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Innovation Attributes impact on Islamic Banking Services Adoption: The Mediating Role of Consumer Attitudes

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Abstract ;

This study examines the adoption of Islamic banking services in Algeria through a consumer behavior perspective grounded in Diffusion of Innovation Theory. It focuses on three perceived innovation attributes—compatibility, complexity, and observability—and investigates their effects on consumer attitudes and, subsequently, on adoption. The study argues that prior research has largely emphasized direct determinants of adoption while paying less attention to the psychological mechanism through which service perceptions are translated into evaluative orientations and behavioral outcomes, particularly in emerging markets . Using a conceptual model in which attitudes mediate the relationship between perceived service attributes and adoption, the findings show that compatibility positively influences attitudes, whereas complexity negatively affects them. Observability, however, does not exert a statistically significant influence. In addition, attitudes positively affect adoption and selectively mediate the effects of compatibility and complexity, but not observability . The model demonstrates moderate explanatory power, accounting for 49.1% of the variance in attitudes and 43.5% of the variance in adoption, with acceptable overall model fit . The study contributes to the literature by clarifying how consumers interpret Islamic banking service characteristics and by providing empirical evidence from the Algerian context.

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1. *Introduction*

Over the past two decades, Islamic banking has evolved from a niche financial alternative into one of the most dynamic segments of the global financial services industry. This expansion reflects the growing demand for financial solutions that comply with ethical and religious principles while offering alternatives to conventional interest-based finance. Unlike conventional banking systems that rely primarily on interest-based transactions, Islamic banking operates according to Sharia principles that prohibit Riba and emphasize risk-sharing, asset-backed financing, fairness in exchange, and socially responsible investment practices. Because of these distinctive characteristics, Islamic banking has attracted increasing attention from both practitioners and researchers seeking to understand the conditions under which consumers accept and use Sharia-compliant financial services (Dusuki& Abdullah, 2007; Amin, 2008).

Despite its rapid growth, the adoption of Islamic banking services cannot be explained solely by the religious identity of the service. From a consumer behavior perspective, financial services are inherently difficult to evaluate prior to actual use because they are intangible, information-intensive, and often cognitively demanding. As a result, consumers frequently rely on subjective perceptions when assessing new financial services, including whether the service aligns with their values, whether it is easy to understand and use, and whether its benefits can be observed through the experiences of other users (Lovelock & Wirtz, 2016; Zeithaml et al., 2018).

Diffusion of Innovation Theory provides a useful lens for understanding how individuals evaluate and adopt new services. According to (Rogers, 2003), the diffusion of an innovation is strongly influenced by how potential adopters perceive certain attributes of the innovation itself. The original framework identifies five key attributes that influence adoption decisions: relative advantage, compatibility, complexity, trialability, and observability. These attributes shape how individuals interpret unfamiliar products and services and influence their willingness to accept or reject them.

In financial service contexts, innovation attributes are particularly important because consumers often face uncertainty when evaluating new banking services. Previous studies in internet and digital banking have shown that perceived characteristics of the service significantly influence adoption decisions (Tan & Teo, 2000; Gerrard & Cunningham, 2003; Lee, 2009; Oliveira et al., 2016; Alalwan et al., 2017). Among these attributes, compatibility, complexity, and observability have been repeatedly identified as especially relevant because they capture three key aspects of consumer evaluation: the perceived alignment of the service with personal values and needs, the cognitive effort required to understand the service, and the visibility of the service's outcomes through the experiences of others.

These issues are particularly salient in the context of Islamic banking services. Because Islamic financial products differ structurally from conventional banking services and operate within a specific ethical and religious framework, consumers often evaluate them not only in terms of financial utility but also in relation to their compatibility with personal beliefs and everyday financial practices. At the same time, unfamiliar contractual structures and limited public understanding of Islamic financial mechanisms may increase perceived complexity,

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while the visibility of successful experiences among other users may help reduce uncertainty and facilitate acceptance.

Although a substantial body of research has examined the adoption of Islamic banking services, two limitations remain evident in the existing literature. First, a large share of previous studies has been conducted in countries where Islamic banking is already relatively well established, particularly Malaysia and several Gulf countries (Dusuki& Abdullah, 2007; Amin, 2008; Lajuni et al., 2017). Less attention has been devoted to emerging contexts where Islamic banking services are more recent and consumer perceptions may still be evolving. Second, much of the existing research focuses primarily on direct determinants of adoption or intention to adopt, while giving comparatively less attention to the psychological processes through which consumers translate perceived service characteristics into overall evaluative orientations toward the service.Despitethese contributions, limited attention has been given to how innovation attributesshape consumer attitudes towardIslamicbanking services and how these attitudes subsequently translate into adoption behavior, particularly in emergingmarkets.

These limitations are particularly relevant in Algeria, where Islamic banking services have expanded relatively recently within a financial system historically dominated by conventional banking institutions. In such a context, consumers may be aware of Islamic banking in general terms but may still differ significantly in how they perceive the characteristics of these services. Understanding how such perceptions influence consumer attitudes and ultimately shape adoption behavior is therefore both theoretically and practically important.

Against this background, the present study examines the influence of three perceived service attributes—compatibility, complexity, and observability—on consumer attitudes toward Islamic banking services and investigates how these attitudes affect the adoption of such services. By positioning consumer attitudes as a mediating mechanism between perceived service attributes and adoption behavior, the study aims to provide a more behaviorally grounded explanation of how individuals evaluate and accept Islamic banking services in emerging financial markets.

The study contributes to the literature in three main ways. First, it extends research on Islamic banking adoption by explicitly focusing on innovation attributes derived from diffusion of innovation theory. Second, it highlights the role of consumer attitudes as a psychological mechanism linking perceived service characteristics to adoption behavior. Third, it provides empirical insights from the Algerian context, thereby contributing to the growing body of research on Islamic banking adoption in emerging markets.

2. Literature Review and Hypothesis Development

2.1 Innovation attributes as evaluative cues in financial services

Research on financial innovation adoption suggests that consumers often rely on simplified evaluative cues when assessing unfamiliar services, particularly because financial services are intangible and difficult to evaluate prior to use. Diffusion of Innovation Theory explains this process by emphasizing that the adoption of new products and services is influenced by how potential adopters perceive specific attributes of the innovation (Rogers, 2003).

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The original framework identifies five main attributes that influence innovation adoption: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). Relative advantage refers to the perceived superiority of an innovation compared with existing alternatives. Compatibility captures the extent to which an innovation is perceived as consistent with individuals' values, needs, and prior experiences. Complexity reflects the degree to which the innovation is perceived as difficult to understand or use. Trialability refers to the possibility of experimenting with the innovation before full adoption, whereas observability concerns the visibility of the innovation's outcomes to others.

These attributes have been widely used in studies examining the adoption of technological and financial innovations. However, previous research also suggests that the relevance of each attribute may vary depending on the nature of the service and the context in which adoption occurs. Consequently, many studies select a subset of innovation attributes that best capture the evaluative dimensions most relevant to the innovation under investigation (Tan & Teo, 2000; Gerrard & Cunningham, 2003; Martins et al., 2014).

In financial service environments, compatibility, complexity, and observability have frequently been identified as influential attributes shaping consumer evaluations of banking innovations. Empirical studies show that compatibility facilitates favorable evaluations, complexity often acts as a barrier, and observability helps reduce uncertainty through the experiences of other users (Lee, 2009; Oliveira et al., 2016; Alalwan et al., 2017).

2.2 Selection of innovation attributes in the present study

Although the diffusion of innovation framework includes five attributes, the present study focuses specifically on compatibility, complexity, and observability. This choice is motivated by both theoretical considerations and the particular characteristics of banking services.

First, relative advantage has already been extensively examined in previous studies on Islamic banking adoption and has consistently been found to influence consumers' intention to use Islamic financial services (Amin, 2008; Amin et al., 2014). Because the objective of the present study is to explore how consumers cognitively interpret and evaluate the characteristics of Islamic banking services rather than their perceived economic superiority, the analysis concentrates on attributes that capture evaluative and perceptual aspects of the service.

Second, trialability is generally less applicable in the context of banking services. Unlike many technological products, banking services typically require formal procedures such as account opening, contractual agreements, and financial commitments. These characteristics limit consumers' ability to experiment with the service before adopting it. As a result, several studies examining banking innovations have either excluded trialability or found it to be less relevant in financial service adoption contexts (Tan & Teo, 2000; Gerrard & Cunningham, 2003).

Accordingly, the present study concentrates on compatibility, complexity, and observability as the innovation attributes most theoretically relevant to understanding how consumers evaluate Islamic banking services.

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2.3 Innovation attributes in Islamic banking research

In the context of Islamic banking, perceived service characteristics have also been shown to influence consumer responses. Early studies emphasized that alignment with religious values and ethical principles represents an important reason why customers choose Islamic banking services (Dusuki& Abdullah, 2007). Later research confirmed that compatibility between Islamic banking products and consumers' beliefs, financial habits, and expectations can significantly increase adoption intentions (Amin, 2008; Amin et al., 2014; Kaabachi& Obeid, 2016; Lajuni et al., 2017).

More recent studies have expanded this perspective by examining Islamic banking adoption within broader frameworks of financial innovation and digital banking services. These studies indicate that compatibility, perceived complexity, and the visibility of service outcomes remain important determinants of consumers' acceptance of Islamic banking products (Sudarsono et al., 2022; Shaikh et al., 2023; Usman &Sobari, 2023).

However, the literature reveals an imbalance in the examination of innovation attributes in Islamic banking research. While compatibility has received considerable attention, other attributes such as observability remain comparatively underexplored. Moreover, many studies focus primarily on direct determinants of adoption rather than the psychological mechanisms linking service perceptions to consumer behavior.

2.4 Consumer attitudes as the psychological mechanism

Attitude plays a central role in consumer behavior because it reflects an individual's overall evaluative orientation toward a behavior, object, or service (Ajzen, 1991). According to the Theory of Planned Behavior, individuals who evaluate a behavior positively are more likely to develop intentions to perform that behavior and ultimately engage in it.

In service contexts, attitudes often emerge from beliefs about the characteristics and expected outcomes of a service. When a service is perceived as compatible with personal values, easy to understand, and socially validated, consumers are more likely to form favorable attitudes toward it. Conversely, perceptions of misalignment, complexity, or uncertainty may generate negative evaluations.

For Islamic banking services, attitudes may reflect a combination of cognitive evaluations, emotional responses, and value-based considerations. Consequently, attitudes provide a theoretically meaningful mechanism linking perceptions of service attributes to adoption behavior.

2.5 Conceptual model

Based on the preceding theoretical discussion, the present study proposes a conceptual framework that explains how perceived innovation attributes influence the adoption of Islamic banking services. Drawing on Diffusion of Innovation Theory (Rogers, 2003) and the Theory of Planned Behavior (Ajzen, 1991), the model assumes that consumers evaluate Islamic banking services through certain perceived characteristics of the service.

In this framework, compatibility, complexity, and observability represent key innovation attributes that shape how consumers interpret the characteristics of Islamic banking services. These attributes act as evaluative cues that influence consumers' overall orientation toward

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the service. Consumer attitudes, in turn, represent the general evaluative disposition toward Islamic banking services and are expected to influence the likelihood of adoption.

Accordingly, the model proposes that perceived innovation attributes affect the adoption of Islamic banking services indirectly through their influence on consumer attitudes. In this sense, attitudes are expected to function as a mediating mechanism linking consumers' perceptions of service characteristics to their adoption behavior.

2.6 Compatibility and consumer attitudes

Compatibility refers to the degree to which an innovation is perceived as consistent with existing values, needs, and prior experiences (Rogers, 2003). In Islamic banking, compatibility is particularly influential because services are often evaluated in relation to religious beliefs, ethical principles, and everyday financial practices.

When consumers perceive Islamic banking services as aligned with their beliefs and financial expectations, they are more likely to evaluate these services positively. Previous studies consistently show that compatibility strengthens positive perceptions and increases consumers' willingness to adopt Islamic financial services (Amin, 2008; Amin et al., 2014; Kaabachi& Obeid, 2016; Ali & Puah, 2017).

H1: Compatibility positively influences consumer attitudes toward Islamic banking services.

2.7 Complexity and consumer attitudes

Complexity refers to the extent to which an innovation is perceived as difficult to understand or use (Rogers, 2003). In the banking sector, complexity may arise from unfamiliar terminology, procedural opacity, or difficulties in comparing financial alternatives.

In Islamic banking, perceived complexity may also result from limited public understanding of Sharia-compliant contracts and profit-sharing mechanisms. When consumers perceive these services as difficult to understand, their evaluations are likely to become less favorable. Empirical studies in both conventional and Islamic financial services indicate that higher levels of perceived complexity reduce favorable attitudes and slow adoption processes (Gerrard & Cunningham, 2003; Lee, 2009; Amin et al., 2014; Oliveira et al., 2016).

H2: Complexity negatively influences consumer attitudes toward Islamic banking services.

2.8 Observability and consumer attitudes

Observability refers to the degree to which the results of an innovation are visible to others (Rogers, 2003). In service contexts, individuals often learn about the effectiveness of services by observing the experiences of other users.

When consumers observe successful use of Islamic banking services among peers or community members, uncertainty decreases and the perceived credibility of the service increases. Exposure to others' experiences can therefore facilitate more favorable evaluations and strengthen acceptance of Islamic banking services (Rogers, 2003; Gerrard & Cunningham, 2003).

H3: Observability positively influences consumer attitudes toward Islamic banking services.

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2.9 Consumer attitudes and service adoption

A favorable attitude toward a service reflects a generalized positive evaluation and increases the likelihood that individuals will adopt that service. According to the Theory of Planned Behavior, individuals who evaluate a behavior positively are more likely to engage in it (Ajzen, 1991).

Previous studies in financial services and Islamic banking contexts confirm that favorable attitudes toward Islamic banking products are associated with stronger intentions to adopt such services (Amin, 2008; Souiden& Rani, 2021; Usman &Sobari, 2023).

H4: Consumer positive attitudes influence the adoption of Islamic banking services.

2.10 The mediating role of consumer attitudes

Consumer attitudes may play an important mediating role in the relationship between perceived innovation attributes and the adoption of Islamic banking services. According to the Theory of Planned Behavior, attitudes represent a key psychological determinant of behavioral intentions and actions, as individuals who hold favorable evaluations toward a behavior are more likely to engage in that behavior (Ajzen, 1991). In the context of financial services, attitudes often emerge from consumers' evaluations of service characteristics and expected outcomes.

Innovation attributes such as compatibility, complexity, and observability influence how consumers interpret and evaluate new financial services (Rogers, 2003). When Islamic banking services are perceived as compatible with consumers' values and financial needs, easy to understand, and supported by visible experiences of other users, consumers are more likely to develop favorable attitudes toward these services. Previous studies in banking and financial innovation contexts have shown that perceptions of service characteristics can shape consumer attitudes, which subsequently influence adoption decisions (Lee, 2009; Martins et al., 2014; Alalwan et al., 2017).

In the context of Islamic banking, research has also confirmed that positive consumer attitudes toward Sharia-compliant financial services increase the likelihood of adoption (Amin, 2008; Souiden& Rani, 2021; Usman &Sobari, 2023). Consequently, innovation attributes may influence adoption behavior indirectly through their impact on consumer attitudes. In this sense, attitudes function as a psychological mechanism that translates consumers' perceptions of Islamic banking services into adoption behavior.

H5: Consumer attitudes mediate the relationship between innovation attributes (compatibility, complexity, and observability) and the adoption of Islamic banking services.

3. Methodology and Empirical Results

3.1 Research design

This study adopts a quantitative, explanatory design to examine how consumers evaluate Islamic banking products and how these evaluations translate into adoption behavior. In line with the theoretical framework developed earlier, the model assumes that adoption is not a purely mechanical response to product availability. Rather, it is the result of a consumer interpretation process in which product-related perceptions shape attitudes, and attitudes, in turn, influence behavior.

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This perspective is particularly relevant in the context of Islamic banking. From a marketing viewpoint, Islamic banking products are not assessed only in terms of functional utility. They are also judged in terms of fit with consumers' values, ease of understanding, and visibility in the surrounding social environment. The empirical model was therefore designed to test the effects of compatibility, complexity, and observability on attitudes, and the subsequent effect of attitudes on adoption.

Because the study involves multiple latent constructs and simultaneous causal relationships, Partial Least Squares Structural Equation Modeling (PLS-SEM) was selected as the analytical technique. PLS-SEM is appropriate when the objective is prediction, theory extension, and the analysis of complex models involving reflective constructs (Hair et al., 2022; Hair et al., 2019).

3.2 Data collection and sample

The empirical analysis is based on primary data collected through a structured questionnaire. The instrument was designed to capture respondents' perceptions of Islamic banking products, their attitudinal orientation toward these products, and their level of adoption. In addition, demographic information was collected to describe the sample.

After screening the responses, 100 valid questionnaires were retained for analysis. The dataset did not contain missing values, which supports its suitability for multivariate analysis. In total, the database included 20 variables, of which 15 items measured the main constructs of the model and 5 variables described the demographic profile of respondents.

Although the sample does not aim to statistically represent the entire market, it remains useful for understanding how consumers exposed to banking services interpret Islamic financial offerings. In behavioral and service research, the relevance of a sample lies not only in representativeness, but also in its ability to reveal meaningful patterns of consumer evaluation and response.

From a methodological standpoint, the retained sample size is considered acceptable for PLS-SEM, which is widely recommended for predictive and explanatory models involving latent constructs and relatively small to medium samples (Hair et al., 2019; Hair et al., 2022). More specifically, the adequacy of sample size in PLS-SEM is commonly judged in relation to model complexity, especially the largest number of structural paths directed at any endogenous construct. In the present model, the maximum number of arrows pointing to a single endogenous construct is three, which supports the suitability of the sample size used in this study. In this respect, a sample of 100 observations can be regarded as sufficient for estimating a model of this complexity and for obtaining stable results in variance-based structural equation modeling (Kock & Hadaya, 2018; Hair et al., 2019).

3.3 Measurement instrument

The questionnaire was built around five latent constructs reflecting the conceptual model of the study: Compatibility, Complexity, Observability, Attitudes, and Adoption. Each construct was measured using three items, resulting in a total of 15 indicators. All items were assessed on a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

The measurement model was specified as reflective, since each indicator was designed to represent a manifestation of its underlying construct. Substantively, the instrument captured

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how consumers make sense of Islamic banking products as service offerings. Compatibility reflected perceived fit with personal beliefs, expectations, and financial practices; complexity captured perceived difficulty; observability represented the extent to which the products and their outcomes were visible in the social environment; attitudes expressed the overall evaluative orientation toward the products; and adoption captured the behavioral expression of these evaluations.

3.4 Preliminary data screening

Before estimating the model, the dataset was checked for completeness and consistency. All observations were complete, with no missing values across the 100 cases. The coding pattern was also consistent, as all items fell within the expected range from 1 to 5.

A first reading of the descriptive results already suggested a generally favorable orientation toward Islamic banking products. Most item means were above the midpoint of the scale, especially for compatibility, attitudes, and adoption. Complexity, however, showed comparatively lower mean values, which may indicate that some respondents still perceive Islamic banking products as somewhat difficult to understand. From a marketing perspective, this is an important signal: resistance may not stem from rejection of the product's value proposition itself, but from the way the offering is cognitively processed by consumers.

4. Sample profile and descriptive statistics

The demographic profile of respondents provides useful context for interpreting the results. As shown in Table 1, the sample is predominantly male, relatively mature in age, and largely concentrated in salaried employment. Most respondents also reported university or postgraduate education and relatively high income levels. These characteristics suggest that the evaluations captured in this study come mainly from economically active consumers who are likely to have practical exposure to banking services.

Table 1. Demographic profile of respondents (N = 100)

Variable	Category	Frequency	Percentage
Gender	Male	66	66.0
	Female	34	34.0
Age	21–30 years	7	7.0
	31–40 years	16	16.0
	41–50 years	38	38.0
	Above 51 years	39	39.0
Education	Secondary	7	7.0
	University	61	61.0
	Postgraduate	32	32.0
Occupation	Employee	92	92.0
	Retired	4	4.0
	Trader	2	2.0
	Service business owner	2	2.0
Income	Less than 18,000 DZD	1	1.0
	28,000–38,000 DZD	1	1.0
	38,000–48,000 DZD	6	6.0
	48,000–58,000 DZD	18	18.0
	More than 58,000 DZD	74	74.0

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The descriptive statistics of the measurement items are presented in Table 2. Overall, the mean values suggest that respondents tend to evaluate Islamic banking products positively, particularly in terms of compatibility, attitudes, and adoption. Complexity appears as the least favorable dimension, which is consistent with the idea that product clarity remains a challenge in this context.

Table 2. Descriptive statistics of measurement items

Construct	Item	Mean	SD
Compatibility	COMP1	3.91	1.20
	COMP2	3.81	1.12
	COMP3	3.71	1.24
Complexity	COMPLX1	3.16	1.30
	COMPLX2	3.44	1.26
	COMPLX3	3.37	1.24
Observability	OBS1	3.71	1.15
	OBS2	3.72	1.16
	OBS3	3.69	1.18
Attitudes	ATT1	3.84	1.12
	ATT2	3.91	1.17
	ATT3	3.91	1.10
Adoption	ADOP1	3.78	1.08
	ADOP2	3.91	1.02
	ADOP3	3.74	1.02

5. Measurement model assessment

The quality of the measurement model was assessed through indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. In PLS-SEM, this step is essential because meaningful interpretation of consumer behavior depends on the extent to which latent constructs are measured accurately (Hair et al., 2022).

Table 3. Indicator reliability (outer loadings)

Construct	Item	Loading
Complexity	COMPLX1	0.863
	COMPLX2	0.921
	COMPLX3	0.907
Compatibility	COMP1	0.938
	COMP2	0.884
	COMP3	0.941
Observability	OBS1	0.914
	OBS2	0.948
	OBS3	0.923
Attitudes	ATT1	0.970
	ATT2	0.975
	ATT3	0.966
Adoption	ADOP1	0.951
	ADOP2	0.949
	ADOP3	0.962

As shown in Table 3, all outer loadings exceed the recommended threshold of 0.70, which indicates that the indicators represent their constructs strongly and consistently (Hair et al., 2019).

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Table 4. Reliability and convergent validity

Construct	Cronbach's alpha	Composite reliability	AVE
Compatibility	0.911	0.944	0.849
Complexity	0.879	0.925	0.805
Observability	0.920	0.949	0.862
Attitudes	0.969	0.980	0.942
Adoption	0.951	0.968	0.910

Internal consistency reliability was examined using Cronbach's alpha and composite reliability. As shown in Table 4, all constructs exceeded the recommended threshold of 0.70, indicating satisfactory internal consistency (Hair et al., 2019). Convergent validity was then assessed through the Average Variance Extracted (AVE). All AVE values were above the threshold of 0.50, which indicates that each construct explains more than half of the variance of its indicators (Fornell & Larcker, 1981).

Discriminant validity was assessed using the Heterotrait–Monotrait ratio (HTMT). This criterion is particularly useful in PLS-SEM because it provides a more sensitive assessment of construct distinctiveness than some older procedures (Henseler et al., 2015). All HTMT values remained below the conservative threshold of 0.90, indicating that the constructs are empirically distinct.

Table 5. Discriminant validity (HTMT)

Construct	Complexity	Compatibility	Observability	Attitudes	Adoption
Complexity	—				
Compatibility	0.101	—			
Observability	0.071	0.867	—		
Attitudes	0.217	0.709	0.621	—	
Adoption	0.161	0.598	0.507	0.686	—

Taken together, these results confirm that the constructs are measured with adequate reliability and validity, which supports proceeding to the structural model.

6. Structural model assessment and hypothesis testing

After establishing measurement quality, the structural model was evaluated through collinearity diagnostics, path significance, effect sizes, explanatory power, predictive relevance, and model fit. Reporting these indicators is important because statistical significance alone does not fully demonstrate the robustness of a structural model.

Table 6. Inner model collinearity statistics (VIF)

Path	VIF
Complexity → Attitudes	1.012
Compatibility → Attitudes	2.730
Observability → Attitudes	2.728
Attitudes → Adoption	1.000

All inner VIF values are well below the critical threshold of 5, which indicates that the structural relationships are not distorted by problematic multicollinearity. This strengthens confidence in the estimated path coefficients (Hair et al., 2019).

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Table 7. Structural paths and hypothesis testing

Hypothesis	Path	β	t-value	p-value	Decision
H1	Compatibility → Attitudes	0.517	4.269	0.000	Supported
H2	Complexity → Attitudes	-0.186	2.494	0.013	Supported
H3	Observability → Attitudes	0.183	1.699	0.089	Not supported
H4	Attitudes → Adoption	0.659	6.609	0.000	Supported

.As shown in Table 7, the results show that Compatibility has a positive and statistically significant effect on Attitudes ($\beta = 0.517$, $t = 4.269$, $p < 0.001$). This suggests that consumers are more likely to develop favorable attitudes toward Islamic banking products when those products are perceived as consistent with their values, expectations, and financial routines. From a marketing perspective, this means that consumer acceptance is strengthened when the offering feels personally relevant and legitimate. Therefore, H1 is supported.

Complexity has a negative and statistically significant effect on Attitudes ($\beta = -0.186$, $t = 2.494$, $p = 0.013$). This indicates that perceived difficulty weakens consumers' overall evaluations of Islamic banking products. In practical terms, even a value-consistent product may face resistance if consumers find it difficult to understand. Therefore, H2 is supported.

The effect of Observability on Attitudes is positive but not statistically significant ($\beta = 0.183$, $t = 1.699$, $p = 0.089$). Although the direction of the relationship is theoretically plausible, the evidence is not strong enough to conclude that visibility significantly shapes attitudes in the present sample. Hence, H3 is not supported.

Finally, Attitudes have a strong positive and statistically significant effect on Adoption ($\beta = 0.659$, $t = 6.609$, $p < 0.001$). This is the strongest direct relationship in the model, confirming that adoption is mainly driven by consumers' overall evaluations of the product. Accordingly, H4 is supported.

Table 8. Effect sizes (f^2)

Path	f^2	Interpretation
Complexity → Attitudes	0.067	Small
Compatibility → Attitudes	0.192	Medium
Observability → Attitudes	0.024	Small
Attitudes → Adoption	0.769	Large

The effect size results provide a more nuanced reading of the model. Compatibility makes the strongest contribution to attitudes, while complexity acts as a smaller but meaningful barrier. Observability contributes only marginally. The very large effect of attitudes on adoption confirms that favorable evaluations are the main mechanism through which product perceptions are converted into market behavior. Following Cohen's guidelines, f^2 values of 0.02, 0.15, and 0.35 may be interpreted as small, medium, and large, respectively.

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Table 9. Explanatory power, predictive relevance, and model fit

Endogenous construct / index	R^2	Adjusted R^2	Q^2predict	Interpretation
Attitudes	0.491	0.475	0.450	Moderate explanatory and predictive relevance
Adoption	0.435	0.429	0.290	Moderate explanatory and predictive relevance
SRMR (estimated model)	0.057	—	—	Acceptable model fit

The model explains 49.1% of the variance in attitudes and 43.5% of the variance in adoption, which indicates moderate explanatory power for a consumer-behavior model. The Q^2predict values are above zero for both endogenous constructs, confirming predictive relevance. In addition, the SRMR value of 0.057 is below the commonly accepted threshold of 0.08, which supports an acceptable overall model fit (Hair et al., 2022). So these results suggest that the model captures a meaningful part of the evaluative process through which consumers move from perceiving Islamic banking products to actually adopting them.

7. Mediation analysis

The mediation analysis provides a deeper understanding of how product perceptions influence behavior. Instead of assuming that innovation attributes directly shape adoption, the model proposes that they first influence Attitudes, which then operate as a transmission mechanism toward behavior.

The indirect effect of Compatibility on Adoption through Attitudes is positive and statistically significant ($\beta = 0.341$, $t = 3.382$, $p = 0.001$). This indicates that compatibility encourages adoption because it strengthens favorable attitudes toward Islamic banking products. Thus, H5a is supported.

The indirect effect of Complexity on Adoption through Attitudes is negative and statistically significant ($\beta = -0.123$, $t = 2.455$, $p = 0.014$). This means that complexity undermines adoption by weakening consumers' overall evaluations of the product. Therefore, H5b is supported.

The indirect effect of Observability on Adoption through Attitudes is positive but not statistically significant ($\beta = 0.121$, $t = 1.615$, $p = 0.106$). Consequently, H5c is not supported.

Table 10. Specific indirect effects

Hypothesis	Indirect path	β	t-value	p-value	Decision
H5a	Compatibility → Attitudes → Adoption	0.341	3.382	0.001	Supported
H5b	Complexity → Attitudes → Adoption	-0.123	2.455	0.014	Supported
H5c	Observability → Attitudes → Adoption	0.121	1.615	0.106	Not supported

These findings show that Attitudes play a selective mediating role. They successfully transmit the effects of compatibility and complexity, but not the effect of observability.

8. Discussion

The findings of this study provide a clearer understanding of how consumers approach Islamic banking services in the Algerian context. More specifically, they show that

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adoption is not shaped by service availability alone, but by the way consumers interpret the service before deciding to engage with it. In this sense, the results confirm that Islamic banking adoption can be understood as an evaluative process in which perceptions of the service influence attitudes, and attitudes in turn influence behavior.

The positive effect of compatibility suggests that consumers are more likely to develop favorable attitudes toward Islamic banking services when they perceive them as consistent with their values, expectations, and everyday financial logic. From a marketing perspective, this result is especially important because it shows that adoption does not depend simply on the Islamic identity of the service, but on its perceived relevance in consumers' lives. A service that appears close to the consumer's beliefs and practical needs is more likely to be accepted. Compatibility, therefore, acts as a positioning factor that helps the service appear not only legitimate, but also personally meaningful.

In contrast, the negative effect of complexity highlights one of the main barriers to wider adoption. When Islamic banking services are perceived as difficult to understand, full of unfamiliar terminology, or unclear in the way they function, consumers become less comfortable with them. In such situations, hesitation becomes a natural response. This result suggests that the challenge is not always in the service itself, but often in the way it is presented and explained. Complexity should therefore be viewed not only as a technical issue, but also as a communication issue. This gives particular importance to clearer explanations, simpler language, and a more accessible presentation of Islamic banking offers.

The non-significant effect of observability adds an interesting nuance to the discussion. It indicates that visibility alone is not enough to create favorable attitudes or significantly encourage adoption. Consumers may be aware of Islamic banking services, or may notice their increasing presence in the market, but this does not necessarily influence their judgment in a strong way. This may suggest that, in the Algerian context, consumers rely more on personal evaluation than on social visibility when approaching such services. In other words, a service can be visible without being truly convincing. What matters is not only being noticed, but also being understood and perceived as relevant.

Another major result is the strong positive effect of attitudes on adoption. This confirms that attitudes are not a secondary element in the adoption process, but a central link between perception and behavior. Consumers do not adopt a service simply because they know about it; they adopt it when they form a sufficiently favorable overall impression of it. In this sense, attitudes work as an internal filter through which service characteristics are translated into behavioral outcomes.

The mediation results reinforce this interpretation. They show that compatibility and complexity influence adoption through attitudes. Their effects are therefore not purely

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direct, but pass through the consumer's evaluative response. This finding is meaningful because it confirms that adoption is shaped not only by objective service characteristics, but also by the meaning consumers attach to them. The service is more likely to be adopted when it is perceived as fitting consumers' lives and when it does not create unnecessary cognitive difficulty.

Taken together, these results show that Islamic banking adoption is better understood when innovation attributes are examined through a consumer behavior perspective. They also suggest that the success of Islamic banking services depends not only on what these services offer objectively, but also on how they are perceived in everyday life. By focusing on Algeria, the study adds empirical evidence from an emerging market where Islamic banking still faces the challenge of becoming both understandable and meaningful to consumers.

9. Conclusion

This study examined the adoption of Islamic banking services in Algeria by focusing on three perceived service attributes—compatibility, complexity, and observability—and by analyzing the mediating role of attitudes. Overall, the findings show that adoption is not simply a response to the presence of Islamic banking in the market, but the result of a broader evaluative process in which consumers decide whether the service appears relevant, clear, and worth engaging with.

The study contributes to the literature by showing that innovation attributes remain useful for explaining Islamic banking adoption, especially when they are approached from a consumer behavior perspective. It also underlines the importance of attitudes as a key psychological mechanism linking service perceptions to adoption. In this way, the study offers a more nuanced understanding of how adoption takes shape in the context of Islamic financial services.

From a practical point of view, the results suggest that banks should move beyond simply offering Islamic banking products and pay greater attention to how these services are presented to the public. The main challenge is not only to increase awareness, but also to strengthen perceived compatibility and reduce perceived complexity. If consumers see Islamic banking services as close to their expectations and easy to understand, they are more likely to develop positive attitudes and adopt them.

At the same time, the study has some limitations. The sample remains relatively modest, and the model includes only a limited number of explanatory factors. Future research could extend this work by integrating other relevant variables such as trust, perceived credibility, financial literacy, or service quality. Comparative studies across different regions or countries may also help deepen understanding of Islamic banking adoption in broader contexts.

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In sum, the study suggests that the future development of Islamic banking services depends not only on market availability, but also on consumer interpretation. These services are more likely to be adopted when they are perceived as compatible, understandable, and meaningful. This makes consumer perception not a peripheral issue, but a central condition for stronger adoption.

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