The Influence of Payment Gateways in Bangladesh on Impulsive Purchasing Behavior among Millennials

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Abstract:

The 'Y' Generation in Bangladesh is the subject of this study, which examines the effects of technology adoption, such as payment gateways, on their purchasing habits. In this study, impulse purchases made in response to promotions from various payment gateways are measured using the technology acceptance model (TAM). This study combines the quantitative approach with an explanatory research strategy. The current investigation collects 196 samples from Gen Y individuals in Dhaka. The purposive inquiry was selected as the data collection method of choice. It became evident that the perceived reliability, perceived ease of use, perceived utility, and promotion of Bkash, Rocket, and Nagad directly influenced impulsive purchases. Impulsive behavior is favorably correlated with perceived usefulness, perceived trust, and perceived simplicity of use, and it is directly linked to the promotion of Nagad, Bkash, and Rocket. HTML elements are simple, easy to use, and understandable; their purpose is obvious, and their continued existence depends on providing high-quality services.

Keywords: Bangladesh, Impulsive Purchasing Behavior, Payment Gateways, 'Y' Generation.

Introduction:

Facilitating the economic recovery of Bangladesh in the wake of the COVID-19 pandemic is the principal aim of the economic reforms presently being implemented within the nation. To attain this objective, it is imperative to prioritize advancing the digital economy. The proliferation of mobile payment transactions has witnessed a surge in recent years because of the Internet's increasing accessibility (Teoh et al., 2020). In developing nations like Bangladesh, mobile payment systems such as Nagad, Bkash, and Rocket have surpassed traditional contactless payment methods in terms of usage (Teoh et al., 2020; Cocosila & Trabelsi, 2016; Bagla & Sancheti, 2018). The information above comes from studies done by Teoh et al. in 2020, Cocosila and Trabelsi (2016), and Bagla and Sancheti (2018). Some good things happened after digital wallets were used in Bangladesh, according to a study by Wong et al. in 2020. These included the country's gross domestic product (GDP) going up, businesses becoming more competitive, and the digital economy growing more smoothly. The COVID-19 pandemic has also led to the use of electronic wallets for cashless purchases and the implementation of social distance rules (Wong et al., 2020; Lew et al., 2020). Still, little research has been done on how electronic payment methods affected people during the pandemic (Aji et al., 2020; Daragmeh et al., 2021).

Based on the findings of the 2020 study by Sedigheh et al., organizations must reevaluate their approach to customer service in light of the progressive transformation of consumer preferences. This research offers the most extensive analysis of how individuals in Bangladesh utilized electronic wallets during the most recent pandemic. Previous research has investigated the influence of mobile purchasing on impulsive buying, particularly in terms of user perceptions of the payment method (Lew et al., 2020; Triasesiarta & Rosinta, 2021). These studies show that organizations must know consumer sentiment concerning their chosen payment method. A study published in 2020 by Yuan et al. found that emotional reactions, including emotions, have a substantial impact on the behavior intentions of individuals. According to the research conducted by Yuan et al. (2020), individuals are more likely to adopt an information system that evokes positive emotions, such as those encountered in a state of flow or imagined happiness. More over, Zhang et al. (2020); Phuong et al. (2020); Wu et al. Researchers have discovered that consumers' level of enjoyment influences the frequency with which they utilize mobile wallets and make in-person purchases.

Scholars such as Zheng et al. (2019), Djafarova and Bowes (2021), Xiang et al. (2016), and Xu et al. (2020) have researched the impulsive purchasing propensity of consumers. However, the impact of contactless payment systems on this behavior has received comparatively less attention (Zheng et al., 2019; Djafarova & Bowes, 2021; Xu et al., 2020). Pradhan et al. (2018) posit that adopting electronic payment systems may hinder consumers' ability to regulate spending. Thomas et al. (2011) found that this result contradicts the hypothesis that using currency might produce the opposite effect. The concept of "impulse buying" is operationally defined by Lucas and Koff (2014), Chen and Yao (2018), and Mandolfo and Lamberti (2021) as the affective reaction of longing that arises within an individual when they encounter an item in their immediate surroundings. The occurrence of impulsive purchases is universal and can impact individuals in any given situation. The citations for the source are as follows (Chen & Yao, 2018). To investigate the phenomenon of impulsive purchasing, the purchasing patterns of participants utilizing electronic wallets will be analyzed in this study.

Sedigheh et al. (2020) say that using electronic wallets to pay is essential for companies and people because it makes it easier to reach critical mass and creates network effects. Miao et al. (2019) say that businesses can benefit because people tend to buy things without thinking about them first. The current investigation is based on two main ideas for future research: The study's goals are twofold: (1) to find out what factors affect user satisfaction, and the pleasure people think they get from using electronic wallets and (2) to look into whether there is a link between perceived pleasure, user satisfaction, and people's tendency to buy things on the spot.

Generation Y, also called "millennials," comprises people born between 1981 and 1994. Many people in the current group are praised for their exceptional scientific knowledge and incredible drive to make a difference, especially in science and technology (IPTEK). Companies that offer digital wallet services, like Nagad, Bkash, and Rocket, are selling to youth as a primary target group. Due to the convenience of online shopping, consumers are less likely to plan before shopping, making them more likely to make hasty purchases.

The Technology Acceptance Model (TAM) is a mental framework that determines what makes people accept new technologies or data. The perceived utility (PU) approach and the Unified Theory of Acceptance and Use of Technology (UTAUT), which are both based on the Technology Acceptance Model (TAM), were found to be the best ways to explain why a digital library system was so well received. A study by Nur and Syahril (2019) showed how users in Bangladesh feel about FinTech goods and services, which affects how perceived benefits, usefulness, economic edge, risk, and cost interact. In Bangladesh, things were like this. However, previous studies have not paid enough attention to how the fintech environment affects people's actions (Lee & Shin, 2018).

According to Huei et al. (2018), people's inclination to use e-money is influenced sequentially and concurrently by their perception of the risks associated with using e-money. When formulating their plans, marketers need to consider both the phenomenon and the trends of impulsive buying (Herabadi, 2003). According to Abdolvand et al. (2011), the value of a store's sales turnover may be directly attributed to impulsive purchases made by consumers. According to Tendai and Chrispen (2009), people who participate in impulsive purchasing tend to make their purchases fast because they often need to take the time to carefully consider their available choices or collect a significant amount of information. Customers who are emotionally involved in a product or service are more likely to purchase without considering the logical parts of the situation (Putra, 2014). This is one of the ways that emotional interest plays a role in impulsive buying behavior.

The financial and technology sectors are both critical to the economy of Bangladesh, and they need to be more open to new technologies. According to Harahap et al. (2017), the term "financial technology" (FinTech) refers to the junction of finance and technology, which has led to the fast development of many different business models. Financial technology is the application of technological progress to enhance the convenience and effectiveness of financial transactions, as Romanova and Kudinska (2016) and Hadi Ryandono (2019) define it.

The incorporation of digital payment systems and electronic wallets can aid in Bangladesh's economic recuperation, where fintech is generally of critical importance. Governments and businesses must comprehensively understand consumer behavior to effectively utilize digital

wallets and fintech services. A comprehensive comprehension of impulsive purchasing tendencies, user gratification, and perceived pleasure is essential.

Literature Review:

Tri Irawati and coworkers' study (2019) says that the Technology Acceptance Model (TAM) is a way of thinking about how people will accept and use technology in their work lives. The TAM model, which comes from psychological theory, explains how people's thoughts, feelings, plans, and actual use of technology affect each other. What people think about how useful and easy to use the technology is a big part of what drives it. It is more likely that people will accept and use new technology if they think it will help them and if it is simple to use. Figure 1 shows the Technology acceptance model (TAM), which is the theoretical model for this study.
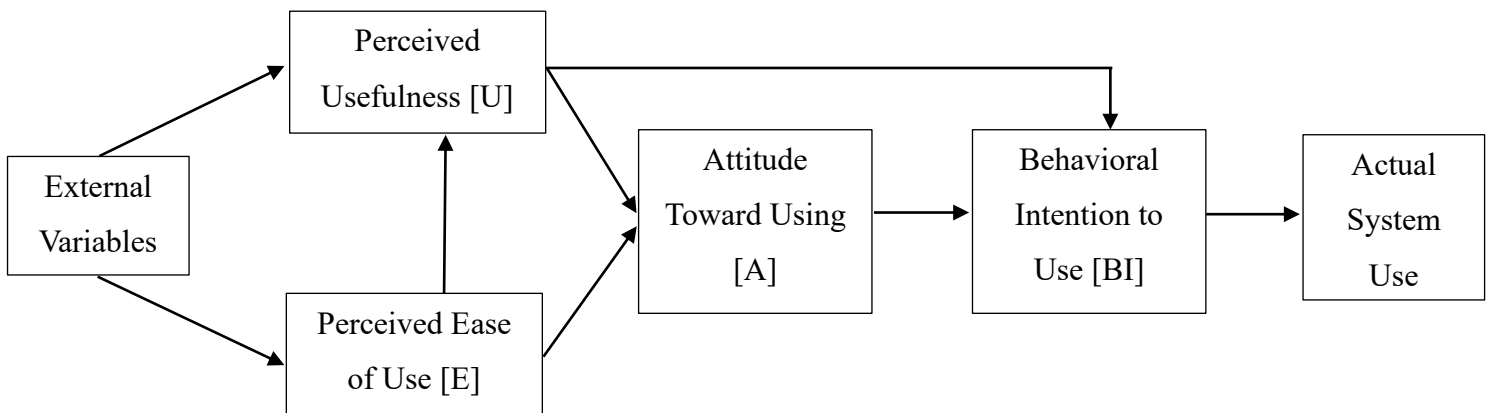

Figure 1: The Theory Acceptance Model, as proposed by Davis et al. in 1986.

According to Davis's Technology Acceptance Model (TAM), which he came up with in 1989, it is possible to study and understand what people adopt and use an information solution. Lee and Panteli (2010) say that expanding the TAM framework is essential to better understanding how people think and how ready they will be to use new technologies. Also, users' thoughts and behaviors have been incorporated into models of how people adapt to new tools. When Davis and his colleagues created the Technology Acceptance Model (TAM) in 1993, they learned more about how people interact with and use new types of technology. The idea of psychology is at the heart of TAM's analysis of user behavior. It looks at users' thoughts, feelings, and goals and how they

act while using technology. Two essential features are included in the TAM model. This is about how easy and valuable something is. These factors are directly connected to each person's actions and accurately show their feelings. TAM is brilliant because it shows how users see things and affects how they feel about using technology. It investigates the critical issues of usefulness and practicability, examining how information technology spreads. The model also shows that how people judge the value of a device depends on how they see the benefit it gives them. To investigate these changes, the TAM study uses four main ideas: actual use, attitude toward use, perceived ease of use, and perceived value. These ideas are included in the investigation of the processes.

Sayekti and Turnta (2016) say that the primary goal of TAM is to give information systems a reason for how they work and what they should do. Additionally, Rahmawati and I Made Narsa (2019) show that the TAM idea is based on the ideals of usefulness and convenience. Schillewaert et al. did a study in 2000 that defined the term "technology acceptance model" (TAM) as "individual adoption of a computer system based on perceptions of its benefits and convenience." This is what Tamsil (2015) says. The level of perceived ease of use is the degree to which potential users connect the technology's ease of use with its usefulness. The preferred utility is the degree to which people think technology will improve things. The TAM idea is a big step forward in our quest to understand how people use technology and how they react to it. TAM gives information about how people think technology works and its usefulness. This information could be helpful for groups and experts who want to get more people to use technology. The primary job of a payment portal is to ensure that the information about a transaction is accurate, according to the rules set by the service providers (Kurniawan et al., 2018).

Payment gateways enable e-commerce businesses to accept various payment methods, including direct client payments, credit cards, and bank transfers, to facilitate and ensure the security of online financial transactions.

Financial technology (Fintech) refers to sector-wide technological advancements introducing novel business models, products, services, and technologies. Consequently, these innovations influence the efficacy and stability of the monetary system. Fintech enables widespread availability of financial services, including financing, insurance, banking, and investment. This functionality empowers users to explore the most advantageous financial solutions, execute timely investments, and obtain guidance on financial planning from their homes. Additionally, micro, small, and

medium-sized enterprises (MSMEs) benefit from the digital transformation as it facilitates electronic transactions and credit evaluations with financial establishments. E-wallets, classified as financial technology (fintech), enable expedient digital financial transactions through applications and cards. Impulsive purchasing is facilitated by the ease and convenience of e-wallet usage, which allows users to conduct transactions instantly and from any location, irrespective of time or location restrictions.

Service quality is a significant factor in customer satisfaction and loyalty, according to Kotler's (2019) definition. Customer satisfaction positively influences customer loyalty. Various factors influence users' satisfaction, including tangibles, reliability, empathy, certainty, and service responsiveness.

Perceived ease of use, as described by Jogiyanto (2007), is the degree to which a person anticipates little effort required to use a technology. The term "convenience perception" refers to beliefs regarding the selection process. If a user thinks the database is straightforward, he is more likely to engage with it. It is simple to learn, easy to use, straightforward and intelligible, and easy to become an expert; these aspects of perceived ease are identified by Sun and Zhang (2011) in Wibowo et al. (2015). Davis (1989) uses the phrase "perceived ease of use" to talk about how people feel about his work. The Technology Acceptance Model (TAM) is a framework for evaluating a person's comfort with new technologies. The TAM model also includes the concept of convenience as a potential outcome. According to Davis, the degree to which a user thinks a given technology or system can be utilized effortlessly and without issues indicates that technology's or system's perceived ease of use. The frequency users engage with the system is another helpful indicator of its usability. E-wallet financial technology is a standard smartphone software. E-wallet apps are popular among customers because of their convenience. Users' impressions of how simple a product or service is to use are " perceptions of convenience." It has been hypothesized that a person's opinion of how simple it is to use an information system, such as an E-Wallet, is a critical sign in gauging their overall satisfaction with such a system. Perceived ease of use, defined by Davis et al. (2000), refers to a user's confidence that a given system can be mastered with little effort. The standard is not that everyone has put in the same amount of effort but that nobody has given up on the system because of how hard it is to use. According to Fusilier and Durlabhji (2005), the perceived ease of utilizing a technological system is one of numerous

elements that contribute to this view. Capable of interacting with technology and requiring little to no effort to use.

According to Rahmatsyah (2011), perceived usefulness is the subjective likelihood that a future user may utilize a particular application to assist their task at their employment. This is the definition of perceived usefulness. The physical and psychological advantages obtained via the streamlined performance may be more significant than those obtained if the items with the new technology were not being used. According to Davis et al. (1986), the perceptions of the system's benefits can be broken down into four categories: the importance of work (necessary for tasks), productivity (productivity), performance or effectiveness (task performance or effectiveness), and overall utility (general usefulness). Each of these categories is described in more detail below. Davis (1989) defines perceived usefulness within the framework of the TAM notion as a conviction of usefulness. More precisely, it describes the degree to which end-users anticipate improved productivity as a direct consequence of adopting new software or hardware at work. As previously mentioned, Thompson et al. (1991) argued that informing the public of the benefits of information technology increases the likelihood of its adoption. The extent to which it is thought that using a particular information system would improve its performance is indicated by the phrase "perceived usefulness," also known simply as "perceived usefulness." This definition makes it evident that one's perspective on the procedure by which choices are chosen produces the feeling of utility. The term "perceived benefits" refers to the degree to which a person believes that what they are making use of is helpful. This conclusion is consistent with Davis's hypothesis (1989), which states that perceived benefits are the extent to which system users have faith in the benefits and may improve their performance. Jogiyanto (2007) defines perceived benefits as an individual's hope that a technological intervention would improve his performance. Similarly, this point of view is what makes each individual different. Meanwhile, "perception of benefits" is defined by Fidiin and Dormos (2019) as whatever a person thinks they could get out of using IT.

Mayer et al. (1995) define trust as "the awareness of another's action in which that other party takes particular actions to oneself." Assumptions about the nature of other people's personalities influence how one acts. A belief in risk-taking is accompanied by an actual readiness to do so (Mayer et al., 1995). As a multifaceted term, trust is formed by various interrelated circumstances. According to studies (Gefendan Straub, 2004; Mayer et al., 1995), people are likelier to trust those

who exhibit competence, virtue, and honesty. Others will have a high degree of faith in the person who holds the trust (trustee) if they see that they possess the requisite competence, virtue, and integrity (Mayer et al., 1995). According to the research of Roca et al. (2008), those who trust others are more likely to solve their issues and work together with others to solve shared ones. Trust is one of the most critical aspects of human behavior, particularly in terms of willingness to take risks (Gefen and Straub., 2004). Since customers do not have direct control over merchants, trust should be one of the elements that impact online transactions (Roca et al., 2008). According to studies (Lu et al., 2011; Zhou, 2013), trust has emerged as a primary indicator of tech adoption and a foundation for comprehending end-user perspectives. Customers who believe in the company or its product are likelier to buy and utilize it. The same holds for this fintech e-wallet: if users have faith in it, they will use it. Relying on the product or brand is a personal decision, as Mujahidin (2020) states. Meanwhile, Gunawan (2013) argues that trust indicates consumers' propensity to use a particular brand. If the product fulfills its promised functions and meets the needs of its target market, buyers will have faith in it.

Promoting (promote) anything is making an effort or progressing toward a goal. The English word "promote" means "to develop or improve," which is where the term "promotion" originates from. When applied to sales, this comprehension becomes helpful in generating more revenue. Promotion, as defined by Kotler (1992) and the marketing mix, comprises all elements with a more compelling message. The firm must craft and disseminate a message to consumers through advertising campaigns. Tjiptono (2000) defines promotion as a marketing activity that aims to educate consumers and encourage product adoption. When running promotions, e-wallet organizers often provide rewards and price reductions. Pinem et al. (2020) define cashback as the return of a certain sum of money in the form of cash or a digital currency. This rebate is often capped at a modest amount. Meanwhile, Shah and Dixit (2005) define a discount as a scheme wherein customers are rewarded for making larger purchases.

E-wallets mimic traditional wallets, enabling users to add funds digitally using mobile banking (Kasirye & Mahmudul, 2021). Users of an electronic wallet save time since they do not have to use their mobile banking accounts as often (Kasirye & Mahmudul, 2021; Junadi & Sfenrianto, 2015). Once an electronic wallet has been funded with debit or credit card information, its owner may utilize it to make purchases (Kasirye & Mahmudul, 2021). Using a cashless payment method

has been linked to reduced impulsive purchases. Buying something on the spur of the moment is known as an "impulse purchase" (Piron, 1991, p. 152). Extant studies (Akram et al., 2017; Badgaiyan & Verma, 2015) show that cashless payment options, such as credit card usage, make it easier for customers to make immediate and impulsive purchases. Digital wallets have also been shown to substantially impact consumers' propensity to make impulsive purchases in Indonesia (Handayani & Rahyuda, 2020). As with other forms of cashless payment, e-wallets encourage impulsive online purchases in Malaysia (Handayani & Rahyuda, 2020). In light of the above, this research aims to analyze the relationship between the widespread use of mobile payment services and increased consumers' propensity to make impulsive purchases using their electronic wallets (E-wallets). Consumers are often persuaded to purchase impulsively because of an overwhelming desire for the product (Rook, 1987). Both internal and environmental elements might impact impulsive purchases. Store attributes (Engel et al., 1973), money, time, and physical effort ownership (Stern, 1962), and other exogenous factors all affect the likelihood of impulsive purchasing. Buyer traits (Engel et al., 1973), mental effort (Stern, 1962), and self-control (Roberts & Manolis, 2012) are internal variables that impact impulsive purchasing. According to Bayley and Nancarrow (in Muruganantham and Bhakat, 2013), impulse purchasing is "the act of purchasing the spur of the moment because of an overwhelming desire for the product rather than after careful consideration of cost, benefits, and other factors." According to Verplanken and Herabadi (2001), impulsive purchases are characterized by a lack of forethought and preparation, followed by an internal struggle between logical and emotional urges. When you are feeling very moved, you can make a rash purchase despite the potential drawbacks (Shofwan, 2010). This is an example of an emotional drive.

Methodology:

Quantitative, explanatory research methods were used for this investigation. Explanatory research, as defined by Sugiyono (2017: 6), seeks to shed light on the relationships between and among the variables under investigation. The 196 participants in this research were all members of Generation Y in the city of Dhaka. Purposive sampling was employed to choose participants for this investigation. According to studies cited by (Utami & Hanum, 2010), the optimal sample size is between five and ten times the number of indicators. This study used twenty-eight (28) indicators, and a sample size of seven (7) times the indicator, or 196 samples, would have been more

appropriate. Sugiyono (2016: 85) describes a sample method called "purposeful sampling," which requires careful planning. Selection parameters:

1. Hold accounts with Nagad, Bkash, and Rocket

2. I have used Nagad, Bkash, and Rocket five consecutive times within one week.

3. Age between 28 and 41 (in 2022)

Variables		Indicator
Quality of Service	1	Nagad, Bkash, and Rocket enjoy transactional safety.
	2	Nagad, Bkash, or Rocket respond quickly to consumer complaints.
	3	Nagad, Bkash, or Rocket contain accurate data.
	4	Nagad, Bkash, or Rocket are all pretty to look at.
Perceived Ease of Used	5	The features of Nagad, Bkash, or Rocket are simple for consumers to comprehend.
	6	Nagad, Bkash, or Rocket are available anywhere and at any time.
	7	The purchasing apps Nagad, Bkash, or Rocket are simple to use.
	8	Nagad, Bkash, or Rocket grant additional abilities to use Perception of Benefits.
Perceived Usefulness	9	Nagad, Bkash, or Rocket can satisfy your requirements.
	10	Nagad, Bkash, or Rocket facilitate financial transactions.
	11	Nagad, Bkash, or Rocket enhance the efficacy of transactions.
	12	Nagad, Bkash, or Rocket are advantageous for conducting transactions.
Perception of Trust	13	Nagad, Bkash, or Rocket has a satisfaction guarantee.
	14	Nagad, Bkash, or Rocket keep their word.
	15	Nagad, Bkash, or Rocket function as anticipated.

	16	The promotions provided by Nagad, Bkash, or Rocket are advantageous to users.
Promotion	17	I no longer use Nagad, Bkash, or Rocket because of the discounts they offer.
	18	Existing advertisements entice me to use Nagad, Bkash, or Rocket.
	19	The notification's mention of Nagad, Bkash, or Rocket attracted me to use it.
Impulse buying	20	I purchase items without regard to expense.
	21	I purchase items that I do not require.
	22	When I see a product that intrigues me, I will not resist purchasing it.
	23	I will purchase a product if its importance to me is low.
	24	I will purchase a product if its importance to me is low.
	25	I will not hesitate before purchasing a product.
	26	I will still purchase products that I find intriguing even if I do not require them.
	27	I will still purchase products that I find intriguing even though I will ultimately regret doing so.
	28	I purchased a product I saw for the first time on a whim.

Table 1: Identification of Variables and Indicators

This research uses questionnaires for data collection, while SPSS 25 is used for statistical analysis (multiple regression). The data are examined for validity, reliability, a test of classical assumptions, and multiple regression analysis. Figure 2 shows the conceptual model of this study.
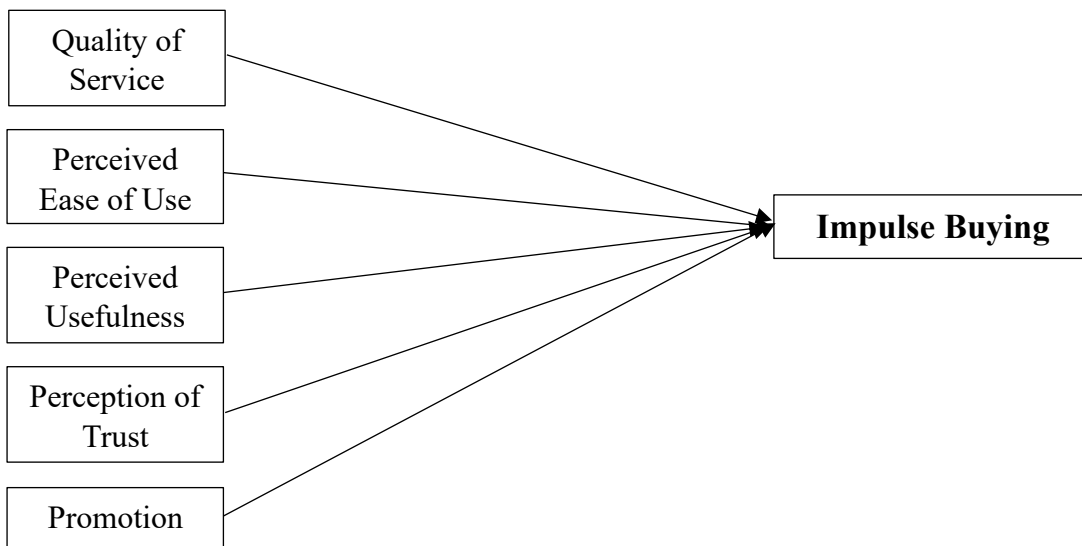
<u>**Figure 2: Research Structure**</u>

Research hypotheses:

H₁: Nagad, Bkash, and Rocket's level of service favorably influences customers' propensity to make impulsive purchases.

H₂: The belief that Nagad, Bkash, and Rocket are simple to use benefits consumers' propensity to make impulsive purchases.

H₃: The perceived utility of utilizing Nagad, Bkash, and Rocket has a beneficial influence on customers' propensity to make impulsive purchases.

H₄: The perception of trust in Nagad, Bkash, and Rocket benefits consumers' propensity to make impulsive purchases.

H₅: There is a correlation between promotions on Nagad, Bkash, and Rocket and increased levels of impulse buying.

<u>**Result And Analysis:**</u>

Validity Test

Table 2 displays the findings of the product-moment correlation used to assess the study's validity, and Table 3 displays the reliability assessment results.

Variable	Items	Score	Explanation
Quality of Service [X₁]	X1.1	0.873	Valid
	X1.2	0.863	Valid
	X1.3	0.901	Valid
	X1.4	0.883	Valid
Perceived ease of use [X₂]	X2.1	0.891	Valid
	X2.2	0.883	Valid
	X2.3	0.913	Valid
	X2.4	0.902	Valid
Perceived of Usefulness [X₃]	X3.1	0.832	Valid
	X3.2	0.831	Valid

	X3.3	0.853	Valid
	X3.4	0.835	Valid
Perception of Trust [X4]	X4.2	0.892	Valid
	X4.2	0.943	Valid
	X4.3	0.894	Valid
Promotion [X5]	X5.1	0.932	Valid
	X5.2	0.941	Valid
	X5.3	0.951	Valid
	X5.4	0.971	Valid
Impulse Buying [Y]	Y1	0.911	Valid
	Y2	0.892	Valid
	Y3	0.901	Valid
	Y4	0.853	Valid
	Y5	0.921	Valid
	Y6	0.881	Valid
	Y7	0.917	Valid
	Y8	0.887	Valid
	Y9	0.863	Valid

Table 2: Results of the Validity Test

Reliability Test

Variables	Cronbach's Alpha	Elucidation
Quality of Service	.931	Consistent
Perceived Ease of Used	.901	Consistent
Perceived of Usefulness	.891	Consistent
Perception of Trust	.881	Consistent
Promotion	.942	Consistent

Table 3 Reliability Test Results

Classic assumption tests

Normality test

Verify the consistency of the residual value's normality in the regression model. Ghozali (2005) states that the Kolmogorv-Smirnov test on the regression model's residual value may be used for the normality test. Assuming the data follows a normal distribution, the significance value is higher than 0.05.

		Unstandardized Residual
n		**196**
Standard Parameters[a,b]	Mean	00000
	Std. Deviation	1.94
Most Intense Variations	Absolute	0.036
	Positive	0.036
	Negative	-0.036
Test Value		0.036
Asymp. Sig. (2-tailed) ,200		0.186[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Table 4: Results of the Normality Test Using the One-Sample Kolmogorov-Smirnov Test

The data is usually distributed because, as shown in the table above, the significance value is 0.186, more significant than 0.05.

Multicollinearity Test

The multicollinearity test tested the study models' independent variables for correlation. The absence of correlation between independent variables is a hallmark of a successful model. The multicollinearity test in the regression model may be measured by examining the Variance Inflation Factor (VIF) and the tolerance value. It may be inferred that the independent variables in

the regression model do not exhibit multicollinearity if the tolerance value is more than 0.1 and the VIF is less than 10. The VIF value for this study is as follows:

Variables Entered/Removed

Model Variables	Variables Entered	Variables Removed	Method
1	X5, X1, X3, X4, X2[b]		Enter
a. Dependent Variable: Y			
b. All requested variables entered.			

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	X1	0.339	2.949
	X2	0.210	4.767
	X3	0.342	2.921
	X4	0.314	3.185
	X5	0.269	3.722

a. Dependent Variable: Y

Table 5 Multicollinearity Test Results

Heteroscedasticity Test

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	X5, X1, X3, X4, X2[b]		Enter

a. Dependent Variable: Absolut residual

b. All requested variables entered.

Coefficients

Table 5 Heteroscedasticity Test Results

This test aims to determine whether the variances of the confounding factors are the same. This research aimed to use the Glesjer test to determine if heteroscedasticity was present. Each variable's significance value is more significant than 0.05 in the heteroscedasticity test, indicating no heteroscedasticity present in this data set.

Inferential Statistics

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta (β)**		
1	**(Constant)**	3.068	0.741		4.161	0.000
	X1	-0.085	0.079	-0.171	-1.131	0.271
	X2	0.081	0.087	0.165	0.871	0.389
	X3	-0.105	0.073	-0.211	-1.345	0.169
	X4	-0.117	0.101	-0.179	-1.162	0.231
	X5	0.091	0.071	0.189	1.180	0.243
a. Dependent Variable: Absolut residual						

Table 6 Regression Coefficients

Model Summary

Model	**R**	**R^2**	**Adjusted R^2**	**Std. Error of the Estimate**
1	0.927a	0.859	0.831	2,00619

a. Predictors: (Constant), X5, X1, X3, X4, X2

b. Dependent Variable: Y

Model		Sum of Squares	d.f.	Mean Square	F	Sig.
1	Regression	3783.028	5	710.509	168.217	.000[b]
	Residual	501.814	190	4.311		
	Total	4284.842	195			

a. Dependent Variable: Y

b. Predictors: (Constant), X5, X1, X3, X4, X2

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.173	1.156		-1.571	.056
	X1	0.442	0.127	0.163	3.386	.001
	X2	0.598	0.144	0.215	3.513	.000
	X3	0.391	0.114	0.191	3.133	.002
	X4	0.401	0.163	0.115	2.397	.013
	X5	0.456	0.141	0.296	5.017	.000

a. Dependent Variable: Y

Table 6 Multiple Linear Regression Analysis

The regression equation in this study is:

$Y = 0.163 X_1 + 0.215 X_2 + 0.191 X_3 + 0.115 X_4 + 0.296 X_5$

Drawing upon the equation, it is possible to elucidate the subsequent concepts:

The coefficient $\beta1$, equal to 0.163, indicates that a one-unit increase in the Quality of Service (X1) variable leads to a corresponding increase of 0.163 units in the impulse buying outcome variable (Y) while holding all other independent variables constant.

The coefficient $\beta2$, which has a value of 0.215, indicates that a one-unit increase in the Perceived Used variable (X2) is associated with a corresponding increase of 0.215 units in the impulse buying variable (Y) while holding all other independent variables constant.

The coefficient β3, equal to 0.191, indicates that a one-unit increase in the Perceived Usefulness (X3) variable results in a corresponding increase of 0.191 units in the impulse buying (Y) variable while holding all other independent variables constant.

The coefficient β4, equal to 0.115, indicates that a one-unit increase in the Perception of Trust value (X4) leads to a corresponding increase of 0.115 units in the impulse buying variable (Y) while holding all other independent variables constant.

The coefficient β5, with a value of 0.296, indicates that a unit increase in the Promotion value (X5) results in a corresponding increase of 0.296 units in the impulse buying variable (Y) while holding all other independent variables constant.

The adjusted R^2 value obtained in this study is 0.831. The findings of this study indicate that a significant proportion, precisely 83.1%, of the observed fluctuations in impulse-buying behavior can be accounted for by the variables of Service Quality, Perceived Ease, Perceived Benefits, Trust, and Promotion. Notably, the remaining 16.9% of the variations can be attributed to other variables outside the proposed model's confines.

The calculated F value of 168.217, accompanied by a p-value of 0.000, suggests that the observed value is lower than the predetermined significance level ($\alpha = 0.05$). Consequently, it can be inferred that the multiple linear regression model is suitable for employment as an analytical instrument to examine the impact of the independent variables (Service et al. of Ease, Perception of Benefits, Trust, and Promotion) on the dependent variable (Impulse Buying).

Hypotheses Test (t-Test)

For the Quality-of-Service variable, the two-sided t-test used in Hypothesis Testing 1 produced a significance value of 0.001 for the null hypothesis. Furthermore, the positive value is 0.163, and the significance level for the one-tailed t-test is 0.0005, which is lower than the threshold of 0.05. All of these findings indicate that there is a statistically significant beneficial influence of Quality of Service on impulsive purchasing, which ultimately supports the first hypothesis that was tested in this research.

The p-value for the two-tailed t-test conducted in Hypothesis Testing 2 for the variable Perceived Used was determined to be 0.000. The significant criterion for the one-tailed t-test is 0.000, which is also below 0.05. Additionally, the positive value considered is 0.215. This study provides

evidence that the perception of usefulness has a significant positive effect on impulsive buying behavior. Consequently, the second hypothesis examined in this research is confirmed.

The two-tailed t-test on the perceived usefulness variable produced a significant result of 0.002 when applied to Hypothesis Testing 3, the third test in the series. The result of 0.191 is deemed positive, and the significance level for the one-tailed t-test is 0.001, which is below the threshold of 0.05. Therefore, the findings clearly show that perceived usefulness has a statistically significant positive impact on impulsive purchases. This confirms the validity of the third hypothesis examined in this study.

In Hypothesis Testing 4, the two-sided t-test for the Perception of Trust variable yielded a significance value of 0.013, suggesting that the hypothesis was not supported. In addition, the positive value is 0.115, and the significance level of the one-sided test is 0.0075, which remains lower than the threshold of 0.05. The inference that can be made from this is that the fourth hypothesis in the study is accurate since it suggests a statistically significant positive impact of trust perception on impulsive buying.

The two-tailed t-test for the Promotion variable yielded a significant p-value of 0.000, which is pertinent to Hypothesis Testing 5, which was performed. The critical value for the one-tailed t-test is 0.000, less than 0.05, and the positive value deemed significant is 0.296. This study provides evidence of promotion's statistically significant positive impact on impulsive purchases. As a result, the fifth hypothesis tested in this research is confirmed.

Examination of the Effects of Nagad, Bkash, and Rocket's Service Quality on Customers' Propensity to Make Impulsive Purchases

Based on the results, the first hypothesis (H1), which states that the service quality of Bkash, Rocket, and Nagad influences impulsive purchases positively, might be true. In this study, we want to determine how much of an impact Nagad, Bkash, and Rocket's service quality has on customers' propensity to make impulsive buys.

Our study shows that the likelihood of making impulsive purchases is directly related to the service quality provided by Nagad, Bkash, and Rocket. There is a clear relationship between service quality and the frequency of impulse buys; conversely, lower service quality is associated with fewer unnecessary purchases. This research emphasizes the importance of service quality in shaping consumer behavior. This implies that if Nagad, Bkash, and Rocket enhance their services, consumers will be more likely to make impulsive purchases.

Contributing to the existing literature, these results provide empirical evidence in favor of Nagad, Bkash, and Rocket's strategic improvement of services as a means to influence and enhance consumer impulsive purchasing behavior in a positive light. Moreover, the findings in this study align with and provide credence to the findings presented in the 2019 publication by Bulan et al.

The impact of the perceived ease of utilizing Nagad, Bkash, and Rocket on impulse purchases.

The second theory (H2) says that people are likelier to buy things on the spot when they think Nagad, Bkash, and Rocket are easy to use. The study tried to answer the question, "How does the perceived ease of use of Nagad, Bkash, and Rocket affect impulse buying?" by comparing these three payment methods. The study found that people are more likely to buy Nagad, Bkash, and Rocket immediately if they think they are simple. However, Nagad, Bkash, and Rocket are less likely to buy something immediately if they think it is hard to use. People may think that Nagad, Bkash, and Rocket make things easier to use, making them more likely to buy things immediately. Others, like Nadya (2019) and Pratama and Saryadi (2019), have found the same thing. Someone will likely buy something immediately if they think it is easy to use. More people buy things without giving them much thought because they are easy to use.

Nagad, Bkash, and Rocket's perceived usefulness and its effect on impulsive purchases.

The results back up the third hypothesis (H3), which states that consumers are more inclined to make impulsive purchases based on how helpful they perceive Nagad, Bkash, and Rocket. This research aims to statistically and comprehensively investigate the relationship between customers' perceptions of the advantages of utilizing Nagad, Bkash, and Rocket and their impulsive purchasing behaviors.

Based on our research, the frequency of impulse purchases is proportional to users' importance of the features offered by Nagad, Bkash, and Rocket. Specifically, when consumers see a significant advantage to the transaction, they are more likely to make an impulsive purchase. If individuals believe the purchase will not provide them with much profit, they are less likely to make an impulsive purchase. The significance of improving the perceived advantages of Nagad, Bkash, and Rocket in influencing people's behavior, particularly their propensity to make impulse purchases, is highlighted by this outcome.

Customers' perceptions of the advantages of utilizing Nagad, Bkash, and Rocket influence their likelihood of making impulsive purchases, adding to the existing body of knowledge. Results were comparable, according to Adiutama and Santika (2020). Perceived usefulness was shown to have a favorable and statistically significant influence on the intention to purchase again on the e-commerce site Tokobagus.com, according to their findings.

The Effect of How People Feel About Trust in Nagad, Bkash, and Rocket on Impulse Buys

The results obtained from this study offer empirical support for the fourth hypothesis (H4), which posits that confidence in Nagad, Bkash, and Rocket increases the likelihood that impulsive buying will be acknowledged and endorsed. This research endeavor aims to evaluate and scrutinize the influence of customers' confidence in Nagad, Bkash, and Rocket on their propensity for impulsive buying.

As a result of our inquiry, we ascertained that the degree of trust placed in Nagad, Bkash, and Rocket was significantly correlated with the frequency with which impetuous transactions were granted authorization. Specifically, impulsive purchases are more prevalent when trust is high and decrease in frequency when trust is low. In influencing consumer behavior, increasing user confidence in Nagad, Bkash, and Rocket may increase customers' impulsive purchase proclivities, demonstrating the strategic advantage of establishing trust.

Furthermore, the results of this study offer empirical support for the notion that customers' heightened confidence in Nagad, Bkash, and Rocket amplifies their propensity to engage in impulsive buying. Consistent with our findings, Khaulah et al. (2015) found that impulsive purchases are positively influenced by trust or beliefs in online retailers and that this effect is unidirectional. Furthermore, these results corroborate the conclusions drawn by Khaulah et al.

The effect of Rocket, Nagad, and Bkash promotions on purchase decisions made on the fly

The results of this research support the fifth hypothesis, which states that the promotions run by Rocket, Nagad, and Bkash encourage customers to make impulsive purchases. This study aims, among other things, to examine and measure the effect of Nagad, Bkash, and Rocket promotions on consumers' propensity to make impulsive purchases.

Our research shows that the frequency of impulse buys is proportional to the quantity of ads shown by Rocket, Nagad, and Bkash. Impulsive purchases are more common when more deals are available, but this tendency is less common when fewer specials are offered. This study shows that Rocket, Nagad, and Bkash's promotional activities may increase customers' propensity to make impulsive purchases. However, it also emphasizes promotions' substantial influence on changing consumers' behavior.

Results show that customers are more likely to buy things on the spur of the moment if Nagad, Bkash, and Rocket run more promotions. The results of this study add to what is already known while also confirming previous findings. The results of the study by Indraswari and Martono (2016), who found that sales significantly boost the frequency of impulse buys, lend credence to these conclusions.

CONCLUSION AND RECOMMENDATIONS

Impulsive purchases are positively affected by trust, perceived advantages, perceived ease of use, and Rocket, Nagad, and Bkash marketing. Rocket, Nagad, and Bkash have a higher propensity for impulsive purchases when consumers have a favorable view of them concerning marketing, trust, perceived advantages, perceived ease of use, and service quality. The offered data allows for making various suggestions, most notably about online purchasing services that may be accessible via many mobile applications, such as Bkash, Rocket, and Nagad. In addition to how consumers profit from these services, they impact user acceptance and generate intentions to purchase online. Other factors that are suspected of having an impact on impulsive purchasing should be included in the study conducted by other researchers. Additionally, surveys are not the only tool that can be used to gather data; other approaches may also be employed. According to the findings of this research, the factors of service quality, perceived convenience, perceived advantages, trust, and

advertising of Rocket, Nagad, and Bkash all had a substantial beneficial impact on the act of making impulsive purchases. Another recommendation I can give for the progress of the payment gateway Rocket, Nagad, and Bkash application is to develop features that have been there in the making user. The Rocket app needs to work the same with delivery service goods provided by Nagad and Bkash. To add features tracking order information to make it easier for users to see the items ordered, Rocket, Nagad, and Bkash applications must add new promotions, such as loyalty points and coupons, and educate their current driver ethics.

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