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Impact of consumption values on cashless society: Influence of perceived costs

Moutusi Tanha[1], Nayem Mahmud Bhuiyan[2], Sudipta Mukhopadhyay[3], Sayed Sajib Mannan[4], Subroto Deb Nath[5], Md. Nasirul Islam[6], Muhammad Al Amin[7]
University of Canterbury, Christchurch, New Zealand[1]
Army Institute of Business Administration, Bangladesh[2]
Jahangirnagar University, Bangladesh[3&7]
University of Dhaka, Bangladesh[4,5,&6]
mta150@uclive.ac.Nz[1], nayem.aiba@gmail.com[2], sudiptamukherjee185@gmail.com[3], sajib.mannan@gmail.com[4], subroto0414@gmail.com[5], md.nasirul.islam.du@gmail.com[6], sajalamin589@gmail.com[7]

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Abstract

Purpose: This study aims to investigate the influence of consumption values (functional, social, emotional, epistemic, and conditional) on adopting a cashless society while examining the moderating effect of perceived cost and the mediating effect of cashless readiness.

Research Methodology: A quantitative research approach was employed, utilizing a convenience sampling method to collect data from 200 respondents through a survey. Statistical analysis techniques such as structural equation modeling (SEM) were likely used to analyze the data and test the hypothesized relationships.

Results: The study reveals that functional, epistemic, and conditional values significantly impact cashless readiness, which in turn affects the adoption of a cashless society. Perceived cost is identified as a significant moderator between cashless readiness and the adoption of a cashless society. Additionally, the findings indicate that cashless readiness partially mediates the relationship between functional, epistemic, and conditional values and the adoption of a cashless society.

Conclusions: Three values—functional, epistemic, and conditional—were found to exert a notable influence on cashless readiness.

Limitations: A potential limitation could be the use of a convenience sampling method, which may affect the generalizability of the findings to a larger population.

Contributions: The findings of this study could be valuable for mobile financial service providers, banking institutions, and governmental organizations in developing strategies to increase the adoption of digital payment systems. It contributes to the existing literature on consumer behavior and technology adoption, specifically in the context of cashless societies and mobile financial services.

Keywords: *Consumption values, mobile financial services, adoption of cashless society, cashless readiness, perceived cost*

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1. Introduction

The rise of cashless societies and cutting-edge technology is a prevalent trend in today's global landscape. A "cashless society," characterized by the predominant use of digital cards and electronic devices for monetary transactions, is swiftly emerging amidst the ongoing digital transformation. Reports from the World Bank indicate a significant increase in digital payment usage, with two-thirds of individuals in emerging countries engaging in digital transactions, marking a notable surge from 35% in 2014 to 57% in 2021. This surge is largely propelled by the adoption of various digital payment channels such as debit and credit cards, mobile financial services (MFS), internet banking, and digital wallets, offering viable alternatives to traditional banking methods, particularly for the unbanked and small enterprises.

Focused particularly on Bangladesh, this study delves into the impact of the mobile financial service sector on the country's journey towards a cashless society. Statistics from Bangladesh Bank reveal a substantial 37.19% increase in the total value of yearly transactions processed by MFS, amounting to Tk 2,08,770.9 crore in 2021. This growth is attributed to the increasing convenience afforded to consumers for a wide array of payments through MFS platforms.

Despite extensive discourse surrounding mobile financial services and cashless societies, research specifically examining the role of mobile financial services in shaping cashless societies remains limited. Drawing upon theoretical frameworks such as Information Diffusion Theory, the Theory of Reasoned Action, and the Technology Acceptance Model, this study contributes to understanding cashless societies, particularly in developing economies, by exploring the factors influencing the adoption of mobile financial services. Adopting the Theory of Consumption Value (TCV), researchers aim to comprehend how consumers perceive various values associated with MFS and how their utilization influences the transition toward a cashless society.

Although MFS has gained considerable traction as a payment method in Bangladesh, the penetration of digital payment systems across the nation remains relatively limited (Islam, Hasan, & Fahim, 2024; Jack & Suri, 2014; Van Klyton, Tavera-Mesias, & Castano-Munoz, 2022). Notably, a significant portion of MFS users fall below the age of 35, indicating a youthful demographic preference since its inception in 2011. The burgeoning digitalization in Bangladesh, evidenced by the rise of online commerce platforms and service providers, underscores the transformative impact of digital technologies on the country's socioeconomic landscape. MFS providers play a pivotal role in facilitating Bangladesh's transition towards a cashless society.

Prior research predominantly focuses on smartphone usage for payments, neglecting broader implications for the cashless economy and its relationship with mobile financial services. Consequently, this study aims to elucidate the benefits of a cashless society for a developing nation like Bangladesh. Through an exploration of the mobile financial sector's significance within the context of consumer value theory, the study seeks to understand the influence of consumption values on cashless society’s adoption. Furthermore, it intends to examine the moderating role of perceived cost and the mediating role of cashless readiness in this transition.

2. Literature Review

2.1 Cashless Society in Bangladesh

Bangladesh's narrative is one of relentless innovation, fuelled by its ambitious journey towards digitalization. Since the inception of the Digital Bangladesh program in 2008, the country has witnessed remarkable progress, with digitalization emerging as a cornerstone of its success story. The vision for a cashless society, articulated by the ICT affairs adviser to the Prime Minister, represents the next frontier in Bangladesh's digital evolution. A cashless society, where physical currency becomes obsolete in daily transactions, promises a multitude of benefits—from reduced crime and enhanced safety to streamlined transactions and improved financial inclusion.

Bangladesh stands poised to lead this paradigm shift, boasting widespread mobile network coverage, ubiquitous personal mobile phone ownership, and robust regulatory frameworks established by the central bank (Chude, Chude, & Egbunike, 2022; Dutot, 2015; Tanha et al., 2022). The COVID-19 pandemic further underscored the feasibility of reducing reliance on cash, if not embracing a completely cashless existence. With mobile phones becoming ubiquitous across Bangladesh, they serve as catalysts propelling the nation towards a less cash-dependent economy (Diniz, De Albuquerque, & Cernev, 2011; Wang, Nguyen, Jiang, Nguyen, & Saleem, 2023).

Transitioning to a digital economy is not an insurmountable challenge, especially with the gradual adoption of simple payment mechanisms like QR code payments. Mobile financial services (MFS) have emerged as pivotal enablers of financial inclusion, ushering previously unbanked segments of the population into the formal banking system. Each MFS agent acts as a conduit for financial transactions, akin to a 'human ATM,' thus amplifying the impact of mobile financial services on the journey towards a cashless society in Bangladesh (de Albuquerque & Christ, 2015; Lai & Liew, 2021).

2.2 Theory of Consumption Value (TCV)

Embedded within the consumption value theory is the notion that consumers' choices are intricately woven from a tapestry of functional, emotional, social, and epistemic values. These values, each bearing its unique weight, interplay to shape decision-making processes across various contexts. While extensively employed in dissecting consumer behaviors concerning tangible goods, the theory's application in studies of technological acceptance has been notably scant.

Nevertheless, the theory of consumption values finds resonance across a spectrum of research domains, spanning from enduring consumer goods to ephemeral services and industrial products. It serves as a bedrock for justifying diverse technological choices, ranging from software degradation to the embrace of Internet banking. In today's landscape, purchasing decisions embody a multifaceted consumer behavior paradigm wherein considerations of value proposition weigh heavily, particularly in the realm of mobile financial services (MFS).

Just as consumers deliberate over the allure of traditional goods and services, their adoption of novel payment technologies is profoundly influenced by their perceived benefits. Thus, the theory of consumption values furnishes a robust theoretical scaffold for probing the applicability of MFS in modern contexts (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008; Sakib, Akter, Sahabuddin, & Fahlevi, 2024).

2.3 Hypothesis development and conceptual framework

The Influence of Functional Value on Cashless Readiness

Functional value pertains to the perceived utility of an item or service in fulfilling specific tasks or purposes (Chuah et al., 2016; Raj L, S, & K, 2021). It encompasses factors such as efficiency, affordability, quality, and reliability, aligning with the principles of financial expected utility and economic rationality. In the realm of payment technology, functional value refers to how effectively mobile financial services (MFS) meet the practical needs of users, particularly in facilitating transactions. While all payment technologies serve the basic function of payment, their unique features can incentivize consumers to adopt MFS, thereby enhancing readiness for a cashless society.

Hypothesis 1: Functional value positively impacts cashless readiness.

The Influence of Social Value on Cashless Readiness

Social value is derived from the visibility and perceived status associated with goods or services. Drawing from the Theory of Consumption Value (TCV), consumers may prioritize the perceived social status conferred by a product or service over its practical utility. In the context of payment technology, symbolic significance, such as possessing a prestigious credit card, contributes to social value. Additionally, social norms play a pivotal role in shaping consumer behavior toward technology adoption. If MFS usage becomes a societal norm, individuals may feel compelled to embrace it, thus influencing their readiness for a cashless society.

Hypothesis 2: Social value positively influences cashless readiness.

The Influence of Emotional Value on Cashless Readiness

Emotional value encompasses the positive or negative feelings associated with an item, influencing purchasing decisions. In payments, emotional value is manifested in factors such as the "pain of paying," linked to the transparency of payment processes. Studies indicate that payment systems that induce greater pain during transactions result in reduced spending. Therefore, emotional responses elicited by payment methods, such as the convenience or discomfort experienced, contribute to cashless readiness.

Hypothesis 3: Emotional value positively affects cashless readiness.

The Influence of Epistemic Value on Cashless Readiness

Epistemic value relates to an alternative's potential to stimulate interest, novelty, or knowledge acquisition. In the context of innovative services like MFS, epistemic value encompasses factors such as novelty, learning opportunities, and curiosity. Consumers may be motivated to adopt MFS out of a desire for exploration and the acquisition of new knowledge, thereby contributing to cashless readiness.

Hypothesis 4: Epistemic value positively impacts cashless readiness.

The Influence of Conditional Value on Cashless Readiness

Conditional value (CV), as defined, refers to the satisfaction derived from an option based on the unique circumstances or conditions influencing the decision-maker. This value emerges within specific contexts where value judgments are made, emphasizing the dependence of an item's worth on the conditions under which it is utilized. Studies on mobile financial services (MFS) usage have highlighted the impact of variables such as the type of services utilized and transaction charges on payment decisions (Chen, 2008; Jingnan, Teo, Ho, & Hooi Ling, 2023). Thus, consumers' assessments of the utility of digital payment technologies under varying constraints are likely to influence readiness for a cashless society.

Hypothesis 5: Conditional value positively impacts cashless readiness.

The Influence of Cashless Readiness on the Adoption of Cashless Society

Adoption of technology entails the societal embrace and utilization of newly developed technologies, encompassing various stages categorized by user types. In regions like Bangladesh, where the concept of a cashless society is still evolving, the sector faces acceptance challenges among consumers. Despite obstacles, the usage of cashless payment methods is anticipated to escalate. However, the creation of a cashless society necessitates an environment conducive to digital currency acceptance across all transactions. The interplay between businesses and consumers highlights a chicken-and-egg scenario: businesses struggle to attract consumers until more venues accept digital currency. Concerns regarding the perceived risks associated with cashless payment systems may hinder consumer acceptance. Therefore, understanding the factors influencing consumers' willingness to adopt cashless payment systems is imperative.

Hypothesis 6: Cashless readiness significantly influences the intention to adopt a cashless society.

Cashless Readiness as a Mediator

Technological readiness denotes individuals' predisposition to adopt and utilize emerging technology to achieve personal and professional objectives. This readiness accelerates the adoption of new technologies. In the context of MFS, technological readiness significantly influences adoption. The Technology Readiness Index (TRI) scale, developed, assesses a society's preparedness for technological adoption based on personality traits. Previous studies indicate that traits influencing perceptions of readiness and acceptance of mobile payment services are positively mediated by cashless or technological readiness (Bauer, Reichardt, Barnes, & Neumann, 2005; Mohd Thas Thaker, Subramaniam, Qoyum, & Iqbal Hussain, 2023). Therefore, an integrated model hypothesizing the mediating role of cashless readiness in the relationship between consumption values (functional, social, emotional, epistemic, and conditional) and the adoption of a cashless society is proposed.

Hypothesis 7a–7e: A comprehensive model predicting and explaining the mediating role of cashless readiness in the relationship between consumption values and the adoption of a cashless society is formulated.

2.3.7 Role of perceived cost as a moderator

The imposition of joining costs and fixed fees, which remain constant regardless of usage volume, poses a potential hindrance to the transition towards a cashless society. Numerous studies have underscored the impact of price incentives on consumer behavior, highlighting the negative influence of perceived costs on the adoption of mobile financial services. For businesses seeking to leverage digital payment technologies, several prerequisites must be met, including access to requisite hardware such as smartphones, internet connectivity, a mobile-accessible bank account, financial capability to cover associated fees, and adequate levels of literacy and technological proficiency (Baptista & Oliveira, 2015; Dieu, Al Mamun, Nguyen, & Naznen, 2023).

Utilizing the Technology Acceptance Model, identified barriers to mobile financial service adoption, particularly among rural Indian populations with limited access to banking services. High transaction costs emerged as a significant impediment to widespread adoption among the rural, unbanked demographic. The prevailing consensus across research findings highlights perceived costs as a negative barrier, suggesting that cost may serve as a detrimental moderator between consumer adoption and readiness for a cashless society.

In light of the aforementioned discourse, the following hypothesis is proposed:

Hypothesis 8: Perceived cost negatively moderates the relationship between cashless readiness and intention to adopt a cashless society.

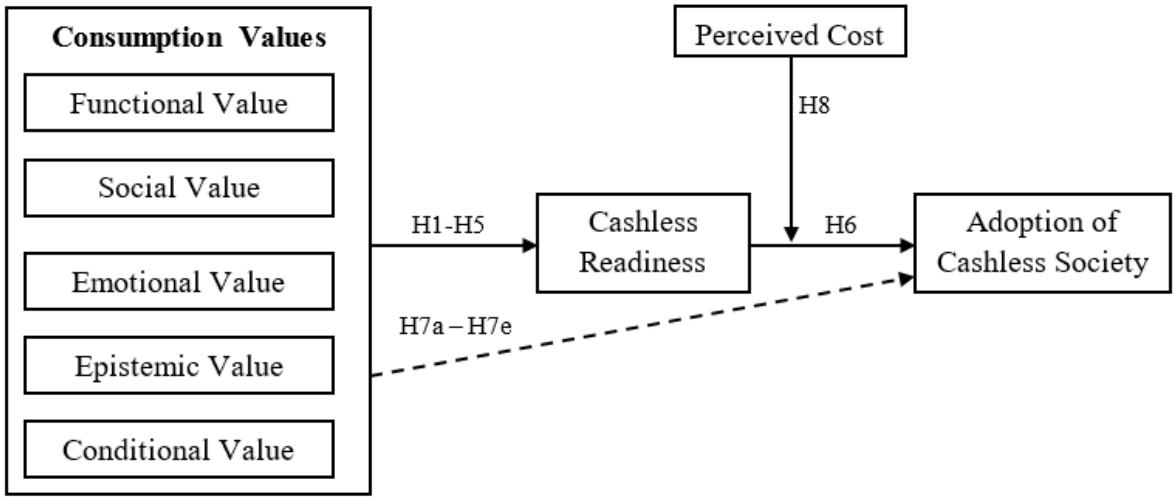

Figure 1. Conceptualized framework for cashless readiness and adoption

In developing economies, the transition to a cashless society is influenced by various factors, including technological advancements, regulatory frameworks, and cultural norms. However, the role of consumption values—such as functional, social, emotional, conditional, and epistemic values—in shaping consumer acceptance of cashless payment systems remains underexplored. Furthermore, perceived costs, both financial and non-financial, may moderate the relationship between consumption values and acceptance. Understanding how these consumption values drive acceptance and how perceived costs influence this relationship is crucial for policymakers and stakeholders to promote and facilitate the adoption of cashless payment systems in developing economies.

2.4 Research Objective

The primary objective of this study is to investigate the impact of consumption values on the acceptance of a cashless society in developing economies. Specifically, the research aims to:

1. Identify and analyze the key consumption values (functional, social, emotional, conditional, and epistemic) that influence consumer acceptance of cashless payment systems.
2. Examine the moderating effect of perceived costs (financial and non-financial) on the relationship between consumption values and the acceptance of cashless payment systems.

3. Provide actionable insights and recommendations for policymakers, financial institutions, and technology providers to enhance the adoption of cashless payment systems by addressing both the consumption values and the perceived costs.

3. Methodology

3.1 Sampling and data collection

The research was conducted with participants hailing from Bangladesh, each required to meet specific criteria for inclusion in the study. Eligible participants had to meet the following conditions: a) be at least 18 years of age, b) have prior experience using Mobile Financial Services (MFS), and c) possess no prior relationship with the researchers that could influence their responses. Given constraints in terms of cost and time, the researchers employed a convenience sampling approach, falling under the category of non-probability sampling, to select participants. Despite its non-random nature, convenience sampling can still yield reliable estimates of population characteristics.

The choice of convenience sampling was primarily justified by its efficiency and cost-effectiveness relative to other non-probability sampling methods, making it the most pragmatic option for data collection within the study's constraints. Data collection was conducted through a structured questionnaire utilizing a quantitative survey approach, facilitating an objective assessment of relationships between variables and allowing for the generalization of findings to a broader audience. Following recommendations from prior research, a minimum sample size of 200 was targeted. The questionnaire was administered online, garnering 213 responses between January and March 2023. Following data screening and cleaning procedures, 200 valid responses were retained for analysis purposes, employing appropriate statistical techniques to derive meaningful insights.

3.2 Measurement Instruments

The scales utilized in this study drew upon validated and reliable items from previous research. Specifically, items about functional value were adapted, while those related to social value were derived, epistemic value from, conditional value from, and perceived cost from. Additionally, items assessing cashless readiness and adoption of a cashless society were adopted.

To gather primary data from participants, a structured questionnaire was meticulously developed. The questionnaire encompassed three distinct sections: demographic information, consumer value theory-related inquiries, and questions about dependent variables (cashless readiness and adoption) alongside the moderator variable (perceived cost). Participants were tasked with rating their agreement or disagreement with statements on a Likert scale spanning from strongly disagree (1) to strongly agree (5). This comprehensive approach ensured the collection of nuanced insights necessary for robust analysis and interpretation of study outcomes.

Table 1. Survey Instruments

Factors	Items	Source
Functional value	FV1: I can make a payment from any location at any time using mobile financial service.	Xiao et al. (2017)
	FV2: Mobile financial services make it easy to keep track of my transactions.	
	FV3: I think paying with mobile financial services is safe.	
Social value	SV1: Using mobile financial services create a positive opinion from others.	Wang et al. (2013)
	SV2: People I care about think I should use mobile financial services.	
	SV2: Using mobile financial services would improve my public image and social status.	
Emotional	EV1: I feel interested to use mobile financial services.	
	EV2: I feel good about using mobile financial services to pay.	
	EV3: I feel relax to make my daily transaction through mobile financial services.	
Epistemic value	EPV1: Mobile financial services allow me to try out new technology.	Goh et al. (2014)
	EPV2: Mobile financial services allow me to try out new approaches to doing things.	
	EPV3: Mobile financial services are the most trending payment technology.	
Conditional value	CV1: I use mobile financial services when I feel secure about the transaction.	Kaur et al. (2021)
	CV2: I prefer mobile financial apps because it easier navigate.	
	CV3: I avoid using mobile financial services when there is a high transaction charge involved.	
Adoption of Cashless Society	ACS1: I have been using the services of cashless society.	Sun et al. (2013)
	ACS2: I like to use cashless payment methods more frequently	
	ACS3: I recommend others to try the services of cashless society.	
Cashless Readiness	CR1: Cashless payments systems contributes a better a quality of life.	Parasuraman et al. (2015)
	CR2: I can easily figure out the features of cashless payment system	
	CR3: I feel confident doing my daily transaction via cashless payment methods	
Perceived Cost	PC1: I think the fees associated with mobile financial service is expensive.	Al-Saedi et al. (2020)
	PC2: I think high transaction cost discourage me to use mobile financial services.	
	PC3: I think it's not convenient to use mobile financial services for everyone because of the cost of mobile devices and network charges.	

3.3 Profile of the Respondents

Understanding the demographic makeup of participants is essential for ensuring the representativeness of a study's sample with its target population. As highlighted, demographic characteristics shed light on the composition of the sample and its alignment with the broader audience under investigation. Below, a frequency table presents the demographic profile of the study's participants.

Out of the 200 valid respondents, 77 identify as female, while 123 identify as male, indicating a gender distribution within the sample. Regarding age distribution, 50.5% of respondents fall within the 18 to 24 age bracket, with a notable proportion (39.5%) falling within the 25 to 30 age range. Educational attainment among participants reveals that a significant majority hold either bachelor's degrees (105) or master's degrees (70). Furthermore, more than half of the sample consists of students, while over 40% are employed or self-employed.

In terms of mobile financial services (MFS) usage patterns, it is evident that Bkash emerges as the preferred platform, with nearly every MFS user selecting it as their primary service provider. Specifically, 69 respondents exclusively utilize Bkash for their MFS needs. Examining the frequency of MFS usage, the data indicates that 46.5% of respondents utilize MFS less than three times a week, while 35% engage in MFS transactions four to nine times daily. Notably, a subset of users, constituting 18.5% of the sample, are classified as heavy MFS users, conducting MFS transactions more than ten times a week.

Overall, this comprehensive overview of participant demographics and MFS usage patterns provides valuable insights into the characteristics and behaviors of the study sample, facilitating a deeper understanding of the research findings.

Table 2. Demographic analysis of respondents

Variables	Categories	Frequency	Percent
Gender	Female	77	38.5
	Male	123	61.5
Age	18-24 years	101	50.5
	25-30 years	79	39.5
	31-40 years	14	7
	41-50 years	4	2
	More than 50 years	2	1
Education	High school	11	5.5
	College	14	7
	Bachelor	105	52.5
	Masters	70	35
Occupation	Employee	62	31
	Not working	13	6.5
	Self Employed	20	10
	Student	105	52.5
Mobile financial services	Bkash	69	34.5
	Nagad	8	4
	Bkash and Nagad	53	26.5
	Bkash and Rocket	15	7.5
	Bkash, Nagad and Rocket	38	19
	Other	17	8.5
Frequency of using mobile financial (weekly)	4 - 9 times	70	35
	Less than 3 times	93	46.5
	More than 10 times	37	18.5

4. Result and discussions

4.1 Descriptive Statistics

The summary statistics for each factor related to the consumption value theory, adoption, cashless readiness, and perceived cost are presented in the following table. Before analysis, an average index was computed for each latent variable by aggregating the values of the scale items. For instance, the values of the three functional value measures were averaged to generate a single score (Baganzi & Lau, 2017).

Among the eight quantitative variables examined, conditional value exhibited the highest score (M = 3.99, SD = 0.79), indicating a relatively strong presence of conditional value among participants. Conversely, social value yielded the lowest score (M = 3.55, SD = 0.87), suggesting a comparatively lower perception of social value among respondents.

It is noteworthy that according to the data demonstrating skewness and kurtosis within the range of -1.5 to +1.5, it is considered indicative of normal distribution. Therefore, it can be inferred that the data obtained in this study approximates a normal distribution, further enhancing the validity and reliability of the statistical analyses conducted.

Table 3. Descriptive statistics of quantitative variables (n = 200)

Latent Variables	Mean	Std. Deviation	Skewness	Std. Error	Kurtosis	Std. Error
Functional Value	3.9400	.86933	-1.296	.172	1.740	.342
Social Value	3.5500	.86611	-.620	.172	.100	.342
Emotional Value	3.9017	.84062	-1.260	.172	1.950	.342
Epistemic Value	3.8233	.87901	-.937	.172	1.160	.342
Conditional Value	3.9917	.79251	-1.509	.172	2.842	.342
Perceived Cost	3.6983	.94020	-.588	.172	-.245	.342
Cashless Readiness	3.8333	.89042	-1.035	.172	1.346	.342
Adoption	3.9017	.87893	-.952	.172	.596	.342

4.2 Analysis of measurement model

The analysis of the measurement model aimed to identify any latent variables that may be correlated with observable or measured variables, as suggested. Quantitative data collected from study participants were utilized to quantify these latent variables, necessitating the establishment of item validity and consistency. To evaluate the suggested model, SmartPLS version 3.0 was employed, utilizing a PLS-SEM approach.

4.2.1 Convergent Validity and Reliability

Convergent validity and reliability were assessed based on Cronbach's alpha values of 0.70 or higher and composite reliability values of 0.70 or more. Notably, all latent variables exhibited Cronbach's alpha values equal to or exceeding 0.70, while all composite reliability values were greater than or equal to 0.70, indicating robust construct reliability.

Furthermore, convergent validity was established through factor loadings approaching or exceeding 0.70 and average variance extracted (AVE) values exceeding 0.50. Analysis revealed statistically significant loadings for all items on their respective factors, ranging from 0.661 to 0.904, indicative of a strong relationship between the items and underlying constructs. Moreover, all constructs demonstrated an AVE value exceeding 0.5 (ranging from 0.641 to 0.766), signifying a high degree of correlation between observed variables and their corresponding constructs.

In summary, the measurement model analysis confirmed the reliability and validity of the study's instruments, laying a solid foundation for subsequent structural equation modeling analyses.

Table 4. Results of measurement model analysis

Latent variables	Items	Factor loadings	Cronbach's alpha	Composite reliability	AVE
Adoption of Cashless Society	ACS1	0.661	0.747	0.855	0.666
	ACS2	0.872			
	ACS3	0.894			
Cashless Readiness	CR1	0.893	0.847	0.907	0.766
	CR2	0.896			
	CR3	0.835			
Conditional Value	CV1	0.836	0.720	0.842	0.641
	CV2	0.845			
	CV3	0.714			
Emotional Value	EV1	0.695	0.766	0.863	0.680
	EV2	0.866			
	EV3	0.897			
Epistemic Value	EPV1	0.869	0.842	0.905	0.760
	EPV2	0.869			
	EPV3	0.877			
Functional Value	FV1	0.867	0.788	0.876	0.702
	FV2	0.844			
	FV3	0.801			
Perceived Cost	PC1	0.904	0.792	0.874	0.698
	PC2	0.811			
	PC3	0.788			
Social Value	SV1	0.859	0.736	0.847	0.651
	SV2	0.864			
	SV3	0.685			

4.2.2 Discriminant validity

The Fornell-Larcker criteria were applied to evaluate the discriminant validity of the model's seven latent variables, with the resulting values depicted below. The model achieves discriminant validity if the square root of the Average Variance Extracted (AVE) for each latent variable surpasses the correlation between that variable and every other latent variable in the model.

Upon analysis, it was observed that the square roots of the AVEs for each item exceeded the correlations between them in the provided table. This observation aligns with the principles of the Fornell-Larcker criteria, supporting the discriminant validity of the model.

The application of the Fornell-Larcker criteria demonstrates the extent to which the measurements utilized to operationalize the constructs in the model are distinct from one another. Consequently, the model's measurement of the latent variables under scrutiny was deemed acceptable and consistent, bolstering confidence in the validity of the study's findings.

Table 5. Results of discriminant validity (Fornell-Larcker Criterion)

Latent variables	1.	2.	3.	4.	5.	6.	7.	8.
1. Adoption	**0.816**							
2. Cashless Readiness	0.809	**0.875**						
3. Conditional Value	0.659	0.686	**0.801**					
4. Emotional Value	0.649	0.687	0.662	**0.824**				
5. Epistemic Value	0.657	0.703	0.665	0.744	**0.872**			
6. Functional Value	0.631	0.669	0.603	0.700	0.618	**0.838**		
7. Perceived Cost	0.262	0.277	0.351	0.176	0.163	0.131	**0.836**	
8. Social Value	0.519	0.593	0.568	0.652	0.639	0.642	0.088	**0.807**

4.3 Structural model analysis and hypothesis testing

Once the validity of the comprehensive measurement model was established, an analysis of the structural model ensued. The structural model diagram was generated in SmartPLS to visualize the connections between the latent constructs and variables.

To ensure the robustness and reliability of the results, the bootstrapping approach was utilized, employing a subsample of 1000 observations. This approach facilitated a robust estimation of the model parameters, enhancing the trustworthiness of the results.

During the PLS analysis, the coefficient of determination, commonly referred to as R-squared (R^2), was calculated to assess the extent to which the structural model elucidated the data. The results indicated that the model accounted for 63.3% of the variation in cashless readiness and 65.7% of the variation in the adoption of a cashless society.

This analysis underscores the efficacy of the structural model in explaining the relationships between latent constructs and variables, providing valuable insights into the factors influencing cashless readiness and the adoption of a cashless society.

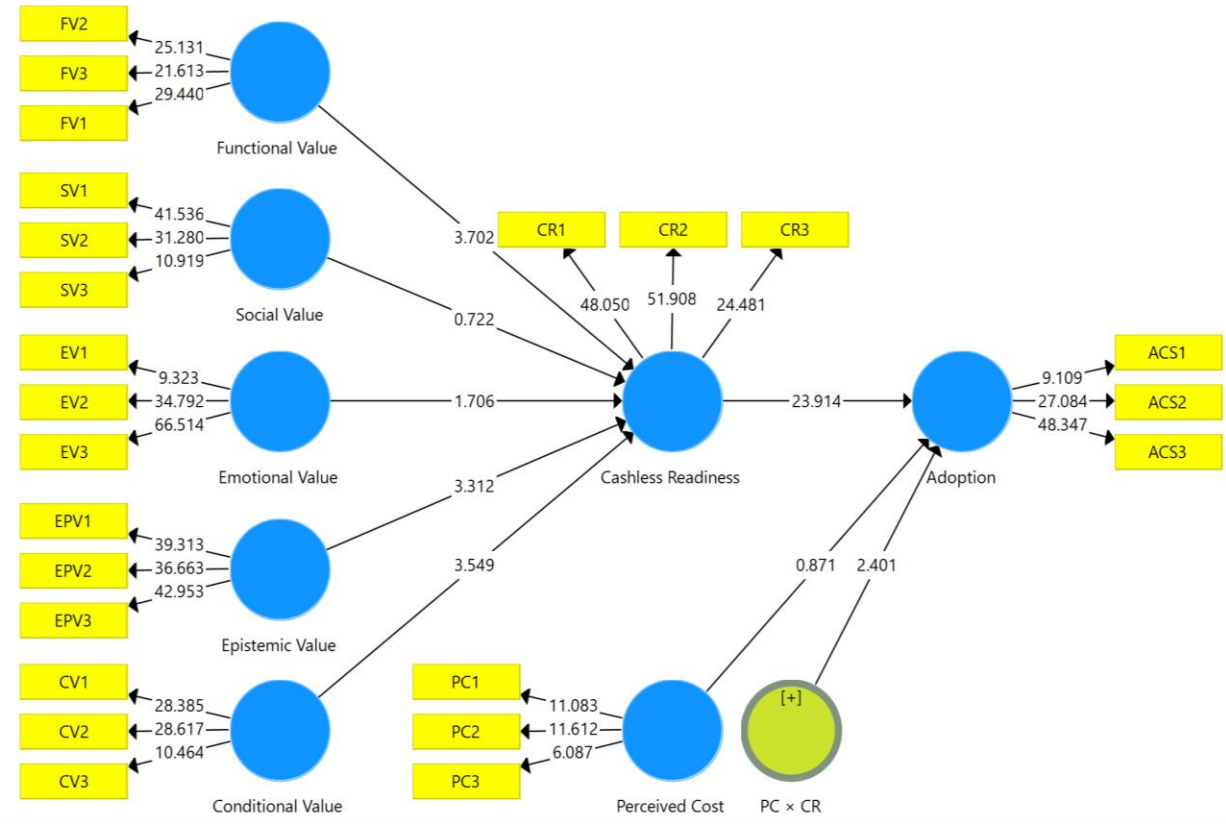

Figure 2. Graphical output of the structural model

Table 6 presents the outcomes of the structural model analysis, delineating the hypothesized relationships, coefficients, t-statistics, and p-values between the constructs under scrutiny. A total of seven assumptions were tested, with the results substantiating five of them.

The findings of this study supported the first hypothesis (H1), which posited a positive relationship between functional value and cashless readiness ($\beta = 0.230$, $t = 3.702$, $p < 0.000$). Conversely, the second hypothesis (H2) yielded negligible results, indicating an insignificant association between social value and cashless readiness. Similarly, the analysis revealed that the correlation between emotional value and cashless readiness, as postulated by the third hypothesis (H3), was not statistically significant. In contrast, the positive correlation between epistemic value and cashless readiness (H4) was deemed statistically significant ($\beta = 0.262$, $t = 3.312$, $p < 0.01$). Furthermore, the fifth hypothesis (H5) suggested a positive correlation between conditional value and cashless readiness, which was supported by the analysis ($\beta = 0.264$, $t = 3.549$, $p < 0.000$).

Remarkably, the sixth hypothesis (H6) exhibited the highest coefficient value, indicating a robust positive influence of cashless readiness on the adoption of a cashless society ($\beta = 0.796$, $t = 23.914$, $p < 0.000$). Finally, the coefficient for Hypothesis 8 was determined to be statistically significant ($\beta = -0.079$, $t = 2.401$, $p < 0.05$), signifying that perceived cost negatively moderated the relationship between cashless readiness and the intention to adopt a cashless society.

Overall, the outcomes of the structural model analysis offer valuable insights into the intricate interplay between various factors influencing cashless readiness and the adoption of a cashless society.

Table 6. Results of structural model analysis (direct effect)

Paths	Coefficient	T statistics	P values	Results
H1: Functional value → Cashless Readiness	0.230	3.702	0.000	Significant
H2: Social Value → Cashless Readiness	0.044	0.722	0.470	Insignificant
H3: Emotional Value → Cashless Readiness	0.128	1.706	0.088	Insignificant
H4: Epistemic Value → Cashless Readiness	0.262	3.312	0.001	Significant
H5: Conditional Value → Cashless Readiness	0.264	3.549	0.000	Significant
H6: Cashless Readiness → Adoption	0.796	23.914	0.000	Significant
Moderating effect				
H8: Perceived Cost x Cashless Readiness → Adoption	-0.079	2.401	0.017	Significant

The subsequent graph illustrates the perceived cost identified as a crucial moderator linking cashless readiness and the intention to embrace a cashless society. Put differently, perceived cost diminishes the favorable association between cashless readiness and adoption.

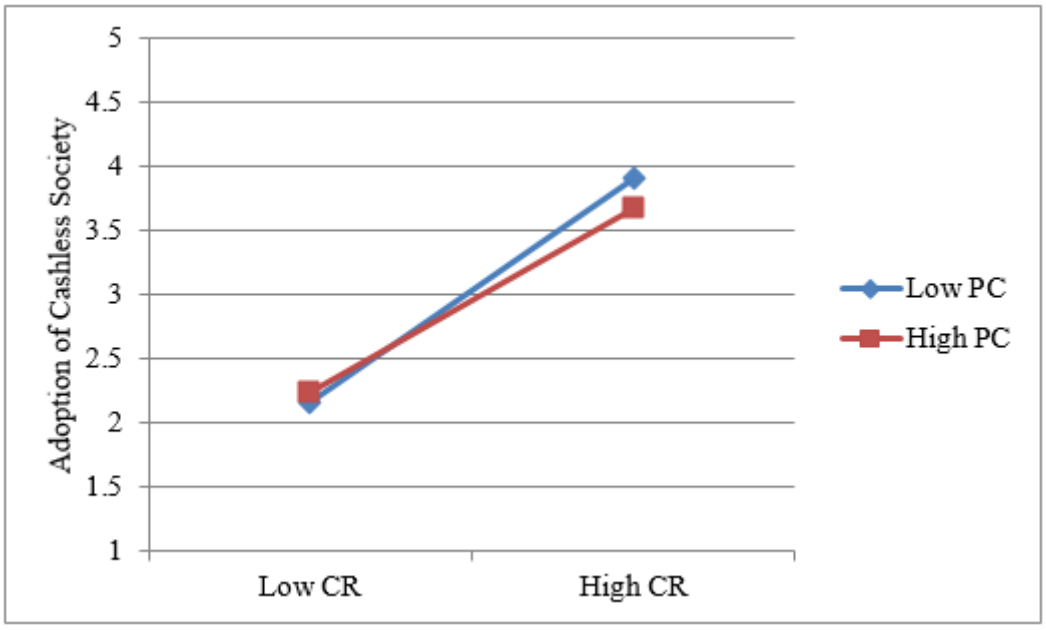

Figure 3. Interaction of Cashless Readiness and perceived cost on adoption

The table presented the indirect effects of various consumption values (such as functional, social, emotional, epistemic, and conditional) on the adoption of a cashless society through cashless readiness. Notably, social value ($\beta = 0.035$, $t = 0.723$, $p = 0.470$) and emotional value ($\beta = 0.102$, $t = 1.703$, $p = 0.089$) were found to lack significant indirect impacts on adoption. This suggests that cashless readiness did not act as a mediator between these two consumption values and the intention to adopt a cashless society.

In contrast, functional value (β = 0.183, t = 3.516, p < 0.000), epistemic value (β = 0.208, t = 3.261, p < 0.01), and conditional value (β = 0.210, t = 3.529, p < 0.000) exhibited significant indirect impacts. These findings indicate that cashless readiness partially mediated the relationship between these consumption values and the intention to adopt a cashless society.

This analysis underscores the nuanced role of cashless readiness as a mediator in influencing the adoption of a cashless society, particularly about certain consumption values. While social and emotional values may not directly impact adoption through cashless readiness, functional, epistemic, and conditional values demonstrate significant indirect effects, highlighting their importance in shaping individuals' readiness to embrace a cashless lifestyle.

Table 7. Results of structural model analysis (indirect effect)

Paths	Coefficient	T statistics	P values	Results
H7a: Functional Value → Cashless Readiness → Adoption	0.183	3.516	0.000	Significant
H7b: Social Value → Cashless Readiness → Adoption	0.035	0.723	0.470	Insignificant
H7c: Emotional Value → Cashless Readiness → Adoption	0.102	1.703	0.089	Insignificant
H7d: Epistemic Value → Cashless Readiness → Adoption	0.208	3.261	0.001	Significant
H7e: Conditional Value → Cashless Readiness → Adoption	0.210	3.529	0.000	Significant

4.4 Discussion

The outcomes of the investigation divulge the favorable impact that functional value has on users' inclination toward the utilization of mobile financial services (MFS). These results follow previous discoveries made, underscoring the pivotal role that functional value plays in shaping consumer spending behaviors. The research emphasizes the significance that consumers attribute to the efficiency and effectiveness of services, indicating their willingness to invest in MFS provided that costs are acceptable and efficiency is sustained. The eagerness exhibited by the participants in embracing a cashless society may originate from the efficacy of MFS in alleviating cash-related inconveniences, a point of particular importance given that a majority of respondents belong to younger age brackets, which prioritize efficiency and practicality in the decision-making process.

In contrast to initial expectations, the study fails to establish a significant correlation between social value and the willingness of users to engage with MFS. This finding diverges from the results obtained, which identified a positive connection between social value and readiness for cashless transactions. This discrepancy could potentially be attributed to certain participants assigning lower significance to benefits related to MFS, such as social acceptance or impression management. While consumption often plays a role in the formation of social identity, MFS may not possess the same symbolic attributes, thus diminishing the influence of social value on driving adoption.

Likewise, emotional value does not emerge as a determining factor of MFS usage in the study. Conflicting viewpoints suggest that although emotional value may not strongly impact MFS adoption due to users' predominantly rational decision-making processes, anticipates an increase in spending associated with emotional value as mobile payment technology progresses.

The research emphasizes the importance of epistemic value, which mirrors users' willingness to explore new technology as a key factor driving MFS adoption. These results align with previous studies indicating that awareness of innovative technology positively affects MFS usage. Consequently, MFS

providers must emphasize the functionality of their services in addressing diverse payment-related needs to leverage epistemic value effectively.

Conditional value emerges as a pivotal factor influencing the advancement of a cashless society in Bangladesh, echoing conclusions drawn from earlier research. Elements such as time, location, and incentives offered by MFS providers impact conditional value, underscoring its role in shaping users' willingness to adopt MFS.

The study also reveals intriguing insights into the moderating impact of perceived costs on the relationship between readiness for cashless transactions and the intention to adopt a cashless society. In line with previous investigations, negative perceptions regarding MFS fees diminish users' enthusiasm for mobile financial transactions, emphasizing the necessity for cost-effective MFS solutions to promote wider adoption.

Furthermore, users' preparedness to engage with MFS significantly influences their inclination to accept a cashless society, supporting the notion that readiness for technological adoption correlates with the acceptance of cashless payment systems. This underscores the importance of assessing consumers' interest in continuing the use of cashless payment systems to ensure sustained acceptance, which is linked to their level of technological adoption.

Finally, the study identifies cashless readiness as a significant mediating factor between several consumption values (e.g., functional, epistemic, and conditional) and the intention to adopt a cashless society. This finding concurs with prior studies, highlighting the pivotal role of cashless readiness as a mediator in driving the adoption of cashless payment systems.

4.4.1 Research Implications

This study holds significant implications both theoretically and practically. Theoretically, it contributes to the understanding of consumer behavior regarding payment choices, offering insights drawn from the theory of consumption values. By exploring the factors influencing consumers' decisions to use mobile financial services (MFS), the study sheds light on the diverse benefits these services offer based on consumers' preferences and values (Alalwan, Dwivedi, & Rana, 2017; Sarker, Sarker, Shaha, Saha, & Sarker, 2024). This fills a gap in the existing literature by delving into the underlying motivations behind consumers' choices in the realm of payment methods.

Practically, the findings of this study offer valuable insights for initiatives aimed at fostering a cashless society. Understanding how individuals perceive the functional and conditional values associated with MFS usage can inform strategies aimed at promoting cashless transactions. For instance, mobile payment service providers like Bkash can leverage this knowledge to tailor their offerings and marketing strategies to better align with consumers' preferences and needs. By prioritizing aspects that resonate most with consumers, such as convenience or cost-effectiveness, providers can enhance the appeal and adoption of their services.

Furthermore, the study's insights into consumers' values toward a cashless society can inform broader organizational initiatives and policymaking efforts. By recognizing the factors influencing consumers' readiness to embrace a cashless society, policymakers and organizations can develop targeted interventions and policies to facilitate the transition toward cashless transactions. For example, understanding the role of functional and conditional values can guide efforts to improve the accessibility and usability of mobile payment platforms, thereby removing barriers to adoption.

Additionally, the study lays the groundwork for further research in this field by proposing a Cashless Society Readiness-Adoption model. This model provides a framework for future studies to explore the relationships between consumption values, cashless readiness, and adoption of cashless payment systems in greater depth. Researchers can build upon this model to investigate additional factors and variables that may influence consumers' attitudes and behaviors toward cashless transactions.

In summary, this study offers valuable insights into the drivers of consumer behavior in the context of mobile financial services and the transition toward a cashless society. By illuminating the underlying values and motivations shaping consumers' payment choices, the study provides practical guidance for mobile payment service providers, policymakers, and researchers alike. Moreover, the development of a theoretical model paves the way for further exploration and understanding of this evolving field.

5. Conclusion

The study aimed to leverage consumer value theories to gain insights into the role of the mobile banking industry in shaping the trajectory toward a cashless society. Employing a structural equation model, the research investigated the impact of five consumption values on cashless readiness. Significantly, three values—functional, epistemic, and conditional—were found to exert a notable influence on cashless readiness. This underscores the importance of considering various dimensions of value perception in understanding consumer attitudes towards mobile financial services (MFS).

Moreover, the study identified perceived cost as a moderator variable, highlighting the importance of addressing financial considerations in developing MFS infrastructure. This implies that efforts to promote cashless transactions should take into account the affordability and perceived value proposition of such services.

Importantly, the findings underscored the pivotal role of cashless readiness in driving the intention to adopt a cashless society. This suggests that initiatives aimed at fostering cashless transactions should prioritize strategies that enhance consumers' readiness and willingness to embrace digital payment methods.

Additionally, the study revealed that cashless readiness acts as a moderator in the relationship between consumption values and the adoption of a cashless society. This emphasizes the need to consider individuals' preparedness and receptivity to cashless transactions when designing interventions to promote the widespread adoption of digital payment technologies.

5.1 Future Scope of This Research

Given the implications of this study for both scholars and practitioners, it is important to acknowledge the existing drawbacks and consider recommendations for future research endeavors (Didenko, Zetzsche, Arner, & Buckley, 2020; Tanha et al., 2025). The current sample size utilized in the research appears to be insufficient, as it comprised individuals spanning a wide range of ages (18-40) hailing from major metropolitan areas characterized by high levels of educational attainment. Moving forward, it may be advisable for forthcoming studies to replicate the study's methodology by incorporating participants from Bangladesh representing diverse socioeconomic backgrounds and employing a significantly larger sample size, particularly individuals residing in smaller cities or with limited formal education. It is worth noting that individuals with low income may face obstacles in utilizing digital payment systems. For those belonging to the lower income bracket, this could potentially be a positive development if collaborative efforts between the government and service providers are made to offer discounts and other incentives. The data gathered for this study was primarily obtained through self-administered surveys. While this approach offers various advantages, it also presents certain challenges such as issues related to interpersonal appropriateness and potential over-reporting. Although surveys can rapidly capture the opinions of digital payment consumers, further exploration of consumption values is warranted, which could be achieved through methods like focus group discussions or personal interviews. Engaging in one-on-one conversations with participants, particularly those with limited academic experience, is viewed as more advantageous compared to relying solely on self-administered surveys, which may lack the opportunity for respondents to seek clarification on any given questions. Given these considerations, it is imperative to delve into the reasons behind the preference for Mobile Financial Services (MFS) over traditional cash transactions. The future scope of this research is extensive and multifaceted. Longitudinal studies could track how consumer attitudes and behaviors evolve, providing a dynamic view of the relationship between consumption values and cashless payment adoption. Expanding the research to include cross-cultural comparisons would reveal cultural nuances and regional differences, offering tailored insights for diverse markets. Further analysis could

focus on specific demographic segments, such as urban versus rural populations, to uncover unique challenges and opportunities. Exploring the influence of emerging technologies, like blockchain and AI, on perceived costs and values could enhance our understanding of technological impacts. Additionally, investigating the role of government policies and regulatory frameworks can help in formulating supportive measures for cashless adoption. Research on the effectiveness of consumer education programs, the broader environmental and social impacts, and the influence on financial inclusion and economic growth would provide a comprehensive understanding of the implications of transitioning to a cashless society. These avenues of research are crucial for developing targeted strategies that address both consumer needs and systemic challenges, ultimately facilitating a smoother transition to cashless economies in developing regions.

References

Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99-110. https://doi.org/10.1016/j.ijinfomgt.2017.01.002.

Baganzi, R., & Lau, A. K. (2017). Examining trust and risk in mobile money acceptance in Uganda. *Sustainability*, *9*(12), 2233. https://doi.org/10.3390/su9122233.

Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. *Computers in Human Behavior*, 50, 418-430. https://doi.org/10.1016/j.chb.2015.04.024.

Bauer, H. H., Reichardt, T., Barnes, S. J., & Neumann, M. M. (2005). Driving consumer acceptance of mobile marketing: A theoretical framework and empirical study. *Journal of Electronic Commerce Research*, 6(3), 181.

Chen, L.-d. (2008). A model of consumer acceptance of mobile payment. *International journal of mobile communications*, 6(1), 32-52. https://doi.org/10.1504/IJMC.2008.015997.

Chuah, S. H.-W., Rauschnabel, P. A., Krey, N., Nguyen, B., Ramayah, T., & Lade, S. (2016). Wearable technologies: The role of usefulness and visibility in smartwatch adoption. *Computers in Human Behavior*, 65, 276-284. https://doi.org/10.1016/j.chb.2016.07.047.

Chude, I. D., Chude, N. P., & Egbunike, C. F. (2022). Intellectual Capital and Financial Performance of Quoted Manufacturing Firms. *Annals of Human Resource Management Research*, 2(2), 147-160. https://doi.org/10.35912/ahrmr.v2i2.1251.

Dahlberg, T., Mallat, N., Ondrus, J., & Zmijewska, A. (2008). Past, present and future of mobile payments research: A literature review. *Electronic Commerce Research and Applications*, 7(2), 165-181. https://doi.org/10.1016/j.elerap.2007.02.00.

de Albuquerque, J. P., & Christ, M. (2015). The tension between business process modelling and flexibility: Revealing multiple dimensions with a sociomaterial approach. *The Journal of Strategic Information Systems*, 24(3), 189-202. https://doi.org/10.1016/j.jsis.2015.08.003.

Didenko, A. N., Zetzsche, D. A., Arner, D. W., & Buckley, R. P. (2020). After Libra, Digital Yuan and COVID-19: Central Bank digital currencies and the new world of money and payment systems. http://dx.doi.org/10.2139/ssrn.3622311.

Dieu, H. T. M., Al Mamun, A., Nguyen, T. L. H., & Naznen, F. (2023). Cashless Vietnam: a study on intention and adoption of cashless payment. *Journal of Science and Technology Policy Management*. doi:https://doi.org/10.1108/JSTPM-02-2022-0031

Diniz, E. H., De Albuquerque, J. P., & Cernev, A. K. (2011). *Mobile money and payment: A literature review based on academic and practitioner*. Paper presented at the oriented publications (2001-2011). SIG GlobDev Fourth Annual Workshop. Shanghai, China December. http://dx.doi.org/10.2139/ssrn.2924669

Dutot, V. (2015). Factors influencing near field communication (NFC) adoption: An extended TAM approach. *The Journal of High Technology Management Research*, 26(1), 45-57. https://doi.org/10.1016/j.hitech.2015.04.005.

Islam, M. J., Hasan, S., & Fahim, A. Y. (2024). Influence of consumption values on adoption of cashless society in emerging economies: The mediating effect of cashless readiness. *Journal of Financial Services Marketing*, 1-13. doi:https://doi.org/10.1057/s41264-024-00273-9

Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. *American Economic Review,* 104(1), 183-223. https://doi.org/10.1257/aer.104.1.183.

Jingnan, J., Teo, P.-C., Ho, T. C., & Hooi Ling, C. (2023). The behavioral intention of young Malaysians towards cashless society: Value-based adoption model. *Cogent Business & Management,* 10(2), 2244756. doi:https://doi.org/10.1080/23311975.2023.2244756

Lai, P. C., & Liew, E. J. (2021). Towards a cashless society: The effects of perceived convenience and security on gamified mobile payment platform adoption. *Australasian Journal of Information Systems,* 25. doi:https://doi.org/10.3127/ajis.v25i0.2809

Mohd Thas Thaker, H., Subramaniam, N. R., Qoyum, A., & Iqbal Hussain, H. (2023). Cashless society, e-wallets and continuous adoption. *International Journal of Finance & Economics,* 28(3), 3349-3369. doi:https://doi.org/10.1002/ijfe.2596

Raj L, V., S, A., & K, A. (2021). Role of perceived countries' advantages of cashless economy in behavioral intentions of using cashless transactions: an empirical analysis. *Journal of Indian Business Research,* 13(3), 413-433. doi:https://doi.org/10.1108/JIBR-06-2020-0186

Sakib, M. N., Akter, M., Sahabuddin, M., & Fahlevi, M. (2024). An application of the extended UTAUT model to understand the adoption of cashless transactions: evidence from developing country. *Journal of Science and Technology Policy Management*. doi:https://doi.org/10.1108/JSTPM-09-2023-0156

Sarker, B. K., Sarker, D. K., Shaha, S. R., Saha, D., & Sarker, S. (2024). Understanding Behavioral Intentions: How Customers Decide to Adopt Internet Banking in Bangladesh. *Annals of Management and Organization Research,* 6(2), 153-166. https://doi.org/10.35912/amor.v6i2.2402.

Tanha, M., Bhuiyan, N. M., Mukhopadhyay, S., Mannan, S. S., Nath, S. D., Islam, M. N., & Al Amin, M. (2025). Impact of consumption values on cashless society: influence of perceived costs. *Annals of Management and Organization Research,* 6(3), 253-269. https://doi.org/10.35912/amor.v6i3.2090.

Tanha, M., Fahim, A. Y., Tasnim, S., Raju, M. A. R., Islam, W., Shawn, F., . . . Islam, M. J. (2022). Different dimensions of conspicuous consumption in the emerging market of Bangladesh. *Annals of Management and Organization Research,* 4(1), 65-87. https://doi.org/10.35912/amor.v4i1.1524.

Van Klyton, A., Tavera-Mesias, J.-F., & Castano-Munoz, W. (2022). Value co-creation and co-destruction in the first cashless society in Colombia–a middle range theory approach. *Information Technology & People,* 35(4), 1298-1325. doi:https://doi.org/10.1108/ITP-05-2020-0273

Wang, J., Nguyen, N., Jiang, X., Nguyen, H. V., & Saleem, M. A. (2023). Consumers' perceived value and use intention of cashless payment in the physical distancing context: Evidence from an Asian emerging market. *Asia Pacific Journal of Marketing and Logistics,* 35(6), 1513-1531. doi:https://doi.org/10.1108/APJML-05-2022-0408