank (Bank Millie Afghan) was established in 1933 (Khelwati, 2008). Although it has seen improvements since the establishment of the new government in 2001, with the help of international donors, Islamic banking is still new in Afghanistan and the first FFIB was recently set up in 2018. In terms of research, some limited empirical studies have been conducted in general on the Afghan banking system, but to the best knowledge of the researchers, there has not been any empirical study done specifically on Islamic banking adoption in Afghanistan.

Researches done on the financial sector of Afghanistan report that overall, the number of Afghans who deal with banks is low. In Afghanistan, which is a majority Muslim country, it is estimated that only 10% of adults (and only 3.8% of adult women) have bank accounts, and loans to the private sector make up just 3.5% of GDP. Moreover, formal enterprises' accessibility to banking accounts is only two-thirds and just 2% of companies use bank loans to finance their investments (Ros-tom, 2018).

Furthermore, according to Da Afghanistan Bank (2019) there is a very large gap between the number of depositors (3.83 million) and the number of borrowers (a little more than 67,000). Based on the Afghanistan National Statistics and Information Authority (2019), the total population of all provinces is 30,075,018. In 2019, only 12.7 % of the total population had bank deposit accounts, while 0.22 % of the population borrowed from the banks. Besides, in Herat province, which is the focus of the case study, the total active accounts were 203,236 in 2017. With the population of Herat at 2,050,514 therefore, only .9 % of the Herat province population who had active bank accounts in 2017. Thus, it is clear that in general, few of the country's population deal with banks (Economics Faculty of Herat University, 2017; National Statistics and Information Authority, 2019).

The relationship between the banking system and the development of countries is a concept that has been discussed among scholars. The banking system has always played a crucial role in the socio-economic development of countries, whether developed or developing. Some studies such as Kaushal and Ghosh (2018) found a long-term relationship between economic growth and the development of the banking and insurance sectors. IMF assessed the effect of Islamic banking on economic growth in their research, which illustrated that, by keeping the level of financial development and other determinants of growth constant, countries with Islamic banking will find its impact on growth is measurable, and they experience more rapid economic growth than other countries. Countries that are currently, suffering from low growth, a feature often found in Islamic countries, should consider expanding the Islamic financial sector further. As a first step, it is necessary to formulate appropriate rules, regulations, and establish support infrastructures including the necessary skill sets (Imam & Kpodar, 2015). To date, the Afghan banking sector, despite its high liquidity, has failed to play a significant role in supporting more inclusive economic development and financing (Rostom, 2018).

This study will identify the relevant factors that may affect the rate of Islamic banking adoption. Six factors may influence the adoption rate of Islamic banking among Afghan consumers such as awareness, product knowledge, religiosity, relative advantage, complexity, and compatibility.

To bridge these gaps in the literature, this current research examines Islamic banking adoption in Afghanistan and endeavors to determine the factors that influence the adoption of Islamic banking as a novel; banking service for Afghans. The findings of this study can add to the existing literature on the Islamic financial sector in Afghanistan. Such additional knowledge may facilitate future research

on the Islamic banking sector in Afghanistan. In light of the above, the following research questions are formulated for this study:

1. To what extent, does awareness influence the adoption of Islamic banking in Herat province, Afghanistan?
2. To what extent, does product knowledge influence the adoption of Islamic banking in Herat province, Afghanistan?
3. To what extent, does religiosity influence the adoption of Islamic banking in Herat province, Afghanistan?
4. To what extent, does relative advantage influence the adoption of Islamic banking in Herat province, Afghanistan?
5. To what extent, does complexity influence the adoption of Islamic banking in Herat province, Afghanistan?
6. To what extent, does compatibility influence the adoption of Islamic banking in Herat province, Afghanistan?

Literature Review

The Diffusion of Innovation Theory (DIT) was applied to determine whether the perceived attributes of innovation such as compatibility, relative advantage, and complexity have any influence on the adoption of Islamic banking among consumers. Yahaya et al. (2014) mentioned Rogers' DIT as one of the most frequently applied models in the study of innovation adoption. Innovation is most commonly defined as "a change in structure, design, of products or processes in which there is a definable new element introduced into the system" (p.15). Innovation is also described as "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 1983, p.11).

'Newness' in innovation is not merely new knowledge. Someone may have been aware of innovation for some time but has not yet developed a favorable or unfavorable attitude toward it, nor has it been accepted or rejected. The 'newness' of innovation "may be expressed in terms of knowledge, persuasion, or a decision to adopt" (Rogers, 1983, p.11). On the other hand, 'diffusion' is the process by which innovation is communicated through specific channels to the members of a social system. Rogers (1983) also stated that it is a special kind of communication because messages are about new ideas. It is important to note the subtle distinction between the 'dissemination' of information and the 'diffusion' of innovative ideas.

As for adoption, Rogers (1983) indicates a logical progression that shifts from awareness to acceptance and usage of a product or service innovation. Further clarification of adoption is provided by Mariadas and Murthy (2017) who describe it as “how well consumers can receive a product or service as well as how likely they are to use the product or service in the future” (P.188).

What is important to note is that DIT presents five constructs that can influence the adoption of any innovation, namely, the relative advantage, compatibility, trialability, complexity, and observability (Ganiyu & Adeosun, 2013). Rogers (1983) again makes a succinct observation of innovation adoption by stating that innovations that are perceivable to people are more likely to have a greater relative advantage, trialability, compatibility, observability, and less complexity of being adopted compared to other innovations.

Awareness

Awareness refers to customers' knowledge level of an Islamic banking product or service in terms of how much they know or do not know. Awareness is considered the first step in the adoption of any product or service (Rogers, 1983). In this study, awareness is considered as the general understanding of customers about the Islamic banking concept.

Thambiah, Ismail, and Eze (2011) conducted a study on the urban and rural customers' awareness and usage of Islamic retail banking (IRB) products and services and reported that urban customers were more aware of IRB than their rural counterparts, also noting that awareness and usage of IRB were closely related. Ashurov, Idris, and Othman (2018), and Mahdzan, Zainudin and Au (2017) found that awareness of Islamic banking products and services significantly influences Islamic banking adoption, while a survey in South Africa found that although customers were aware of Islamic banking, their usage rate was still low because for customers when they tried to choose a bank some factors such as lower bank charges, efficiency, availability of ATMs and existence of more branches were more important than only the religious factor (Saini, Bick & Abdulla, 2011).

This present study, therefore, assumes the following hypothesis:

H₁: There is a positive relationship between customers' awareness of Islamic banking and its adoption.

Product Knowledge

Knowledge is defined as “information combined with experience, context, interpretation, and reflection, as well as an organized combination of ideas, rules, and

procedures” (Harun, Rashid & Hamed, 2005 p.24). In this study, product knowledge means the knowledge of customers about some specific and important products of Islamic banking such as *Murabaha*, *Ijarah*, *Musharakah*, *Mudarabah*, etc.

Naser, Jamal, and Al-Khatib (1999) investigated the awareness of customers regarding Islamic banking products and services and came to the conclusion that most customers know specific products like *Mudarabah* and *Murabaha*, but most of them are not involved with these products. Another study by Okumuş (2005) in Turkey reported similar findings.

Some other researches were done in the context of Pakistan and Malaysia (Khattak & Rehman, 2010; Mariadas & Murthy, 2017). Khattak and Rehman (2010) in their study in Pakistan indicated that customers were aware of some general products such as current accounts and time deposit accounts, but most of them were ignorant about specific products such as *Murabaha* and *Ijarah*, whereas Mariadas and Murthy (2017) in Malaysia reported two factors that influenced the adoption of Islamic Banking, which were consumers’ knowledge and consumers’ satisfaction.

Based on the discussed literature the following hypothesis is formulated:

H₂: There is a positive relationship between customers’ product knowledge and the adoption of Islamic banking.

Religiosity

Some scholars have discussed the religious concept as a multifaceted structure that influences beliefs, identities, and lifestyles and religiosity refer to examine the level of religious practice of customers (Sun, Goh, Fam, & Xue, 2012). In the current study, religiosity has been considered as belief in *Allah* and as a measure of a Muslim’s religious values and practices in his/her daily life.

According to Ahmad, Rahman, Seman and Ali (2008) religion is assumed to significantly influence ethical beliefs, and this in itself will be manifested in the consumer’s daily actions and obligations. The same researchers argued that “The lack of formal religious background in Islamic teachings may explain the reason for low religious belief as well as a lack of awareness for the requirement to only patron Islamic banking” (p.109). Based on their findings, during a bank selection, the availability of ATMs was the most important factor. As such, Islamic bankers should focus on expanding and enhancing their electronic services to attract more customers.

Gerrard and Cunningham (1997) researched Islamic banking in Singapore and found that Muslim customers choose to deposit their money in Islamic banks be-

cause of the religiosity factor. Another study by Naser et al. (1999) in Jordan reported that the two leading factors, which motivated consumers to use Islamic banks services, were the bank's image and reputation, and the religious beliefs. Moreover, a majority of customers (70%) indicated religious reasons as a factor for dealing with Islamic banks. Meanwhile, Bley and Kuehn (2004), and Obeid, and Kaabachi (2016) also revealed the religious factor as a predictor of Islamic banking adoption in their research. In light of the above, the following hypothesis is formulated:

H₃: There is a positive relationship between religiosity and the adoption of Islamic banking.

Relative Advantage

"Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes" (Rogers, 1983, p.15). The degree of relative advantage can be assessed economically; while social prestige, comfort, and satisfaction are also crucial factors. It is not an issue if an innovation has many objective advantages. What matters is whether the individual finds the innovation useful (Rogers, 1983). This study considers the relative advantage factor for the adoption of Islamic banking from economic and social prestige perspectives such as risk reduction, profit, and loss sharing trust and justice.

Many studies indicated the consistent influence of relative advantage on adoption. For example, Aziz et al. (2015) stated that there is a positive significant influence of relative advantage on attitude toward Islamic banking products and services. Furthermore, a meta-analysis of innovation features and innovation adoption-implementation by Tornatzky and Klein (1982) found relative advantage to be a significant factor in affecting the adoption of novel innovations. Diffusion scholars consider the relative advantage to be one of the best predictors of innovation adoption. Relative advantage represents the benefits and costs of adopting innovation.

The present study, therefore, assumes the following hypothesis:

H₄: There is a positive relationship between the relative advantage and adoption of Islamic banking.

Complexity

According to Rogers (1983) complexity is "the degree to which an innovation is perceived as difficult to understand and use" (p.15). The same author argued that some innovations are easily understood, while others are more complex and take a long

time before they are adopted. A new idea that is easily understood is adopted more quickly compared to other innovations that require some new skills to be learned before they are deemed adoptable.

Some researchers have found the significant influence of complexity on the adoption of Islamic banking (Jamshidi, Hussin, & Wan, 2015; Thambiah, Ramathan, & Mazumder 2012) conducted a study to identify the influential factors in the adoption of Islamic banking among Muslims and non-Muslims in Malaysia. The study found that the complexity and adoption of Islamic banking products and services were significantly related.

Based on the literature about complexity, the following hypothesis is formulated:

H₅: There is a negative relationship between complexity and adoption of Islamic banking.

Compatibility

Compatibility is defined as “the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters” (Rogers, 1983, p.15). Customers have many reasons to accept Islamic banking, and compatibility is a major factor. Islamic banking offers a variety of products and services, and customers evaluate whether they fit their needs, habits, beliefs, social system norms, values and lifestyle as well (Obeid & Kaabachi, 2016). This current research seeks to investigate the compatibility of Islamic banking from the customers’ perception, and its impact on the adoption of Islamic banking.

Also, Echchabi and Aziz (2012) reported that compatibility has a significant influence on the adoption of Islamic banking services. Obeid and Kaabachi (2016) reported the same findings in Tunisia that compatibility is a predictor of Islamic banking adoption and Islamic banking services are compatible with customers’ habits, values, and lifestyles.

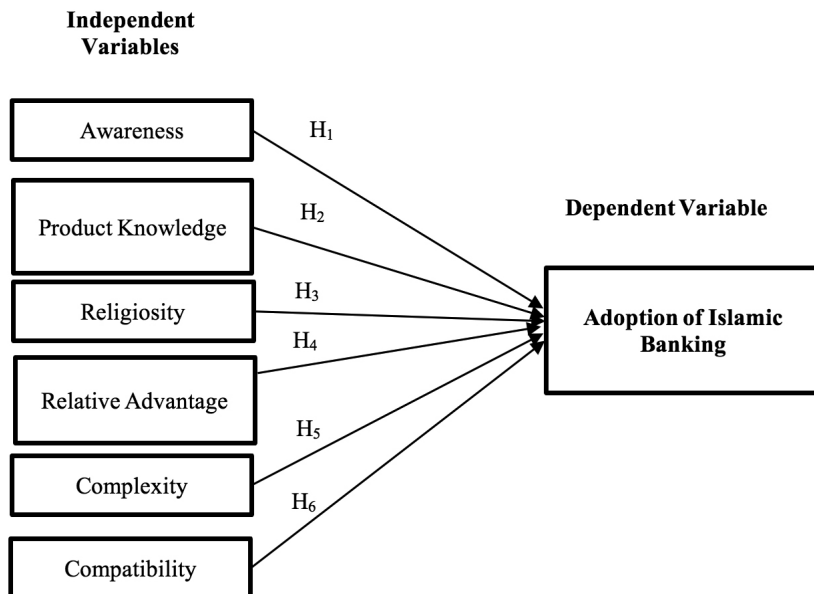
Hence, based on the above, this study assumes the following hypothesis:

H₆: There is a positive relationship between compatibility and adoption of Islamic banking.

Based on the literature review, six factors such as awareness, product knowledge, religiosity, relative advantage, complexity, and compatibility are considered as independent variables (IVs) and adoption as a dependent variable (DV) in this study. From these independent variables, three out of six variables are adopted

from Roger's Theory, namely, relative advantage, compatibility, and complexity, while the three remaining variables, such as awareness, religiosity, and product knowledge are considered in this study as the contribution of the researcher as they have been tested in different studies around the world. Therefore, the conceptual framework for this research is as constructed as shown below.

Figure 1
Conceptual Framework



Methodology

As this study aims to determine the relationship between independent variables IVs and dependent variable DV, the appropriate method for this study is quantitative. A quantitative research method is especially useful when there is a wish to test hypotheses. We might want to explain something, for example, determining if there is a relationship between two variables (Muijs, 2010).

A total of 334 copies of the questionnaire was distributed applying the stratified convenience sampling method to bank customers in Herat province. Stratified convenience sampling was used to ask customers with active bank accounts for their response. The data in this study were therefore derived from primary sources collected through a survey questionnaire.

In this study, the stratified sampling method was used to allocate the target population to 11 categories, comprising the active banks as shown in Table 1. It is very difficult to get a detailed list of active bank account holders in Afghanistan. Hence, this study used convenience sampling for gathering the sample from each category instead of using random sampling as that was not possible. The researchers chose a stratified convenience sampling from each group through a sampling ratio and for controlling the sample size of each group: first, the Google Form link was sent to the customers. The sample size of 31 was related to six banks with less active accounts as shown in Table 1, such as the following: Pashtany Bank and Bank Alfalah, which do not have any Islamic banking windows and Ghazanfar Bank, Bank Millie Afghan, Afghan United Bank, and Afghanistan International Bank with having Islamic banking windows. For the remaining five banks, hard copies of the questionnaire were distributed among the Banks' customers and it continued until the target-stratified sample ratios were attained as illustrated in Table 1.

Convenience sampling refers to gathering information from members of the population that are available to provide it. This kind of sampling is most often used in the exploratory phase of a research project and maybe the best way to obtain early and efficient initial information (Sekaran & Bougie, 2016). In the selection process, all the participants were screened before they responded to the survey. In this research, the inclusion criterion was having an active account in one of the commercial banks in Herat province. This was important to ensure that the correct sample was chosen for the research.

In most cases where the population is large, sampling is needed. Sample size estimation in research commonly uses the Krejcie and Morgan (1970) method, which involves the following formula (Chuan & Penyelidikan, 2006):

$$S = X^2NP (1-P) / d^2 (N-1) + X^2P (1-P)$$

where:

S = the required sample size;

X^2 = the table value of chi-square for one degree of freedom at the desired confidence level;

N = the population size;

P = the population proportion (assumed to be .50 since this would provide the maximum sample size); and

d = the degree of accuracy expressed as a proportion (.05).

At a 95% confidence level with a degree of freedom 1, the chi-square (χ^2) value is 3.841 and at a 95% confidence level, the margin of error (d2) is 0.05. Hence, with a population of 203,236, the sample size is 383.

$$S = 3.841 * 203,236 * 0.5 (1-0.5) / (0.05)^2 (203,236-1) + 3.841 * 0.5 (1-0.5) = 383.37$$

Table 1

Banks' Active Accounts

No.	Banks	Active Accounts	Percentages = ACs / 203236	Sample= Percentages*400	Valid Questionnaires
1	Pashtany Bank	1563	0.007690567	3	3
2	First Micro Finance Bank	30700	0.151055915	60	50
3	Maiwand Bank	27069	0.133189986	53	53
4	New Kabul Bank	90110	0.443376174	177	122
5	Ghazanfar Bank	1542	0.007587238	3	3
6	Bank Millie Afghan	2418	0.011897498	5	5
7	Islamic Bank of Afghanistan (FFIB)	10804	0.053159873	21	21
8	Azizi Bank	28908	0.14223858	57	57
9	Afghan United Bank	4200	0.02066563	8	8
10	Bank Alfalah	422	0.002076404	1	1
11	Afghanistan International Bank	5500	0.027062135	11	11
Total		203,236	1	400	334

Source: Economics Faculty of Herat University (2017)

The sample size for the population of 203,236 according to the Krejcie and Morgan, (1970) formula for this research determined 383 participants. A sample size of more than 30 and less than 500 is adequate for most researches (Sekaran & Bougie, 2016). Therefore, to get the sample size the researcher decided to have two forms of questionnaire distribution. For those six banks having a smaller number of active accounts as mentioned before, the questionnaires were distributed through Google Form due to time and cost limitations. The total sample needed for

these six banks was 31. Hence, the questionnaires were sent to 82 bank customers and 31 of them were used as a valid sample to control the strata sample size. Moreover, the remaining 51 questionnaires dropped from the sample were filled by other bank customers and not the customers related to these six banks.

Furthermore, 400 hard copies of the questionnaire were distributed to the customers of five banks with a large number of active accounts such as First Micro Finance Bank, Maiwand Bank, New Kabul Bank (Islamic banking window), Islamic Bank of Afghanistan (Full-fledged Islamic banks), and Azizi Bank. From all distributed questionnaires, 356 were returned, and 10 questionnaires (three related to First Micro Finance Bank and seven related to New Kabul Bank) were excluded from the data entry phase for various reasons including incomplete responses. Therefore, the total number of responses for questionnaires was 377, which included 31 from Google Form and 346 (out of 400). However, 43 questionnaires were deleted during data analysis due to the existence of outliers, and the remaining 334 questionnaires were used for the eventual data analysis of this study.

To obtain the necessary information about the factors influencing Islamic banking adoption the combination of an adapted and self-administrated questionnaire was employed. The questionnaire from Thambiah (2012) on IRB adoption that was conducted in Malaysia was considered as the main basis for developing the questionnaire for this study. However, there were some questions adapted from Ashurov et al. (2018), Al-jabri and Sohail (2012), and Azam, Qiang, Abdullah, and Abbas (2011) and self-developed questions.

This study used the Statistical Package for Social Sciences (SPSS 22) to analyze the data. The multicollinearity of the variables, the descriptive analysis, correlation, and multi regression analysis was done, to test the relationship between dependent and independent variables. The regression and correlation analysis would be used to determine the acceptance or rejection of the research hypothesis.

Findings

Reliability Analysis

Cronbach's alpha ranges from zero for a completely unreliable test (although technically it may be below zero) to a completely reliable test. For the Cronbach's alpha value for the reliability of the questionnaire, an alpha score above 0.75 is usually used to illustrate a scale of high reliability, generally ranging from 0.5 to 0.75 as a relatively valid scale (Hinton, Brownlow, McMurrar, & Cozens, 2004). Therefore, according to Table 2, none of the variables has low reliability due to none of them being below 0.5.

Table 2

Reliability Test (Cronbach's Alpha)

Variables	Number of questions	Cronbach's Alpha	Average mean value
Awareness	5	0.715	3.968
Product Knowledge	5	0.912	2.174
Religiosity	4	0.746	3.7175
Relative Advantage	5	0.804	3.198
Complexity	5	0.707	2.614
Compatibility	5	0.882	3.948
Adoption	5	0.817	2.768
Overall	34	0.869	

Demographic Characteristics of Respondents

The background of the respondents consists of their age, gender, marital status, education, employment status, and type of employment, income level.

Table 3

Demographic Characteristics of Respondents

Demographic	Info	Frequency	Percentage
Age	Below 20	12	3.6
	21-25	131	39.2
	26-35	144	43.1
	36-45	39	11.7
	46-55	6	1.8
	Above 55	2	0.6
Gender	Male	219	65.6
	Female	115	34.4
Marital Status	Single	136	40.7
	Married	198	59.3
Education	High School	71	21.3
	College	38	11.4
	Bachelor	169	50.6
	Master	51	15.3
	PhD	5	1.5

Employment	Yes	298	89.2
	No	36	10.8
Type of employment	Government Sector	133	39.8
	Private Sector	168	50.3
	Student	15	4.5
	Housewife	13	3.9
	Others	5	1.5
Income Level	Less than 10000	103	30.8
	10001-20000	100	29.9
	20001-30000	78	23.4
	30001-40000	22	6.6
	40001-50000	14	4.2
	More than 50000	17	5.1

Most of the respondents (43.1%) were between 26 and 35 years old. Respondents aged between 21 and 25 years represented 39.2%, and respondents aged between 36 and 45 years made up 11.7%. Collectively, these three age groups represented 94% of the respondents in this study. However, the respondents below 20 years of age, 46 to 55 years old, and above 55 years collectively represented 6%. Hence, most of the respondents were young and between the ages of 21 and 45 years. Also, most of the respondents were male (about 65.6%) while 34.4% of the total respondents were females. Furthermore, most of the respondents (59.3%) were married while those who were single made up 40.7%. From all respondents, 50.6% have a bachelor's degree while 21.3% were school diploma holders, 15.3% held a master's degree and college diplomas and PhD holders made up 11.4% and 1.5% respectively. As most of the participants had a bachelor's degree it shows that the general education level has increased in Afghanistan. Most of the respondents (89.2%) had a job while only 10.8% of them were unemployed. Therefore, it can be stated that most of the respondents were employed, and having a salary account in an Afghan bank was common. The majority (50.3%) of the respondents were private-sector employees. However, the respondents with jobs in the government sector comprised 39.8%. The other three groups of respondents such as students, homemakers, and others made up about 10%. Finally, as can be seen, the majority (30.8%) of the respondents had a low-income level of less than AFN10, 000. The next two other levels of income, AFN10,001-20,000 and AFN 20,001-30,000 represented 29.9% and 23.4% respectively in this study. However, the three remaining income levels of AFN 30,001-40,000, AFN40,001-50,000, and above AFN50,000 made up 6.6%, 4.2%, and 5.1% respectively. It shows that the income levels of participants were low.

Correlation

Correlation analysis was employed to explain the direction and strength of the linear relationship between DV and the six IVs. Correlation coefficients of Pearson (r) can only obtain values of -1 to +1, which show whether it exists as a positive correlation (with increasing one variable, as another) or a negative correlation (decreasing another by increasing one variable). A full correlation of +1 or -1 indicates that one variable value can be determined exactly by knowing the value of another variable. A scattering of this relation shows a straight line. However, a correlation of zero shows that there is no relationship between the two variables. It indicates that knowing the value of one variable cannot predict the value of the second variable. The scatterplot shows a circle of points, with no specific pattern (Pallant, 2005). According to Sekaran and Bougie (2016) Pearson's bivariate correlation is considered appropriate for the variables that are measured on the interval scale. Hence, in this study, Pearson's correlation analysis is used to examine the relationship between the DV and the IVs.

Table 4
Correlations

		Awareness	Product Knowledge	Relig-iosity	Relative Advantage	Comp-lexity	Compa-tibility	Adoption
Awareness	Pearson Correlation	1						
	Sig. (2-tailed)							
Product Knowledge	Pearson Correlation	.055	1					
	Sig. (2-tailed)	.314						

Religiosity	Pearson Correlation	.063	.268**	1				
	Sig. (2-tailed)	.248	.000					
Relative Advantage	Pearson Correlation	.005	.237**	.467**	1			
	Sig. (2-tailed)	.927	.000	.000				
Complexity	Pearson Correlation	.043	.157**	-.020	.146**	1		
	Sig. (2-tailed)	.433	.004	.712	.008			
Compatibility	Pearson Correlation	-.026	-.015	.488**	.463**	-.026	1	
	Sig. (2-tailed)	.635	.784	.000	.000	.632		
Adoption	Pearson Correlation	-.016	.633**	.500**	.405**	.095	.198**	1
	Sig. (2-tailed)	.773	.000	.000	.000	.083	.000	

** Correlation is significant at the 0.01 level (two-tailed)

Table 4 illustrates the Pearson correlation coefficient among each pair of variables listed in a study. There are different interpretations of the Pearson correlation. The Pearson correlation $r = .10$ to $.29$ or $r = -.10$ to $-.29$ is considered as a small correlation, $r = .30$ to $.49$ or $r = -.30$ to $-.49$ is considered as a medium correlation, and $r = .50$ to 1.0 or $r = -.50$ to -1.0 is considered as a large correlation (Pallant, 2005). In this study, the correlation between the dependent variable and independent variables illustrates a very small negative correlation between awareness and the adoption of Islamic banking, which is $-.016$ and a small positive correlation between complexity, compatibility, and adoption, that is $.095$ and $.198$ respectively, while the $.405$ shows the existence of a medium correlation between relative advantage and adoption. On the other hand, there is a large correlation of $.633$ and $.500$ respectively between product knowledge, religiosity, and adoption obtained from this correlation analysis.

Multiple Regression Analysis

Multiple regression is based on correlation but provides more complex discoveries than the interrelationships between a set of variables. It illustrates the degree of the variance that can be explained by the IVs. It also indicates the relative contribution of each IV. Tests allow the researchers to determine the statistical significance of the results, both model and individual (Pallant, 2005).

In this study, a linear regression analysis was used to find the factors affecting the adoption of Islamic banking in Herat province. Table 5 below shows the result of the linear regression analysis for this study.

Table 5
Linear Regression Test

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.252	.347		.725	.469
Awareness	-.115	.067	-.065	-1.715	.087
Product Knowledge	.491	.038	.521	12.772	.000
Religiosity	.377	.059	.302	6.387	.000
Relative Advantage	.171	.054	.146	3.157	.002
Complexity	.001	.048	.001	.022	.983
Compatibility	-.011	.050	-.010	-.226	.822

a. Dependent Variable: Adoption

Based on Table 5 above, three out of six independent variables have a significant influence on the adoption of Islamic banking, which are: product knowledge ($p=0.000$), religiosity ($p=0.000$), and relative advantage ($p=0.002$), as p -value is less than 0.05. It can be concluded that enhancing the customers' product knowledge, religiosity and relative advantage levels will significantly increase their adoption of the Islamic banking level. Furthermore, for these six variables, the influence of awareness and compatibility is negative on adoption and the remaining four variables have a positive influence on the adoption of Islamic banking. However, awareness influences ($p=0.1$) on adoption whereas complexity and compatibility have no significant influence on adoption.

Hypotheses Testing

As can be seen in Table 6 below, from the six hypotheses of this study, the hypotheses related to awareness, complexity, and compatibility are rejected, while three hypotheses of product knowledge, relative advantage, and religiosity are accepted.

Table 6
Hypotheses Testing

Variables	Hypotheses	P-value	Decision
Awareness	H ₁ : There is a positive relationship between the awareness of customers and the adoption of Islamic baking in Afghanistan.	0.087	Not Supported
Product Knowledge	H ₂ : There is a positive relationship between product knowledge of customers and the adoption of Islamic baking in Afghanistan.	0.000	Supported
Religiosity	H ₃ : There is a positive relationship between religiosity and the adoption of Islamic baking in Afghanistan.	0.000	Supported
Relative Advantage	H ₄ : There is a positive relationship between the relative advantage and adoption of Islamic baking in Afghanistan.	0.002	Supported
Complexity	H ₅ : There is a negative relationship between complexity and adoption of Islamic baking in Afghanistan.	0.983	Not Supported
Compatibility	H ₆ : There is a positive relationship between compatibility and adoption of Islamic baking in Afghanistan.	0.822	Not Supported

Discussion of the Findings

The main purpose of conducting this research was to investigate the adoption of Islamic banking in Afghanistan, through a case study of Herat province. To attain the objectives of this research, the data were analyzed using SPSS v22. The analyses included descriptive, correlation, and multiple regression. The findings of this study show that from six hypotheses three of them, which related to product knowledge, relative advantage, and religiosity were accepted while the hypotheses related to awareness, complexity, and compatibility were rejected. The details of the accepted hypotheses are shown in table 6.

The second hypothesis of this study was “There is a positive relationship between product knowledge of customers and the adoption of Islamic banking,” which was accepted. A descriptive analysis was done for the second question, which is “To what extent, does product knowledge influence the adoption of Islamic banking in Herat province, Afghanistan?” As shown in Table 2 the average mean value of this variable (2.174) is less than moderate, it is concluded that customers do not have a lot of knowledge about Islamic banking products and services (*Murabaha*, *Mudarabah*, *Musharakah*, *Salam*, and *Ijarah*), maybe it is due to that the Islamic banking concept recently emerged between Afghans. Moreover, multiple regression analysis was performed in Table 5 to determine the effect of product knowledge on adoption. It shows that Product knowledge has a significant influence because of $p\text{-value} = .000$. This significant influence of product knowledge on adoption can be a strong factor for consideration of banks. It means they should consider improving customer knowledge about their products and services in their marketing strategies and this improvement could influence the adoption rate of Islamic banking among them. This finding is supported by studies done by other researchers. Naser et al. (1999) found that customers have a little knowledge of specific products such as *Mudarabah* and *Murabaha*, but they do not deal with these products. The same findings by Okumuş (2005) in Turkey show that customers are aware of specific products such as *Musharakah* and *Mudarabah*, but most of them do not deal with these products. Besides, Ashurov et al. (2018) reported that customers are not aware of some specific products such as *Ijarah*, *Muhdarabah*, *Musharakah*, and *Murabaha*, while Khattak and Rehman (2010) indicates that most of the customers are ignorant of specific products such as *Murabaha* and *Ijarah*. In this study, the customers’ knowledge about *Murabaha*, *Mudarabah*, *Musharakah*, *Salam*, and *Ijarah* contracts is low. Therefore, as the previous researches have shown, with the existence of a low rate of product knowledge among customers their adoption rate of Islamic banking products and services is low as well, which means there is a significant relationship between product knowledge and adoption of Islamic banking.

Hence, by improving the knowledge of Afghan customers about Islamic banking products and services, their rate of Islamic banking adoption will increase.

The third hypothesis of this study was “There is a positive relationship between religiosity and the adoption of Islamic banking,” which is accepted. A descriptive analysis was performed for the third question, which is “To what extent, does religiosity influence the adoption of Islamic banking”. A descriptive analysis was performed for this variable as shown in Table 2. According to the average mean value of this variable (3.7175), it is shown to be more than moderate. Hence, customers practice religiosity in their daily life. It is maybe due to the majority of Afghans are Muslim and they have religious knowledge. As discussed before according to Ahmad et al. (2008) Muslim’s formal religious education and maturity influence their religiosity. Also, multiple regression analysis was done to determine the impact of religiosity on adoption. It shows that religiosity has a positive effect on Islamic banking adoption and this positive effect is significant because the p-value = .000. Furthermore, the findings of this study are similar to the findings of other researches done in different countries. Gerrard and Cunningham (1997) found that Muslim customers choose to deposit their money in Islamic banks because of the religiosity factor. Another study conducted by Naser et al. (1999) found that one of the factors influencing the adoption of Islamic banking is religious beliefs and it is a reason for the customer to deal with Islamic banks. Moreover, Bley and Kuehn (2004), and Obeid and Kaabachi (2016) revealed from their research, that the religious factor is a predictor for the adoption of Islamic banking. Although, in this study, even the level of religiosity of the banks’ customers is more than moderate and it has a positive significant impact on adoption, but the adoption rate of Islamic banking is low as mentioned before. It can be concluded that even the religious factor is important for them, but it will not be the only factor for motivating people to adopt Islamic banking. This interpretation is supported by the findings of Ahmad et al. (2008) who indicated that when the customers try to select a bank for their dealings, the religiosity factor significantly influences their selections, but it is not the only factor. Therefore, Islamic banks may also focus more on developing and expanding their services to attract more customers. Moreover, Dusuki and Abdullah (2007) argued that Islamic banks cannot rely only on religious products and services but must be able to compete in the banking industry by improving the quality of their products and services, especially in countries with dual banking systems. As such, the religiosity factor significantly influences the adoption of Islamic banking among customers and the descriptive analysis in Table 2 shows a high average mean value of more than moderate. It means that the religious factor is important for Afghan customers so maybe if the banks pay more attention to

increase the quality of their products and services it can positively influence the adoption of Islamic banking services and products among Afghans.

The fourth hypothesis of this study was “There is a positive relationship between relative advantage and adoption of Islamic banking,” which is accepted. A descriptive analysis was performed for the fourth question, “To what extent, does relative advantage influence the adoption of Islamic banking”. According to the average mean value of this variable (3.198), it is concluded that the average mean value is more than moderate. Hence, Afghan customers believe in the relative advantage of Islamic banking over the other systems. This view of Afghan costumers can be a strong factor for banks to employ beneficial methods to improve their customers’ product knowledge and offering them, good services to encourage them to adopt Islamic banking products and services. Additionally, Table 5 shows that relative advantage positively affects Islamic banking adoption and this positive effect is significant because the p -value = .002. The outcomes of this study are also in agreement with those of previous studies. Aziz et al. (2015) found that relative advantage positively and significantly influenced customers’ attitudes toward Islamic banking products and services. Latip, Yahya, and Junaina (2017) reported that relative advantage was a second significant factor in the usage of IRB products and services. The significant positive influence of relative advantage on adoption was supported by Al-Ghaith, Sanzogni, and Sandhu (2010), Kolodinsky, Hogarth, and Hilgert (2004), Obeid and Kaabachi (2016), and Tornatzky and Klein (1982). Moreover, a study by Al-jabri and Sohail (2012) also found a positive impact of relative advantage on adoption. Thus, the relative advantage in this study appears to have a positive and significant impact on the adoption of Islamic banking among customers. It shows that the perception of relative advantage increases the adoption rate of Islamic banking products and services. Therefore, it can be concluded that the perceived relative advantage motivates the adoption of Islamic banking products and services.

However, awareness of Islamic banking products and services, compatibility, and complexity were found to be insignificant predictors of Islamic banking adoption. This shows that Afghan customers are generally aware of Islamic banking because in this study awareness was considered as the basic knowledge of customers about Islamic banking. For instance, awareness of customers about Islamic banking in general, the concept of profit and loss sharing, the existence of full-fledged and windows of Islamic banking in Afghanistan, and the necessities of Islamic banking operations in society. Also, as a majority Muslim country, they are aware of the basic concept of Islamic banking and it is compatible with their values, experiences, lifestyle, and needs. The insignificant influence of complexity is may be due to that about 70% of the respondents had a College’s or Master’s degree.

Conclusion

In general, all the objectives of this research have been achieved. It can be illustrated that all research variables have been measured in an effective way employing a quantitative approach. As mentioned earlier, public dealings with the banking sector including Islamic banking in Afghanistan are very low. Consequently, attention needs to be paid to the factors that influence the adoption of Islamic banking, which is important for increasing the adoption and usage rates of Islamic banking products and services.

Accordingly, the focus of the current study was to identify the factors influencing the adoption of Islamic banking in the Herat province of Afghanistan by examining the Diffusion Innovation Theory from Rogers. The primary data were collected from 334 participants in Herat province through a quantitative stratified convenience method and subjected to multiple regression analysis. The results show that relative advantage, religiosity, and product knowledge variables have a significant positive influence on the adoption of Islamic banking. It can be concluded that the religiosity and relative advantage of the customers according to the average mean values from the descriptive analysis as shown in Table 2 are higher than moderate (3.7175, 3.198 respectively), but the product knowledge of customers is low, at 2.174, which is less than moderate. Additionally, the constructs related to awareness and compatibility have a negative influence, and the construct related to complexity has a positive influence, while the influence of all was insignificant.

The review of the literature indicated that there have been many studies on the adoption of Islamic banking in other countries and some of them applied the Diffusion of Innovation Theory as a theoretical basis for their study. However, this study is pioneering to examine the adoption of Islamic banking in Afghanistan, also based on Roger's Diffusion of Innovation Theory. Moreover, this study bridges the gaps in the literature about Islamic banking adoption in Afghanistan and can be a useful guide for bankers and policymakers to formulate beneficial policies to enhance the adoption of Islamic banking in Afghanistan.

The government and financial institutions have been encouraged to support Islamic banking through their policies and to improve people's knowledge about the importance of Islamic banking operations to motivate them to adopt it. In addition, because there is lack of empirical studies about the banking system in Afghanistan, this research will provide information about the factors that influence the adoption of Islamic banking and it may be an excellent opportunity for other researchers to study more about the banking system of Afghanistan, particularly Islamic banking and conduct more research in that direction to contribute more in-

formation on the adoption of Islamic banking in Afghanistan as such information is currently negligible.

However, despite the efforts of the researchers, this study has some limitations, a situation that is a typical challenge of any pioneering research. The distribution of the questionnaires in only one province of Afghanistan is a limitation due to time and resource constraints. Another limitation is the scarcity of directly relevant previous studies in the context of Afghanistan. Furthermore, this study would have been enhanced by greater compresence employing analytical tools like SEM. Finally, despite six constructs being tested in this study, other factors may also influence the adoption of Islamic banking such as regional factors, Islamic banking literacy, and customer demographic characteristics, etc.

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