

Determining the Factors that Affect Customer Loyalty Under the Moderating Role of Trust in Islamic Financing

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Abstract

The concept of customer loyalty has changed significantly in the age of digital transformation, with a greater focus on developing cooperative customer-firm co-production relationships. However, a paucity of empirical research on this concept has been found. To fill this void, the aim of this research is to examine the direct effects of different factors on attitudinal customer loyalty, as well as their indirect effects mediated by the role of co-production in Malaysian Islamic banks. Based on the service-dominant (S-D) logic, a research framework has been developed. Data were collected from the customers of Malaysian Islamic banks using survey questionnaires. The collected data are analyzed through the Partial Least Squares Structural Equational Model (PLS-SEM). Data reliability and construct correlations were thoroughly examined. Resultantly, communication, client expertise, commitment, and interactional justice were positively associated with co-production, while co-production positively affected customer loyalty to Malaysian Islamic Bank financial services. The findings also revealed that trust positively

moderated co-production and customer loyalty. The results could guide policymaking regarding customer loyalty attainment via effective communication, client expertise, trust, commitment, and interactional justice.

Keywords: Customer loyalty, Islamic banking, financial services, service-dominant logic,

JEL: G10, N10

Introduction

Over the last thirty years, there has been a notable trend in both population growth and the number of individuals embracing Islam (Floren et al., 2019; Muflih et al., 2024). As per the latest population projections of Statista (2024), there is a compelling indication that the global Muslim population is poised to experience a significant surge, projected to increase by an impressive 45.7% from 2022 to 2060. In the same vein, Pew Research Centre (2017) forecasted that the Muslim population will increase to an estimated 2.99 billion by the year 2060. Within the current population landscape, it is evident that Muslims constitute a sizable and swiftly expanding community. Consequently, there is a general rise in demand among Muslim consumers for

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Islamic products and services. This refers primarily to the Islamic financial and banking products and services. Generally, Islamic finance refers to “the provision of financial services in accordance with Shari’ah Islamic laws, principles and rules” (International Monetary Fund, 2017). Over time, the Islamic finance sector has witnessed a remarkable expansion. As highlighted by Domat (2024) in Global Finance, Islamic finance has evolved into a thriving industry worth \$2.5 trillion, with its footprint extending across more than 80 countries. Likewise, Statista (2024) affirmed that the collective value of Islamic financial assets globally approaches nearly \$4 trillion. Despite the crises like COVID-19 and Oil prices drops, Islamic finance demonstrated impressive growth in 2020, with total assets soaring by 10.6% (S&P Global, 2022). Despite its size and growth projections, Islamic financial industry encounters numerous challenges, particularly in terms of fostering loyalty among its clientele (Muflih et al., 2024; Moosa and Kashiramka, 2022).

In the previous literature, the term loyalty refers to a collection of attitudes aligned with a series of purchase behaviour that systematically favour one entity over competing entities (Watson et al., 2015; Narvanen et al., 2020). In prior literature customer loyalty has been categorized into attitudinal and behavioural dimensions (Rodriguez-Rad et al., 2023). Attitudinal loyalty involves a strong commitment to consistently repurchase a particular product, service or brand, driven by emotional and psychological attachment, whereas behavioral loyalty is evidenced by repeat purchases until a suitable substitute comes along (Rodriguez-Rad et al., 2023; Narvanen et al., 2020). There exists divergent perspectives regarding the significance of attitudinal and behavioral

customer loyalty. For instance, Chahal and Bala (2010) argued that attitudinal loyalty serves as a source of behavioural loyalty. In other words, attitudinal loyalty positively promotes behavioural loyalty. In the same vein, Saini and Singh (2020) contented that attitudinal loyalty drives behavioural loyalty. Recently, Kaur et al., (2021) and Abdelkader and Attallah (2021) affirmed that attitudinal loyalty significantly promotes behavioural loyalty. This underscores the importance of fostering customer loyalty, where individuals develop emotional attachment and deep commitment towards the product and services (Hawkins et al., 2013). Moreover, attitudinal loyalty helps managers to understand why customers choose their brand and competitors and identify strengths and weakness. These insights facilitate managers to formulate effective marketing strategies (Bandyopadhyay and Martell, 2007). Furthermore, attitudinal customer loyalty generates long-term profits and lifetime value of products and services (Hawkins et al., 2013). In the prior literature, customer loyalty has been extensively debated but specifically the role of attitudinal customer loyalty in Islamic banking has been oversight. Recently, Liana et al. (2023) examined the role of service quality to promote customer loyalty in mobile payment. The outcome indicates that attitudinal customer loyalty performs better than behavioural loyalty.

In the past studies, the association between various determinants and attitudinal customer loyalty have been examined. The dominant determinants are attitudes (Albaity and Rahman, 2021), trust (Albaity and Rahman, 2021; Ltifi et al., 2016; Nyagadza et al., 2022), customer satisfaction (Albaity and Rahman, 2021; Moosa and Kashiramka, 2022), gender (Abdelkader and Attallah, 2021;

Ltifi et al., 2016; Liana et al., 2023), quality (Ltifi et al., 2016; Liana et al., 2023; Nyagadza et al., 2022). Apart from the above mentioned determinants, there is a need to identify more factors that impact the attitudinal customer loyalty (Rodriguez-Red et al., 2023; Muflih et al., 2024), especially in emerging markets like Malaysia (Hamid et al., 2023; Haron et al., 2020). The rationale behind this assertion stems from the abundance of empirical studies conducted in western countries (Floren et al., 2019), and limited Islamic countries like Indonesia (Asnawi et al., 2019; Muflih et al., 2024). Therefore, based on the above discussion and lack of empirical evidence, the purpose of this study is to examine the impact of different determinants on attitudinal customer loyalty in Malaysian Islamic banking sectors.

In addition to the impact of various determinants, prior literature suggests the existence of various mediating and moderating variables. For instance, Rodriguez-Rad et al., (2023) argued that the association between participants' behaviour and attitudinal loyalty is serial-mediated. Likewise, Moosa and Kashiramka, (2022) contend that the relationship between Islamic banking objectives and customer loyalty is mediated by customer satisfaction. In terms of moderating, Liana et al., (2023) argued that the relationship between different quality determinants and customer loyalty is moderated by gender. Likewise, Ltifi et al. (2016) examined the moderating role of gender on different determinants to select Islamic banks in Tunisia. While past researchers have indeed explored the association between various determinants and customer loyalty using a variety of mediating and moderating variables, there is a pressing need to delve deeper into this relationship by incorporating additional factors

such as co-production (Behnam et al., 2021). The concept of co-production entails the joint collaboration between customers and firms in service production (Behnam et al., 2021). In other words, co-production emphasizes the collaborative process of service delivery of design, facilitated by the mutual participation of both firm and customers. Based on the above arguments and literature support, the objective of this research is to examine the mediating role of co-production between various determinants and customer attitudinal loyalty. Furthermore, this study examines the moderating role of trust on co-production and customer attitudinal loyalty.

Theoretical framework and hypotheses development

Theoretical framework

In the past literature, the majority of customer loyalty models have relied heavily on social exchange theory and theory of planned behaviour (Albaity and Rahman, 2021; Ltifi et al., 2016; Liana et al., 2023; Rodriguez-Rad et al., 2023). Specifically, the theory of planned behaviour emphasizes the influence of various behavioural patterns on loyalty (Liana et al., 2023; Albaity and Rahman, 2021). However, the application of these theories has often been constrained by a provider-centric approach or good-dominant (G-D) logic (Liana et al., 2023). G-D logics affirmed that firms play a crucial role in the processes and ultimately control customer loyalty (Behnam et al., 2021). In response to the limitations of these theories and models, Vargo and Lusch (2004) introduced service-dominant (S-D) logic, wherein service provision occupies centre stage in economic exchange. A fundamental tenet of S-D logic is that value does not arise solely during the

exchange process but rather emerges during the actual usage or application of the services (Hartwig et al., 2021).

Therefore, the present study adopts the S-D logic framework as its theoretical basis. The S-D logic framework underscores the significance of value creation through co-production, suggesting that value in co-production results from the integration of resources through interactions between firms and customers (Behnam et al., 2021). Vargo and Lusch (2016) argued that actors are unable to simply deliver value; instead, they can engage in the creation and presentation of value propositions, implying that value can be collaboratively created through customer engagement (Hartwig et al., 2021). The research studies of prior researchers have used the S-D logic framework in exploring the interface between co-production and loyalty. For instance, Behnam et al., (2021) examined the relationship between customer engagement and loyalty through the mediating role of co-production in sport management. Moreover, Auh et al. (2007) contented that engaging customers in co-production can reduce the cost and increase productivity.

Hypotheses development

Relationship between determinants and co-production

Drawing from the past studies, four determinants (Communication, client expertise, effective commitment, interactional justice) have been identified that influence co-production and consequently foster customer attitudinal loyalty (Auh et al., 2007).

In the current study the concept of communication refers to the exchange of meaningful and timely information, both formally and informally, between a client and advisor in an empathetic way (Sharma and

Pattersons, 1999). In the financial context, communication content includes keeping clients informed about investment strategies and portfolio performance, clarifying financial concept and trade-offs, and addressing client inquiries. Effective communication is pivotal in building trust, resolving client concerns, and managing their expectations. Consequently, it anticipates that communication between customers and firms will enhance co-production by facilitating greater willingness to share potentially sensitive information (Auh et al., 2007). The review study of Li (2019) argued that digital ways of communication between customers and firms can positively promote co-production activities. Howarth and Morse-Jones (2019) contented that effective communication represents an innovative approach, where customers and firms do not solely depend on scientific advice for decision-making but also leverage interactions and expertise from other sources. As a result, this approach fosters a more trustworthy relationship and ultimately enhances co-production. In the prior literature, the association between communication and co-production has been well-grounded. For instance, Tuurnas (2020) examined the relationship between public sector communication and co-production by analysing a co-production programme in a neighbourhood community development in Tampere, Finland. The case analysis exemplified the significant contribution of communication to co-production initiative administration and planning. The co-production study implied that companies with effective public communication might affect customers' perceptions and establish their tendencies. This communication results in customers' willingness to engage in company production processes. Similarly,

van Gestel, Kuiper and Hendrix (2019) examined the role of communication in co-production. From a scholarly perspective, an effective communication flow between firm personnel and customers leads to customers' involvement in production processes, which facilitates good results. Nevertheless, the relationship between communication and co-production in the Islamic financial sectors remains unexplored. Thus, the following hypothesis has been proposed.

H1: Communication is positively related to co-production.

Expertise refers to a customer's accumulated knowledge regarding product performance and understanding of typical performance standards within a product category. Indeed, increased expertise is likely to enhance client engagement in co-production for several reasons (Ahu et al., 2007). First, as customers gain knowledge in the product domain, they can pinpoint areas where they can contribute effectively. Secondly, inexperienced customers often perceived higher decision-making risks, which makes them less likely to engage in co-production due to concerns about potential suboptimal outcomes. Lately, expert customers typically seek more control in the service delivery process (Ahu et al., 2007).

Prior literature discusses the association between client expertise and co-production. For instance, Zieba and Kończyński (2020) discussed the role of client expertise in co-production based on a thorough examination of the literature on client co-production in knowledge-intensive business services (KIBS) firms and case study investigation. The authors used a theoretical and experimental approach to investigate the factors affecting client co-production in KIBS firms from the perspective of both customers and the

service rendered. The authors stated that client expertise enabled optimal engagement in product design as per market requirements. Yang and Northcott (2019) also asserted that the presence of clients with quality expertise contributed to client co-production for companies. Based on the above logical arguments and literature support, the following hypothesis has been proposed.

H2: Client expertise is positively related to co-production.

The concept of affective commitment is defined as the customer's deep attachment to, identification with, and active participation in the organization (Meyer and Allen, 1997). It is rooted in a sense of liking and emotional connection to the partnership, fostering a feeling of belonging. The pivotal aspects of the aspects of commitment is that the customers choose to remain with the firms out of genuine desire. Unlike continuance or normative forms, affective commitment is significantly enhancing customer engagement in co-production (Ahu et al., 2007). Prior literature highlights the relationship between affective commitment and co-production. For instance, Jiang et al. (2023) examined the relationship between affective commitment, customer environmentally friendly co-production, and customer environmental satisfaction. In the same vein, Fleming et al. (2023) stated that clients' affective commitment enables firms to implement co-production programmes effectively. Likewise, Chen et al. (2011) argued that affective commitment positively impacted in co-production in Taiwanese IT industry. Even though the relationship between affective commitment and co-production are well grounded, they are lacking in Islamic financial sector. Thus, the following hypothesis has been proposed.

H3: Affective commitment is positively related to co-production.

The concept of interactional justice pertains to fairness assessments rooted in the quality of interpersonal treatment received by a customer during a service interaction (Masterson et al., 2000). Within interpersonal relationship, perceptions of interactional justices shape attitudes and behaviours towards the individual (advisor) delivering the treatment (Masterson et al., 2000). In the prior literature, the association between interactional justice and co-production has been well-grounded. For instance, Ahu et al. (2007) examined the positive impact of interactional justice on co-production in financial services firms. In the same vein, Jemine, Puyou and Bouvet (2023) examined the association between technological innovation, interactional justice, and co-production. The research sample comprised 20 specific small accounting firms. The firm managers were surveyed to collect data through interviews. Jemine et al. (2023) reported that representatives introduced their company to customers by applying interactional justice, where they built good relations with customers and offered customers participation in company production practices. Based on the above arguments, the following hypothesis has been proposed.

H4: Interactional justice is positively related to co-production.

Relationship between co-production and customer loyalty

The execution of the co-production practices policy enables customers

to examine organisational tendencies, functioning, and product quality. Customers may judge whether the company is working under the assigned legal boundaries and in favour of social welfare. Customers who are satisfied with their findings develop attitudinal loyalty (Reinhoudt-den Boer, Huijsman & van Wijngaarden, 2021). Behnam, Sato and Baker (2021) analysed the relationship between co-production and attitudinal loyalty. A cross-sectional research design and convenience sampling were used, where the members of 15 fitness clubs in Urmia, Iran, were approached. Data were obtained through questionnaires, where 559 questionnaires were considered valid. The quantitative data were analysed with confirmatory factor analysis (CFA), descriptive statistics, correlations, the Fornell–Larcker criterion, Harman’s single-factor test, and structural equation modelling (SEM). Resultantly, co-production led to familiarity and understanding between company representatives and customers. In this situation, customers showed positive thoughts and attitudinal loyalty. Accordingly, the following hypothesis was developed:

H5: Co-production is positively related to attitudinal loyalty.

Mediating role of co-production

Based on the S-D logic, customer and firms co-creation, fostering mutual bonds results in increased customer loyalty (Cambra-Fierro et al., 2017).). Behnam et al., (2021) argued that customers are inclined to reuse services when provided with opportunities

for co-production. Franke and Piller, (2004) argued that customers are more willing to pay for co-created products compared to standardized ones due to the superior fit with their preferences. For instance, a fitness club can utilize input from consumers to deliver personalized services and cater to individuals striving for a healthier lifestyle (Behnam et al., 2021). In the prior literature, co-production plays a mediating role within exogenous and endogenous variables. For instance, Auh et al., (2007) examined the mediating role of co-production between various determinants and loyalty (attitudinal and behavioural) in financial services. The results indicate that co-production is a significant mediator between various exogenous factors and attitudinal loyalty. In the same vein, Behnam et al., (2021) examined the mediating role of co-production between customer engagement and behavioural loyalty. The empirical findings highlight that co-production has a mediating role between customer engagement and customer loyalty in sport management. Finally, Chen et al., (2011) examined the mediating role of co-production between partner expertise, affective commitment and service innovation in Taiwanese IT industry. The findings highlight that co-production has a partial mediating role between exogenous (partner expertise, affective commitment) and service innovation. Based on the S-D logics framework and literature support the following hypotheses have been proposed.

H6a: Co-production mediates the relationship between communication and attitudinal loyalty.

H6b: Co-production mediates the relationship between client expertise and attitudinal loyalty.

H6c: Co-production mediates the relationship between effective commitment and attitudinal loyalty.

H6d: Co-production mediates the relationship between interactional justice and attitudinal loyalty.

Moderating role of Trust

Firm personnel who demonstrate trust in clients and allow them to share the information they obtain from the market or from personal experience might have efficient engagement in goods and services production. An increased co-production rate could result in clients' involvement leading to attitudinal loyalty. Thus, trust strengthens the relationship between co-production and attitudinal loyalty (Zhou, Li & Meng, 2022). Hendler, LaTour and Cotte (2022) identified the relationship between temporal orientation, trust, co-production, and attitudinal loyalty via qualitative research. Based on the Zaltman metaphor elicitation technique (ZMET) of interviewing, three visits were made to customers at a Las Vegas mega-resort hotel and casino, where individual interviews were performed. The responses were audiotaped, and images were saved. Furthermore, the customers completed questionnaires. The authors reported that firms that have their clients' trust may work efficiently on co-production, which further generated customers' attitudinal loyalty. Therefore, H7 was proposed. Figure 1 depicts the theoretical framework in detail.

H7: Trust is a significant moderator between co-production and attitudinal loyalty.

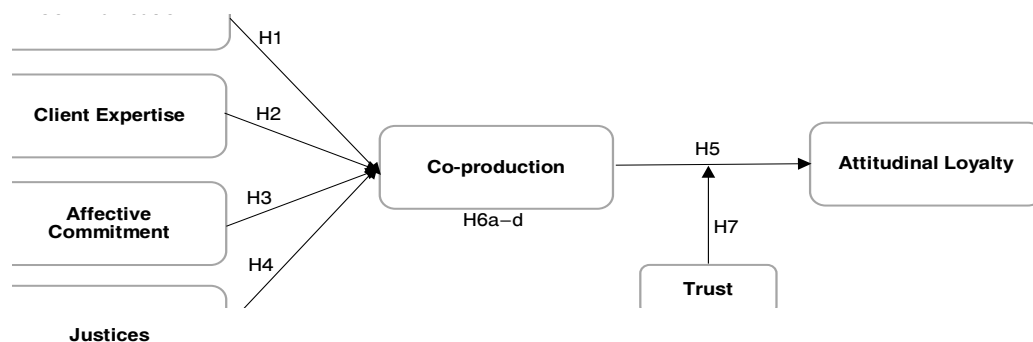


Figure 1. Theoretical framework

Methodology

To achieve the study objective, the study population consists of customers operating their bank accounts in Malaysian Islamic banks and convention banks that offer Islamic services. According to Global Finance (2024), Malaysia (11%) stands third in terms of Islamic financial assets after Iran (29%) and Saudi Arabia (25%). Moreover, Global Finance (2024) highlights that Asia-Pacific regions represent almost 25% of the Islamic finance market and one-quarter of the Islamic financial institutions operator in Malaysia. Moreover, the Islamic financial sector in Malaysia is mature in nature. Thus, Malaysia emerges as a highly favourable choice for conducting this study. Similar to Haron et al. (2020), the Islamic banks located in Kuala Lumpur and Shah Alam (Selangor) were selected. The selection of the two cities were primarily influenced by their status as capital city and economic hub with a substantial number of Islamic banks in the areas (Haron et al., 2020). Based on Central Bank Malaysia, there are sixteen (16) operators under Islamic laws (Bank Negara

Malaysia, 2024), the list is attached as a supplementary material. The unit of analysis is the individual having banks accounts in the 16 Islamic banks in Malaysia.

To address the pertaining issues, a survey approach through online and face-to-face methods was adopted to collect data. Ali et al. (2020) argued that both methods (online & face-to-face) provide a higher response rate and also mitigate the weakness of each other. To approach the respondents, a non-probability purposive sampling technique was adopted. During the data collection process, several control and filter questions were implemented to uphold the survey quality standards. These filter questions were designed to ensure that respondents met three essential criteria; be at least 18 years old, maintain account with Islamic banks, and provide voluntary consent to participate in the survey (Haron et al., 2020). Moreover, to mitigate any potential bias arising from peak customer traffic at certain times or days, the questionnaire were distributed across different working hours of the days. This approach ensures a more

comprehensive representation of respondents and enhances the survey's reliability and validity (Haron et al., 2020). A total of 291 out of 465 valid responses were received for analysis with a response rate of 62.58%. The higher response rate was supported by a past study within the same geographical area and research domain (Haron et al., 2020).

The variables were measured by items extracted from the relevant literature, where communication, client expertise, affective commitment, interactional justice, co-

production, trust, and attitudinal loyalty was measured with four items extracted from Bultman and Svarstad (2000), two items from Bell, Auh and Smalley (2005), six items from Vandenberghe, Bentein and Stinglhamber (2004), four items from Maxham III and Netemeyer (2003), three items from Cheung and To (2011), six items from Suh and Han (2003), and four items from Ferm and Thaichon (2021), respectively. Finally, all items were measured on a 5-point Likert scale. Table 1 lists the aforementioned variables and their measurements.

Table 1. Items and Variables

Item	Statement	Source
Communication		
CM1	Encourages expression of issues	Bultman and Svarstad (2000)
CM2	Asks about concerns	
CM3	Listens to your concerns	
CM4	Helped solve issues	
Client Expertise		
CEX1	I possess good knowledge of financial planning services and products	Bell et al. (2005)
CEX2	I am quite experienced in this area	
Affective Commitment		
ACM1	This organisation has much personal meaning for me	Vandenberghe et al. (2004)
ACM2	I feel a sense of belonging to my organisation	
ACM3	I am proud to belong to this organisation	
ACM4	I feel emotionally attached to my organisation	
ACM5	I feel as if the issues of my organisation are my own	
ACM6	I feel like a part of the family at my organisation	
Interactional Justice		
IJ1	(Firm) personnel treated me courteously when resolving my issue	Maxham III and Netemeyer (2003)
IJ2	Firm employee(s) demonstrated a real interest in fairness during their effort to address my issue	
IJ3	Firm employee(s) worked as hard as possible for me during the recovery effort	
IJ4	Firms' employees(s) were honest and ethical in dealing with me while resolving my issue	

Item	Statement	Source
Co-production		
CP1	I am willing to expend substantial effort to aid the bank in providing service to me	Cheung and To (2011)
CP2	I help new bank employees when they appear uncertain	
CP3	I am willing to aid new customers who do not know where to queue	
Trust		
TR1	This bank is trustworthy	Suh and Han (2003)
TR2	I trust in the benefits of the decision of this firm	
TR3	This firm keeps its promises and commitments	
TR4	This firm keeps customers' best interests in mind	
TR5	This firm would do the job correctly even if not monitored	
TR6	I trust this firm	
Attitudinal Loyalty		
ALY1	I feel emotionally attached to my bank	Ferm and Thaichon (2021)
ALY2	I have a sense of belonging to my bank	
ALY3	I feel like part of a family as a customer of my bank	
ALY4	My relationship with my bank has a much personal meaning	

Results and analysis

As suggested by Hair et al. (2019), PLS-SEM analysis were performed and reported like a measurement model (reliability, convergent and discriminant validity) and structural model. Before the PLS-SEM analysis, a common method biases (CMB) was performed (Podsakoff et al., 1986).

Due to the single source of data collection, CMB is a serious threat to data quality. To overcome, CMB possibility, the Harmon's Single-factor test was performed on all study variables. The results affirmed that the maximum variance explained by a single factor (27%) was lower than the recommended threshold value (Podsakoff et al., 1986). In the PLS-SEM studies, Kock (2015) and Kock and Lynn (2012) anticipated that variance inflation

factors (VIF) values of all items are ≤ 3.3 , then this indicates that the framework is free from CMB. In the current study, all the study items achieved the minimum VIF threshold values.

Measurement model

Reliability and validity

Item correlation was examined with Alpha, where the alpha values were > 0.70 . Item correlation was also examined using composite reliability (CR), which yielded values that were > 0.70 . Item correlation was also examined using factor loadings, where the values were > 0.50 (Hair et al., 2019). Finally, item correlation examination using average variance extracted (AVE) yielded values > 0.50 (Hair et al., 2019). These values indicated high correlation among the items. Table 2 presents the item correlation results.

Table 2. Reliability and Convergent Validity

Construct	Item	Loading	Alpha	CR	AVE
Affective Commitment	ACM1	0.812	0.838	0.887	0.614
	ACM2	0.719			
	ACM4	0.851			
	ACM5	0.863			
	ACM6	0.649			
Attitudinal Loyalty	ALY1	0.877	0.833	0.899	0.749
	ALY3	0.852			
	ALY4	0.867			
Client Expertise	CEX1	0.854	0.741	0.883	0.791
	CEX2	0.923			
Communication	CM1	0.858	0.883	0.919	0.740
	CM2	0.921			
	CM3	0.890			
	CM4	0.764			
Co-production	CP1	0.628	0.703	0.836	0.635
	CP2	0.852			
	CP3	0.885			
Interactional Justice	IJ2	0.922	0.785	0.873	0.699
	IJ3	0.852			
	IJ4	0.722			
Trust	TR1	0.855	0.911	0.931	0.694
	TR2	0.798			
	TR3	0.894			
	TR4	0.693			
	TR5	0.850			
	TR6	0.891			

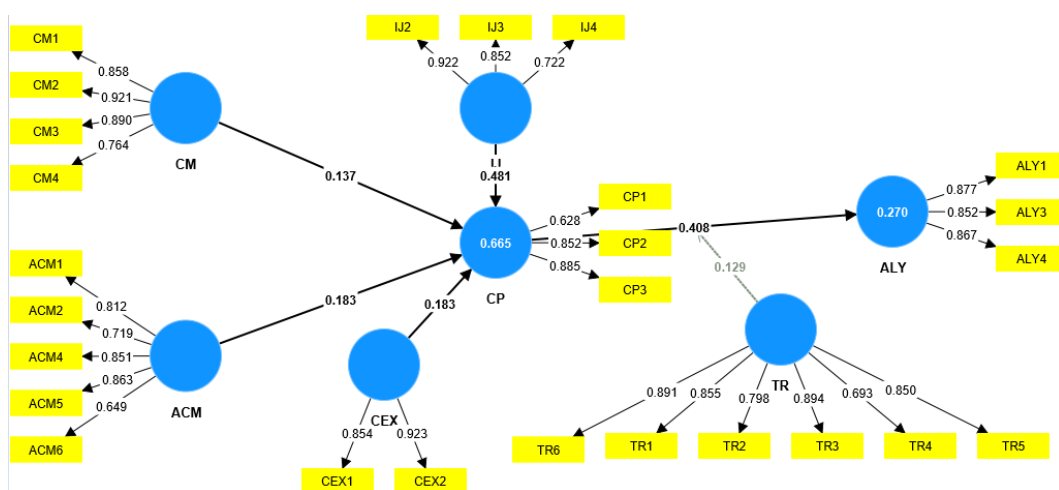
Discriminant Validity

In discriminant validity there are three approaches: the Fornell-Larker, cross-loading and Heterotrait-Monotrait ratio of correlation (HTMT). In the PLS-SEM studies, Hair et al. (2019) affirmed that the HTMT ratio is considered more appropriate than others (Fornell-Larker & cross-loading). In the same

vein, Henseler et al. (2015) have criticized that other measures are incapable to establish discriminant validity in PLS-SEM. Thus, the HTMT criterion was employed. To establish the discriminant validity, a threshold value of HTMT is 0.90 for similar constructs and less than 0.85 for distinct constructs (Hair et al., 2019) as shown in Table 3.

Table 3. The HTMT Ratio

	ACM	ALY	CEX	CM	CP	IJ	TR
ACM							
ALY	0.630						
CEX	0.873	0.553					
CM	0.482	0.680	0.433				
CP	0.898	0.651	0.786	0.628			
IJ	0.844	0.576	0.558	0.513	0.453		
TR	0.456	0.348	0.249	0.292	0.553	0.769	

**Figure 2.** Measurement Model Assessment

Structural model and hypotheses analysis

The outcomes indicated that communication, client expertise, commitment, and interactional justice were positively associated with co-production. Therefore, H1, H2, H3, and H4 were supported. The results

also revealed that co-production positively affected customer loyalty. Therefore, H5 was also supported. Furthermore, the results indicated that trust positively moderated co-production and customer loyalty. Therefore, H7 was supported. Table 4 presents the linkages.

Table 4. Direct Path Analysis

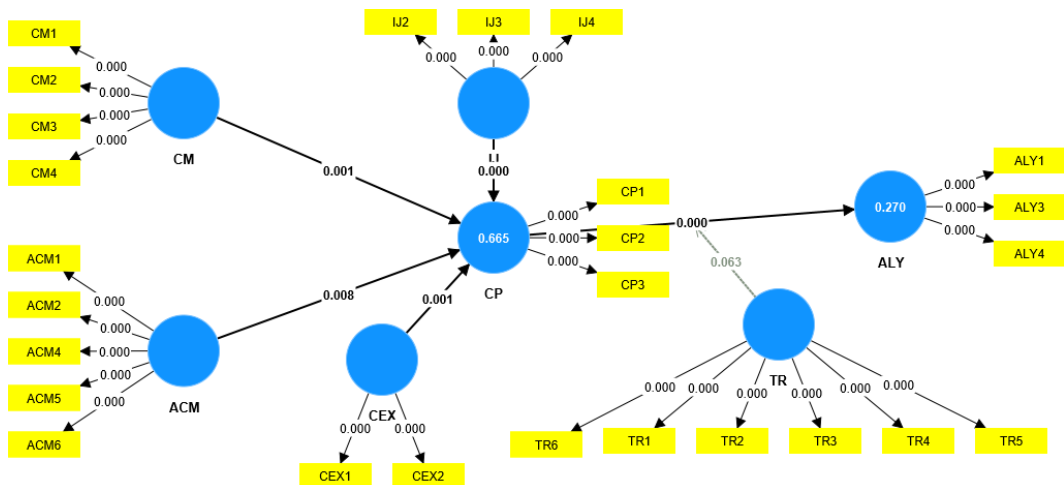
Relationship	β	Standard Deviation	T-statistic	p-value	Outcome
H1: CM $\rightarrow$ CP	0.137	0.041	3.313	0.001	Supported
H2: CEX $\rightarrow$ CP	0.183	0.053	3.452	0.001	Supported
H3: ACM $\rightarrow$ CP	0.183	0.068	2.677	0.008	Supported
H4: IJ $\rightarrow$ CP	0.481	0.048	9.970	0.000	Supported
H5: CP $\rightarrow$ ALY	0.408	0.070	5.868	0.000	Supported
H7: TR $\times$ CP $\rightarrow$ ALY	0.129	0.069	1.862	0.063	Supported

The outcomes indicated that co-production significantly mediated communication, client expertise, commitment, interactional justice, and customer loyalty. Therefore,

H6a–d were supported. Table 7 presents the aforementioned connections. Moreover, Figure 3 shows the structural model.

Table 5. Indirect Path Analysis

Relationship	β	Standard Deviation	T-statistic	p-value	Outcome
H6a: CM $\rightarrow$ CP $\rightarrow$ ALY	0.056	0.022	2.557	0.011	Supported
H6b: CEX $\rightarrow$ CP $\rightarrow$ ALY	0.075	0.024	3.139	0.002	Supported
H6c: ACM $\rightarrow$ CP $\rightarrow$ ALY	0.075	0.033	2.243	0.025	Supported
H6d: IJ $\rightarrow$ CP $\rightarrow$ ALY	0.196	0.035	5.537	0.000	Supported

**Figure 3.** Structural Model Assessment

Discussion

The main purpose of this study is to examine the direct role of various determinants (communications, client expertise, affective commitment and Interactional Justice) on customer attitudinal loyalty and indirect role through co-production in Malaysian Islamic financial institutions. Based on Service-dominant (S-D) logic, and framework has been developed.

With respect to the first study objective, communication, client expertise, interactional justice and affective commitment have a positive and significant relationship with co-production. The findings are supported by past studies. For instance, Auh et al. (2007) affirmed that communication, client expertise, interactional justice and affective commitment have a positive and significant association with co-production in financial services. The current study findings are also supported by Chen et al. (2011). Chen et al. (2011) found a positive and significant relationship between partner expertise, affective commitment and co-production. Moreover, Bultman and Svarstd (2000) argued that communication positively influences the client and service provided relationship. Furthermore, Vandenberghe et al. (2004) indicated that affective commitment positively impacted on job performance and intent to quit. The current findings are supported by Addis, Miniero and Ricotta (2021), who examined the communication role in co-production. The results also demonstrated that client expertise was positively related to co-production, which agreed with Mugica and Berne (2020), who discussed the client's expertise role in co-production.

The results demonstrated that effective commitment was positively related to co-production. The results aligned with Wulandari

and Nasution (2019), who suggested that some clients have an emotional attachment or mental connection with specific institutions dealing in financial services. These results were supported by Xiao, Opata, Tetteh, John Narh and Hinson (2020), who reported on interactional justice among customers and its effect on co-production effectiveness. The authors posited that a company representatives' interactions with clients demonstrate its behaviour and intentions towards customers. Company representatives who demonstrate justice while providing financial services to customers or interacting with them in any way might influence clients and result in co-production.

The results revealed that co-production was positively related to attitudinal loyalty. The results were supported by Behnam et al. (2021), who stated that a financial institution or any other firm that participates in and contributes to the production of services or products might develop a friendly link with clients, gain their support, and further influence their thinking. In such circumstances, it would be easy to obtain clients' attitudinal loyalty. The results demonstrated that co-production mediated communication and attitudinal loyalty. These results aligned with Sesan et al. (2021), where financial instruments and services firms that focus on the nature and effectiveness of communicating with the public to advertise or sell their products might receive cooperation from the public when designing their products.

In terms of the second research objective, the results also demonstrated that co-production mediated client expertise and attitudinal loyalty. The results agreed with Casidy, Leckie, Nyadzayo and Johnson (2022), who examined the co-production role in clients' attitudinal loyalty to the institution. The results demonstrated that co-production

mediated effective commitment and attitudinal loyalty. The results supported Teixeira, Rêgo and Silva Filho (2020), who suggested that company representatives with a policy of interacting with customers had effective commitment to the firm and its products. The results also demonstrated that co-production mediated interactional justice and attitudinal loyalty. The results aligned with Lindenmeier et al. (2021), who clarified the relationship between interactional justice, co-production, and attitudinal loyalty.

Finally, these results were supported by Senali et al. (2023), who suggested that clients' trust in banking firm customer service or product features and the firm personnel's trust in clients encourages them to remain connected in co-production. The effective co-production creates clients' attitudinal loyalty in clients. Thus, trust improves the relationship between co-production and attitudinal loyalty.

Implications

This study revealed the relationships among communication, client expertise, effective commitment, interactional justice, trust, co-production, and attitudinal loyalty, and can guide academic research. The findings demonstrated important empirical implications for Malaysian banking firms specifically and worldwide generally. The results suggested a set of guidelines on how customers' attitudinal loyalty can be obtained. The author suggested that banking firm representatives should develop an effective communication network with customers for co-production, and included a guideline suggesting that banking firms should refine clients' expertise to encourage co-production. Furthermore, the bank management should develop client effective commitment to motivate clients' involvement in co-production.

Additionally, financial firm representatives must demonstrate interactional justice to clients for co-production on the clients' part.

The guideline suggested that the managerial personnel in financial institutions, such as banks, should encourage co-production to attain attitudinal loyalty. The author also suggested that bank managers should establish an effective communication network with customers to promote co-production and thereby a clear means of gaining customers' attitudinal loyalty. Similarly, banking firms should also focus on refining client expertise, which would encourage co-production and aid the attainment of clients' attitudinal loyalty. Additionally, the management should develop clients' effective commitment to the organisation to attain co-production, which would also generate attitudinal loyalty. The guideline suggested that bank representatives must demonstrate justice when interacting with clients, which would encourage clients' co-production and aid the achievement of attitudinal loyalty. The guideline would aid policymaking related to achieving customer loyalty using effective communication, client expertise, trust, commitment, and interactional justice. Lastly, the study indicated that customer interactions should integrate the creation of a trust element, which would improve the co-production role in attitudinal loyalty.

Limitations

The study had some limitations that must be resolved proactively by other researchers. First, only clients' attributes (communication, client expertise, affective commitment, interactional justice) and role in co-production were analysed. Subsequently, these attributes were linked to clients' attitudinal loyalty by mediation. Future researchers could also

examine the direct effects of these client attributes on attitudinal loyalty. Second, trust was used as a moderator between co-production and attitudinal loyalty. Trust can better be a mediator between communication, client expertise, effective commitment, interactional justice, and co-production. Therefore, more research is required.

Conclusion

The study was initiated to investigate the relationship among communication, client expertise, effective commitment, interactional justice, and co-production. The role of co-production among communication, client expertise, effective commitment, interactional justice, and attitudinal loyalty, and the role of trust between co-production and attitudinal loyalty were also examined. Empirical data were obtained from Malaysian Islamic banks for the analysis. The results demonstrated a positive relationship between communication, client expertise, affective commitment, and interactional justice to co-production and a positive relationship between co-production and attitudinal loyalty. The results demonstrated that developing effective communication with clients would enable the disclosure of firm policies, service products, personnel disposition, firm offerings, and marketing structure to clients. These disclosures would influence clients' drivability and motivation for co-production.

The results indicated that bank clients who have the expertise to recognise and comprehend company offerings, service quality, product value, and firm responsiveness can evaluate production and participate in co-production. Furthermore, the firm may execute co-production efficiently if bank clients are committed effectively to the firm. Similarly, banking firms that act on the justice principle

of interaction when dealing with clients would attain the client's favour and their participation-cum-cooperation in production processes. The results indicated a mediating role of co-production among communication, client expertise, effective commitment, interactional justice, and attitudinal loyalty. A banking firm with effective communication, clients with expertise and effective commitment, and interactional justice towards clients would be able to act on a co-production programme. Effective co-production facilitates the attainment of attitudinal loyalty. The study also highlighted that trust is a moderating factor between co-production and attitudinal loyalty. Co-production operation is improved and aids the achievement of clients' attitudinal loyalty if clients trust the bank products and services.

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