Impulsive buying behavior and Digital wallet Usage

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Abstract

This study has initiated an in-depth understanding of digital wallet usage on Impulse buying behavior. This study has used an online survey by using 385 respondents comprising people from different ages and backgrounds. This research has enabled us to understand that there is a significant contribution to Impulsive buying behavior due to the usage of digital wallets. In the research, impulsive buying behavior is a dependent variable, and Digital wallet usage is an independent variable. This research confirmed that there is a significant relationship between both. The relationship is proven with a value of 0.348 of standardized coefficient Beta. T-test with a t value of 4.798, which is significant at a 0% level of significance, indicated the above relationship. It was concluded that age and gender on both variables do not affect. Statistical Program for Social Sciences (SPSS) has been used for analysis. These interpretations also suggest dissimilarity between the factors affecting impulsive buying behavior and digital wallet usage.

1. Introduction

Impulsive buying behavior can be explained as a behavior that is not planned, intended, or anticipated that happens without much consideration, which sometimes leads to disappointment or contentment. Typically, when a shopper sees or purchases a product or service that is of value to him or her, even though he was on a shopping trip for some other reason, this action can be defined as Impulsive Buying action, and Piron (1991) term it "on-the-spot." The digital world - where everything is so interconnected - has given rise to a significant amount of impulse buyers. These digital platforms have made transactions possible in seconds or with just one click.

Several experts have said that purchasing something that is not on the shopping list is impulsive buying behavior. Likewise, not buying what is on the list is Impulsive buying conduct, observed Coley. These kinds of consumer behaviors have always been of great interest to major companies for formulating their marketing strategies.

A digital wallet is a technology that stores a person's transactions and other details for various payment methods. A digital wallet allows users to make transactions using near-field communication technology in an easy and fast manner. You can also create more secure passwords without having to worry about remembering them in the future. Digital wallets, in combination with different payment systems, help people pay for purchases using their smartphones. A digital wallet can also capture card information and other transaction details. Sometimes digital wallets are also called electronic wallets or e-wallet.

We are grateful to some technologies like digital wallets. Many developing countries are getting a chance to be in the global monetary system. Users can give or receive money from anyone using any digital wallet platform in any other country with a digital wallet. Digital wallets require no bank account or tangible companies; this ensures participation from remote areas.

Developing countries like India have had a huge help because of these digital wallet platforms in their journey to achieve the dream of a cashless economy. These digital platforms have brought in an enormous shift in consumer spending behavior. These facts keep researchers intrigued to understand more about consumer spending behavior to get a competitive edge. Many big corporations are on the lookout. A cashless economy also becomes a huge attraction for many global brands to invest in these developing countries. This intangible cash has increased the daily transaction that happens in a country into a whole new level.

The fights over small amounts of change between the consumer and shop owner have completely vanished. Even a very small amount like 1 rupee can be transacted with the help of digital wallets.

This study was also done to contribute to the understanding of the consumer spending perceptions and the extent to which they prefer a cashless economy, with digital wallets playing a huge role in attaining that.

2. Literature Review

2.1. Key Concepts, Theories, and Studies

It was researched by Dr. K. Kamatchieswaran et al. [8], about demonetization that resulted in unprecedented growth in digital payment. In February 2019, digital wallet companies had grown by 271 percent to a total of 2.8 billion dollars (191 billion rupees). The Indian government and private sector companies such as Paytm, Google Pay, Freecharge, and MobiKwik have aggressively driven digital payment applications. Digital transfers with apps led to changes in behavior and facilitated the introduction of digital payments. Except for education, the demographic factor was found not to have had a significant impact on introducing digital payments. ANOVA calculation supported this result, as respondents did not perceive significant differences based on gender, age, occupation, and annual income, which indicates that the introduction of digital payments depends on the client's level of education. Digital transfers with apps led to changes in behavior and facilitated the introduction of digital payments.

It is proven in her study by Priyanka Malik et al. [10], that there is no relationship between the occupation of a consumer and the frequency of him or her using digital wallet transactions. She also mentions that digital wallet transactions are not an indicator for countries' employment stats. She concludes by stating that due to the increased use of digital wallet transactions altogether, a new segment is being created, going completely cashless.

A study was done by Sushil Punwatkar et al. to understand the drastic change in human lifestyle after smartphones and other hand-held devices. He tried to understand the effect after of accessibility of the internet coupled with smartphones. It made the world in reach of your fingertips. Thanks to simple cyber shopping and the other transaction option via a digital wallet, people can now feel reassured. Different studies have proven that digital wallet platforms have given rise to an optimistic behavior among the users. The study also showed that respondents are positive and confident of accepting and doing transactions through digital wallets such as Paytm, GPay, Freecharge, MobiKwik, etc.

Money is "a form of credit in which a currency issued by the government usually has the highest degree of reliability concerning future reimbursement expectations, observed Miller et al.[17], "Money is an important part of consumer and business behaviors as a medium of exchange observed by Mishra and Nayakankuppam et al. [7], The difficulty of payment is related to the "credit card effect," which is the sudden pain that happens when people buy commodities and services, as observed by Prelec & Loewenstein. Transaction transparency is linked to the similarity between cash and other payment alternatives. While cash is the most transparent, transparency in cards and other electronic payment methods are less and can completely be translucent, e.g., direct debit from a bank account, observed Soman et al.

Digital money seems to work even more easily, more conveniently, and less appealingly than any other payment method. It was noted by Farah Diba Abrantes [6] Braga and Anant Jyoti Badgaiyan et al. [3], that while marketing experts can act strategically to get the most out of the positive relationship between constructs such as extroversion, materialism, shopping pleasure, impulsive buying trend, and collectivism; it could also be crucial for future research in this area, especially in the Indian context [4]. All five personal factors that influenced the purchasing situation, e.g., the availability of money, economic well-being, the influence of the family, the availability of time, and the use of a credit card, have positively affected the impulsive behavior of purchases. On the other hand, it was found that only two factors of the availability of money and the use of credit cards - among the five personal factors mentioned - significantly influence the need to buy.

[5] Anshul Verma et al. have uncovered a significant association between impulsive buying trends and impulsive buying behavior and a negative association between impulsive buying trends with self-control. Also, he reiterated his belief that impulse buying is higher among people with relatively low self-control and that impulse buying trends have a positive impact on impulse buying behavior.

A research Dr. M Sumathy et al. [16], says that India operates away from cash-based transactions towards cashless transactions. Movements like this offer numerous advantages, such as. These include reducing the cost of managing currencies, monitoring transactions, improving monetary involvement, and gradually integrating parallel economies into the mainstream [15]. Furthermore, mobile wallets have been shown to exceed the limits of large cities and are also gaining popularity in villages. The development of digital payments is leading to new spending behavior for people in these areas.

A research paper by Dr. Hem Shweta Rathore et al. [12], shows major factors that take part in a significant role in consumer adoption. These factors are convenience in the purchase, brand loyalty, and the advantage of digital wallet usage. It was identified that e-wallet usage could be a substitute for online payments. People who use digital wallets are contented with the services it offers. The most cherished feature of digital wallet usage is that it is a problem-free mode of making online transactions.

A study by Gagandeep Singh et al. [13], mentions how different countries are achieving the dream of a cashless country by promoting the use of plastic money, especially digital wallet platforms, which improves the banking sector performance. Most commonly, people use digital wallets for top-ups and money transfers from one account to another. They believe this is the safe, quick, and convenient way to transfer money and the cheapest advantage in the easiest and fastest transaction mode. It was also found that the 18-25 to 25-40 age groups mainly use digital wallets. This consumer shift offers a great deal for the companies in the digital wallet space to achieve their growth if they move strategically. Consumers' continuous access to the internet has enabled many people to adopt digital wallet transactions.

A study by Akhila Pai, H. et al. [1], Were to understand the market depth of the digital wallet industry. Her study shows that digital wallets have a huge consumer base, especially from younger generations, the leader being Paytm in the digital wallet space. She also mentioned how much the brands have been able to penetrate the market because of the sudden recall of the brand from all her respondents. It also indicates the customers prefer to top up their digital wallets for transaction purposes. She concludes by mentioning the consumers' willingness and trust to use the digital wallet platforms for most of their transactions.

An analysis by Dr. S. Yuvaraj et al. shows that consumers buying with confidence are the major factor influencing to use of these digital payment modes. Now, everyone with smartphones and Internet connection in their hands is the main change in the lifestyle of consumers is reflected in the purchasing behavior [14]. Now, digitalization has changed the habit of customers. It is an easy and fast payment method so that users can use it for their purposes convenience.

In their research paper, Jacqueline J. Kacen et al. [9], have estimated that nearly $4 billion sales per annum in the US happens due to consumers' impulsive buying behavior; growth of the cyber shopping has created a huge market for impulse purchase behavior by large amount consumers. However, there is only very little study done on this impulsive consumer aspect to give the corporates a broader understanding to make the necessary changes in the marketing and positioning to make the most out of business. She also mentioned the cultural factors that impact impulsive buying behavior. Unplanned transactions with sudden decisions are called impulsive buying. It also includes a subjective biasing in favor.

Research by Alaeddin O" set al. [2], has guided the managers on how to increase their market share of products like digital wallets by concentrating more on advantages that come while using digital wallets and their user-friendly application. Also focusing on the simplicity linked to the high security for a broader range of customers.

2.2. Key Debates and Controversies

Most of the work has acknowledged the need to understand the relationship between consumer behavior and e-wallet usage. The constant use of intangible money has constantly affected consumer behavior. Efforts have also been made to understand the consumer behavior of consumers who use e-wallets. Among the study's findings, most consumers' spending behavior has drastically changed due to the use of intangible cash [11].

3. Research Objective

The relationship between impulsiveness and digital wallet usage will be examined in this study, which will be achieved by hypothesizing a dependent and independent arrangement between variables. The digital wallet will be taken as an independent variable, and Impulsiveness usage will be taken as a dependent variable.

4. Research Methodology

A descriptive research design was carried out in the study. A descriptive analysis was carried out to determine and outline the element of importance in the case**.** Factor analysis and regression are conducted to evaluate the interaction between independent (Digital wallet usage) and dependent variables (Impulsive buying behavior), discussing its effect on consumer buying behavior with increased digital wallet usage.

4.1. Sample and Sample Size

The probability-simple random sampling technique was adopted. A sample of 385 respondents was taken. A pilot test on 45 respondents was also done to guide the research in the right direction.

4.2. Data Collection Tool

A questionnaire was crafted to gather the necessary data to execute the primary collection of responses. A self-administered questionnaire was used for data collection. Likert scale was used for measurement of the responses with numerical values. The questions for the measurement of variables were framed anew-taking inspiration from previous studies. The variables were based on a five-point Likert scale, tied down by (1) "Strongly disagree" and (5) "Strongly agree." The respondents filed the survey as honestly as possible.

4.3. Data Analysis Tool

Quantitative analysis was used to determine the answer to the research questions in this study. Factor analysis and regression have been used for the analysis and to prove the hypothesis to ascertain the link between digital wallet usage and impulsive buying behavior. Statistical Program for Social Sciences (SPSS) has been used for analysis.

5. Results and Discussions

5.1. Pilot Study

Research experts suggested that the value above 0.70 works as a sufficient measure of reliability, as observed by **Keith S. Taber**. The pilot study conducted on the results of 45 respondents showed **Cronbach's alpha 0.956,** which is regarded as high reliability of coefficient. Therefore, the study shows that the variables are greatly consistent. Table 1 shows the reliability stats.

5.2. Reliability Computation

Cronbach's alpha method is used to quantify the reliability of all the data in the questionnaire

Cronbach's alpha: Impulsive Buying Behavior

Table 1

Reliability stats

Cronbach's alpha	Cronbach's alpha established on standardized objects	Number of objects
0.823	0.824	12

Cronbach's Alpha: Digital Wallet Usage

Table 2 shows the experts say that a reliability value of more than 0.7 is good. The above stats indicate higher values than 0.7, putting the questionnaire used for the research as highly reliable.

Table 2

Reliability stats

Cronbach's alpha	Cronbach's alpha established on standardized objects	Number of objects
0.757	0.759	10

5.3. Validity Examination

Factor analysis has been used to determine the major factors that influence impulsive buying behavior and usage of digital wallet usage.

Table 3 and Table 4 explain the Kaiser-M-Olkin is **0.833** for Impulse Buying and **0.754** for Digital wallet Usage, which is more than the standard value of 0.70. It states that there is no error in 83.3% (Impulse Buying) and 75.4 % (digital wallet Usage) of the sample. Bartlett's test of sphericity indicates that the strength of the link among variables is strong. It presents a good idea to proceed to factor analysis for the data. The value of the Chi-Square test is 528.945, significant at .000 for Impulse Buying and384.965 significant at .000 for Digital

Table 3

Kaiser-M-Olkin and Bartlett test for impulse buying

Kaiser-M-Olkin test of Sampling Adequacy		.833
Bartlett Test of sphericity	Approximate Chi-Square Df Significance	528.945 63 .000

Table 4

Kaiser-M-Olkin and Bartlett test- digital wallet usage

Kaiser-M-Olkin Measure of Sampling Adequacy.		.754
Bartlett Test of Sphericity	Approximate Chi-Square Df Significance	384.965 54 .000

Wallet Usage. The above values indicate the elimination of the null hypothesis. These interpretations also suggest dissimilarity between the factors affecting impulsive buying behavior and digital wallet usage.

5.4. Description of Factors

Table 5 explained the Pure Impulse buying has occupied as the major factor whose eigenvalue comes out to be 2.604. Here, five different statements from the questionnaire were taken under one factor using the principle of component analysis (Stern, 1962). The second important factor is unplanned impulsive buying with an Eigenvalues of 1.896. Here four statements were taken under one factor using the same principle.

The last factor brings the Reminder of impulsive buying with an eigenvalue of 1.794. Here three statements were merged under one factor.

5.5. Description of Factors

Spendthrift: Spendthrift has got a habit of spending money prodigiously, and synonyms include profligate and extravagant. This attitude sometimes reaches an extent where the person spends more than his financial aptitude, which has emerged as the major factor in credit card usage. Table 6 explained the statements absorbed by this factor mainly reflected impulsivity of shopper, low price consciousness, Timely making debts Payments, and one contra statement, i.e., crim-

Table 5

Factor analysis for impulse buying behavior

Factor Number	Factors	St. No.	Statements-	Percent of Variance	Loadings	Eigen-value
1	Pure Impulse	4	I buy something if I think I need it, even though I went shopping for other purposes.	21.436%	0.723	2.604
		9	I buy something I think I need, Even though I went shopping for other purposes.		0.712	
		2	I expect to find something I want to buy when I get to the store.		0.687	
		7	When I see new style merchandise, I just buy it.		0.643	
		11	I cannot resist buying general things if I like them.		0.526	
2	Unplanned Impulse	12	I buy any general kinds of stuff I like, without dwelling a lot about the future.	17.241%	0.784	1.896
		8	I prefer to buy new things that are new in the market.		0.630	
		6	I purchase merchandise I had looked for before, even though I went shopping for other items.		0.496	
		10	When I have a compulsion to purchase something, I just purchase it.		0.508	
3	Remainder Impulse	3	Rather than a store with a list, I determine what to buy after I reach the store.	14.986%	0.864	1.794
		1	While going around the store, I determine the things I need to buy.		0.656	
		5	I buy something if I think I need it, even though I went shopping for other purposes.		0.577	

Table 6

Factor analysis for digital wallet usage

Factor Number	Factors	St. No.	Statements-	Percent of Variance	Loadings	Eigen-value
1	Spendthrift	8	I update my e-wallet with money now and then.	20.745%	0.722	2.367
		11	I am least worried about the price when I make use of the digital wallet.		0.708	
		9	I am more impulsive in shopping		0.636	
		10	I spend more when I use a digital wallet.		0.659	
		6	I am a Seldom delinquent in making payments.		0.538	
2	Vigilant	2	I often make only minimum payments with my digital wallet.	17.683%	0.798	1.978
		4	I use digital wallets very cautiously while shopping.		0.687	
		1	I rarely add money to my digital wallets.		0.598	
3	Restraint	5	I use digital wallets only if I do not have cash or a card.	16.784%	0.794	1.868
		3	I use a digital wallet to buy most of my things.		0.698	
		7	I rarely go above my available digital wallet credit limits.		0.541	

inal in making the payment, was included. With an e-value of 2.367 and variance of 20.745, Spendthrift became the highest among all the factors.

Vigilant: After applying the principal component analysis, this emerged as the second factor, containing a 1.978 eigenvalues. Vigilant can be described as the characteristic of the shopper who is a great observant and attentive. This kind of shoppers is very much conscious in buying and making payments and thus does not contribute to Impulse Buying;

Restraint: With an Eigen figure of 1.868 and variance of 16.784, Restraint emerged as the last factor.

Regression

Table 7 shows the remodeling statistic the adjusted R square value is .110 indicates an 11 % deviation in the Impulsive buying behavior variable. Table 8 shows The F value is 23.576 and being significant at 0% level shows a high predictable regression model. The link between digital wallet usage and Impulse Buying behavior is described by a value of 0.348, coefficient beta. Using the T-test, the importance of beta is tested, and t is 4.798, which is pointing towards a significant link between Impulse Buying behavior and Digital wallet Usage shows in Table 9. The value of Durbin Watson is 1.927 for Autocorrelation (it should be between 1.5 and 2.5). Cook's Distance for outliers resulted in Mini (.000) - Max (.129) as it should be below 3.

6. Conclusion

The study concluded that Digital Wallet usage has a significant effect on Impulse buying. Also, there is a significant relationship between both. The research also deduced that there are no impacts of diversity, like age and gender, on digital wallet usage and impulsive buying behavior. The study gives a clear indication of the transformation of India into a cashless economy. A descriptive analysis was carried out to determine and outline the element of importance in the case. A self-administered questionnaire is used for data collection. Likert scale was used for measurement of the response with numerical values. The questions for the measurement of variables are framed new-taking inspiration from previous studies. These attitudes sometimes reach an extent where the person spends more than his financial aptitude, which has emerged as the major factor in credit card usage. This kind of shoppers is very much conscious in buying and making payments and thus does not contribute to Impulse buying.

7. Implications

The use of digital platforms has been proved to be a valuable approach to do any kind of transaction between any two parties. Many companies have understood this shift early to strategize their movements in a way to attain maximum growth. More and more

Table 7

Remodeling statistic

Model	R-	Rsquare	modified Rsquare	remodeling statistic					D-Watson
				R Square Change	F change	Df1	Df2	Significant F- Change	
1	0.347	0.120	0.115	0.120	23.576	1	174	0.000	1.968

Table 8

ANOVA

Model-	Addition of squares	Df	Avg. Square	F	Significant
1. Residual Regression	2564.482 20196.824	1 174	2564.482 118.494	23.576	0.000
Total	22.761.306	175			

Table 9

Coefficient

Model	Non standardized Coefficient		Normalized Coefficient	t-	Sign.-
	B-	Normalized Error	Beta		
1. (Constant)	28.343 0.698	4.865 0.108	0.348	6.468 4.798	0.000 0.000

studies have been done to dwell more into the consumer perception in digital wallet usage. This study will be one step closer to this understanding, giving these companies new directions to think. To sum up, cashless transactions will be the only mode for transactions in the future where digital wallets place a very significant role in making sure every person in a country can use this opportunity.

Conflict of interest

None declared.

Author contributions

The authors read the ICMJE criteria for authorship and approved the final manuscript.

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