

Unveiling The Economic Tapestry: A Study On Indian Individual Expenditure Trends In The Post-Upi Era

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Abstract

Background/Aim:

ThisstudyaimstoinvestigatetheimpactoftheUnifiedPaymentInterface(UPI)onIndianIndividualexpenditure trends, considering the transformative era of digital payments post the introduction of UPI in 2016. With the increasing prevalence ofdigital transactions, understandinghow UPI hasinfluenced spending patterns becomes crucial for comprehending the evolving economic landscape.

Methodology:

Theresearchadoptsadescriptivemethodology,examiningthespendingbehaviorsof398IndianIndividuals.The sample size is determined using Taro Yamane's formula. The study explores various dimensions, including comparativeadvantage,Individualawareness,trustinUPI,easeofuse,andtheproportionatespendingfacilitated through UPI. The research employs a systematic approach to unravel the intricate factors shaping expenditure patterns in the post-UPI era.

Results:

The findings of the study reveal significant insights into the impact of UPI on Individual expenditure. The analysis encompasses diverse aspects, such as the frequency and purpose of UPI usage, changes in spending habits, and the proportion of income allocated through UPI. Demographic details, including gender, age, education, occupation, and family income, are presented to provide a comprehensive understanding of the sample population. Descriptive analysis of trust in UPI, relative advantage over hard cash, awareness, ease of use, and financial discipline in UPI usage are presented, revealing nuanced perspectives.

Conclusion:

This research contributes to the growing body of knowledge on digital payment systems, particularly the transformative effects of UPI on Individual expenditure in India. The study underscores the importance of understanding the factors influencing spending patterns in the dynamic landscape of digital transactions. Policymakers,financialinstitutions,andindividualsstandtobenefitfromthenuancedinsightsprovided,guiding their strategies and decisions in navigating theevolving realm of digital payments. The study serves as a timely exploration of the economic implications of UPI, shedding light on its multifaceted influence on Individual expenditures.

Keywords:UPI,IndividualExpenditure,DigitalPayments,TransformativeImpact

1. INTRODUCTION:

Background:

Beforethe introduction of theUnified Payments Interface(UPI), thelandscapeof digitalpayments in India was marked by considerable fragmentation and user-unfriendliness, which significantly hampered the adoption of digitaltransactionsacrossabroadsegmentofthepopulation.(Ramachandran,2018)Indiahasbeencashdriven economy,primarilyduetolackofinfrastructuretomakedigitalpayments.Indiahasenoughdebitandcreditcard userswhich have been steadily increasing over theyears from304 million cards in 2012 to 910 million cardsin 2017butdigitalpaymentacceptanceinfrastructureisgrosslyinadequate.(Kumbharetal.,2023)The mount of

internet companies in India started in the mid-1990s. The stumpy penetration of internet, lack of knowledge and lack of growth and confidence in online payments systems were reasons for Indian internet companies not keenly engaging in e-commerce. It was only in the mid-2000s that e-commerce industry in India started to take off. (Indoria & Devi, 2021) Unified Payments Interface was launched in 2016 by National Payments Corporation of India and regulated by the Reserve Bank of India which facilitates the instantaneous fund transfers between two bank accounts on the mobile platform. (Kakade & Veshne, 2017) Payments systems in India have undergone swift changes during the past few years. The adoption of mobile and card payments systems are two key mechanisms of this initiative (Mohapatra, 2017) (Philip, 2020). The payments sector is undergoing significant upheaval. The industry has experienced incredible growth, innovations, and regulatory backing. The expansion of e-commerce businesses and the subsequent rise of digital wallet companies marked the beginning of the acceleration of digital payments. (Padmaja & Venkata Durga Rao, 2019)

Meaning of UPI:

Unified Payment Interface is a digital innovation with an instantaneous payment alternative developed indigenously in India. UPI works on a know-how known as Open Application Programming Interface. API is a type of edge where parties can be connected with each other easily. UPI has been premeditated in such a way that it serves three broad purposes altogether: it is a mobile-based app; it is connected with AADHAR number; therefore, it can even work without internet; it is enormously easy to use. (Rastogi et al., 2021) After demonetization, people gradually started embracing digital payments and even tiny merchants and store owners started accommodating payments through the digital mode. One can make straight bank payments to anyone on UPI by means of their UPI ID or scanning their QR. One can also request money through the app from a UPI ID. (Kolte & Humbe, 2020)

Key Features of UPI:

Common features of UPI are (Kakade & Veshne, 2017):

- Ability to use personal mobile as the primary device for all payments.
- Ability to use Aadhaar number, mobile number, card number, and account number in a unified way.
- Make payments only by providing an address with others without having to ever provide account details or credentials on 3rd party applications or websites.
- Ability to make payments using 1-click 2-factor authentication all using just a personal phone without having any acquiring devices or having any physical tokens.

Adoption of UPI:

Due to the popularisation of digital payment among customers, the main concerns of bank clients' have been moved from a paper-based payment method of a monetary transaction to the electronic mode. E-payment systems in the retail business segment have played a significant role in promoting financial inclusion in a larger space (A. & Bhat, 2021). Consumer adoption refers to the process by which consumers start using a new product or service. It involves the decision-making process where consumers become aware of the product, gather information, evaluate its benefits, and make a choice to purchase and use it. It is an important area of research to understand what will prompt a user to adopt UPI. (Kujur et al., 2024) UPI enables numerous bank accounts into a single mobile application of any participating bank, integrating several banking features, flawless fund routing & merchant payments into one hood. It also caters to the "Peer-to-Peer" collect request which can be programmed and paid as per requirement and ease. Each Bank provides its own UPI App for Android, Windows and iOS mobile platforms. (Kolte & Humbe, 2020) UPI enables transactions with a single click—in which the customer just requires to enter MPIN on the mobile phone to create a transaction. This is unlike the prevailing payment systems where you have to enter card details, usernames and passwords, OTPs etc. on third party devices or websites to make a transaction. In UPI the user's personal mobile phone acts as a sole device to allow and validate the payment. (Gochhwal, 2017) As per the RBI database, India's digital payment ecosystem includes various digital payment instruments such as Banking cards, Unstructured Supplementary Service Data, AADHAR enables payment system, Internet Banking (NEFT, IMPS, and RTGS), M-Wallets, Prepaid Payment Instruments (PPIs), and Unified Payment Interface. According to the most recent RBI data, UPI is accounting for 58.47 percent of all digital payment transactions, totaling 2.53 billion transactions. UPI was developed to facilitate payment systems in retail digital payment transactions, and it now accounts for more than half of the total transactions performed in the digital payment ecosystem. (A. & Bhat, 2021) Throughout the country, UPI-based payment is already a daily life activity for a variety of users, including retailers, service providers, small businesses, entrepreneurs, and suppliers, among others. Market potential, timing, and adoption rate are all critical factors to consider for digital payment apps that use the UPI system to expand their capacity. (Gupta et al., 2023) Information security trepidation makes users suspicious, it has been viewed as a key obstacle to UPI adoption methods and it is pertinent hurdle to the wide acceptance and use of mobile payment applications. Every online transaction in general raises worry on security and also privacy concerns amongst consumers. Security is more related to the risk aspects of financial failure, whereas privacy of data is connected to the ethical concerns like treatment of the personal information of the customer (Pillai & G, 2020).

BenefitsofUPI:

When compared to traditional methods like cash transfers, UPI also has a number of benefits. Since there's no need for both parties to be present during the exchange, the transaction can be processed faster. This makes UPI ideal, particularly when it comes to large amounts where speed is most important. Also, because it can be easily integrated, businesses have more options than ever before when it involves adding financial services to their existing applications via APIs. (George et al., 2023) With UPI there is no need of any other payment app at all. UPI uses open source technology to build enterprise class architecture of high throughput and high volume. (Thomas & Chatterjee, 2017) UPI has encouraged a broader demographic to embrace technology-driven solutions, thus fostering a more inclusive financial environment. The platform has democratized access to secure and reliable banking services, allowing millions of new users to participate in the digital economy with ease. This has been particularly beneficial for small and medium enterprises and entrepreneurs, who now have the tools to operate more efficiently and scale their operations. Furthermore, UPI's role in promoting a cashless economy has led to enhanced transparency and reduced transaction costs potentially reducing the incidence of financial fraud. (Ramachandran, 2018)

2. REVIEW OF LITERATURE

Numerous research studies have been conducted by researchers on spending behavior after introduction of UPI. The following paragraphs review the literature on spending behavior of Individuals in post UPI period.

Spending Behavior:

(A. Kumar et al., 2022) stated that UPI enables the day-to-day transactions of an individual by providing the ability to manage personal finances safely and efficiently, transfer funds and purchases and make other transactions electronically. It allows businesses to increase their competitiveness by offering their customers a convenient and safe digital payment mode and thus makes it a coherent and natural choice. (Mahammad Rafeet et al., 2022) showed a negative correlation between income level to mode of payment while going out for shopping with family and friends, spending more than what one usually spends attracted by cash back offers and positive correlation growth in debt due to Credit cards, Paytm pay later, Amazon pay later etc. Upender et al., (2007) found that the growth rate of Individual savings has accelerated and the data indicates that during the post-economic reform period, there has been no change in the growth rate of domestic savings at the aggregate and disaggregate levels. There has been no shift in the amount of income elasticity of savings of Individual, private and public sectors throughout post economic reform period. Mallick et al., (2017) empirically analysed elements that influence Indian Individuals' saving habits by building an econometric model and analyzing the effects of different variables. He discovered that a number of relevant variables included age, gender, marital status, principal occupation, number of dependents, and property holdings. No connection was seen between the kind of family, such as nuclear or joint. Harshitha & Mahesh, (2019) evaluated the impact of mobile payments on consumers' behavior when it comes to utilizing their credit or debit card to make purchases on mobile devices. Because they are not exchanging physical cash for the product, customers who use cashless transactions lose the emotional significance of money and are less likely to consider the cost of the item before making a purchase. Kumar & Chakravarthi, (2019) enumerated that easy cashless transactions enable people to make more purchases in less time. An increase in consumer demand for goods will lead to a rise in the quantity of digital transactions, creating jobs.

Jeon et al., (2020) found that trust and being credible with the chosen payment method are the qualities which influence people to select one payment method over another when making digital purchases from the fashion industry. Because other nations' payment systems differ much from Sweden's, assurance, dependability and suspicion were carefully considered before making a purchase. Deb, (2020) focused on impact of use of multiple mobile apps on Individual saving and spending behavior. Smart phone users can manage various Individual spending requirements such as equal monthly installment payments, life insurance, stock trading, marriage, entertainment, healthcare services, education, lodging, and travel, among other things. Bhat, (2022) understood that within the online payment ecosystem, online payment systems for retail payments were a big success. Factors like RBI's goal of a cashless society, the move to contactless payments, the rise in Smartphone usage, and improved security against online fraud, contributed to the industry's steady growth. Seldal & Nyhus, (2022) found that mobile payment users were less financially vulnerable than non-users. However, a deeper comprehension of how this newer payment technologies impact financial behavior is required, given that UPI-19 has caused a significant shift in spending towards online platforms and the increased availability of these technologies.

Usage of Digital Payments:

Batra & Kalra, (2016) indicated a sizable unexplored market for digital wallets usage and raising awareness is prevalent. Additionally, restrictions are prevailing on the quantity and frequency of each digital wallet transaction. According to the report, respondents like utilizing wallets because they are convenient, time-saving, and quick to access. Singh & Rana, (2017) found that with the exception of education, demographics have little effect on the increase of online payments. Respondents did not detect any discernible differences based on gender, age, occupation, or yearly income. An individual will use online payment mode if they have completed coursework beyond matriculation and are familiar with the internet. Suma Vally & Hema Divya, (2018) examined the effect

of implementing online payments on Indian banking industry, the results have provided a crucial policy direction that can help the nation boost cashless transactions. The findings show that online payment technologies have enhanced the banking industry's performance and enabled the realization of the goal of a cashless economy.

Praiseye & John, (2018) examined that once registered, mobile wallets save time by preventing the need to repeatedly enter account details. Mobile wallets are used by people, businesses, banks, and retailers. Businesses provide their customers a choice of how to pay and transactions are simplified. Pandey & Rathore, (2018) explained the advancement of digital transactions in both urban and rural areas can be facilitated by education and training in the latest technologies, which can help in the digitalization of the economy through its everyday application. The Indian government is implementing all the policies and initiatives that can contribute to the country's development, including demonetization, digital India, digitalization, improved infrastructure, etc. Baghla, (2018) narrated that India would need ample time to transition to a fully cashless economy. People will need to fully support it and increase its awareness and knowledge. To raise the amount of digital transactions, the issue of low education and digital literacy must be addressed first. M. Mohana Priya & Dr. Tamilarasi Mailachalam, (2018) examined the connections between perceptions of these several aspects that influence cashless payment options and spending behavior, an area that is constantly being studied by government officials and academic researchers. According to the author, India should pursue a less cash economy as opposed to a cashless one. Samuel Joseph et al., (2018) assessed Generation Z's knowledge and usage patterns of digital payment methods. 86% of respondents used digital modes. They would rather spend the most on mobile phone recharges and films. Their favored digital means is the ATM/debit card.

Pancholi & Jain, (2019) The study's respondents who were the youth population were adopting cashless payments and employing e-wallets as well as new, digital alternatives in place of old methods for financial transactions. Few of the respondents were unaware about latest technology and they don't want to opt for E-Wallet to make cashless banking transactions. Tiwari et al., (2019) mentioned that more than half (59.91%) of people are still ignorant about and don't know anything about digital payment systems (mobile banking, e-wallet, BHIM, UPI, etc.), despite extensive promotional and education efforts under the Digital India program. Padmaja & Venkata Durga Rao, (2019) have found that there was a variance in the use of debit cards at ATMs, particularly during the demonetization phase when limits on withdrawals were placed in an effort by the government to shift towards cashless commerce. The expansion of e-commerce businesses and the subsequent rise of digital wallet companies marked the beginning of the acceleration of digital payments. Upadhyay Sheetal & Anup, (2019) stated that small-sized commercial organisations suffered greatly and negatively from the abrupt demonetization for a brief while, although many have since recovered with the aid of internet services and a variety of e-payment methods. The mobile application industry in India is overflowing with options. N. K. Singh, (2019) depicted that there are disparities between government and commercial platforms when it comes to service provision. The survey found that while there are differences in the functionality, availability, and application of Paytm and BHIM services, there was still a significant impact on user happiness.

Shobha B G (2020) identified a digital payment generates data for documentation to be provided to the banker and other users, while also saving time and money. The RBI and Indian banks must address any potential drawbacks like lack of infrastructure and awareness and security concerns from digital payments and put in place the appropriate measures to deal with these issues. Padmavathi (2021) understood that the advancement of digitization can be attributed to a combination of factors such as technological innovation, policy interventions, infrastructure expansion and strengthening on the supply side, and rising population adoption of digital and financial instruments on the demand side. Singhal, (2021) explained the Indian economy is growing quickly, and with it so is the rate of proficiency among the population. These days, even the working class has excellent Android Smartphone, even though they lack complete knowledge on its usage optimally. Even if some people know how to use it, they are reluctant to use online banking due to several reasons such as cybercrimes, online fraud, limited experience, lack of knowledge about online policies, and so forth. Aji & Adawiyah, (2021) revealed that young people use digital payment methods like e-wallets and online banking on a regular basis. The reason why young people in Udaipur City still utilise cash for transactions despite Paytm having the largest user base among them is that shops do not accept e-wallets. Lee et al., (2022) in their study indicated that perceived happiness and E-wallet satisfaction are positively correlated with subjective norm. E-wallets can be promoted by media celebrities which strengthen the Para-social relationship between app users and promoters. These Para-social ties have the power to increase pleasure perception, which in turn can promote impulsive buying.

3. RESEARCH OBJECTIVES:

The study aims to look at the spending patterns of Indian Individuals in the post UPI era. Specifically, the study aims to examine the impact of UPI on the expenditure patterns of Indian Individuals and to identify the factors that influence these patterns. Furthermore, the research seeks to examine the relationship between the usage of digital payment methods such as UPI and changes in the spending behavior of Individuals.

4. METHODOLOGY:

Present study is descriptive in nature and it examined the spending pattern of Indian Individuals in the post UPI era. The study has been conducted by taking Individual members of various parts of India. Taro Yamane (1967)

formula was used to determine sample size and finalized with Sample size of 398 with 0.05 error. The study measured impact of UPI on the expenditure patterns of Indian Individuals considering the factors like comparative advantage, awareness of Individuals, trust on UPI, Ease of use, proportionate spending through UPI etc. Questionnaire was developed into two parts, first part asking demographic details and second part asking questions related to spending pattern of Indian Individuals. Each factor is measured separately by asking questions with 5-point Likert scale, 5 being Strongly Agree and 1 being Strongly Disagree. Questionnaire was constructed with help of literature, where some of the statements are directly adapted (Yamuna, 2013) and some with little modifications. After developing questionnaire, data were collected from various parts of India, Questionnaires were distributed randomly through Google Form in email, WhatsApp and also personally (with help of friends and colleagues in different part of the country). Totally 433 responses were collected and after data cleaning process researcher retained only 398 responses to analyse the data. Thereafter the responses were entered in SPSS 23 version. The researcher carried out Cronbach Alpha test to know the reliability of the data. The result of reliability test showed in Table No.1.

Table 1: Reliability Analysis

Variable	No. of items	Cronbach Alpha Value
Trust on UPI	4	0.848
Relative advantage of UPI over hard cash	4	0.808
Awareness of UPI	4	0.810
Ease of use of UPI	4	.812
Financial discipline in UPI usage	4	.855
Spending behavior- Pre-UPI period	4	0.827
Over-all	20	0.827

The table 1 revealed that Trust on UPI ($I=0.848$), relative advantage of UPI over hard cash ($I=0.808$), awareness of UPI ($I=0.810$), ease of use of UPI ($I=0.812$), financial discipline in UPI usage ($I=0.855$), Spending behavior- Pre-UPI period ($I=0.827$) and overall pattern ($I=0.827$). Since Cronbach Alpha value is more than 0.6 therefore, we can conclude that the opinion given by respondents are reliable.

5. SCOPE OF THE STUDY:

The study will contribute to the existing literature on the impact of UPI on spending patterns in Indian Individuals. This research will help in understanding the impact of digital payment systems on Individual financial management and provide insights to policymakers, financial institutions and Individuals for making informed decisions about managing their finances. It is useful in analyzing spending patterns of Indian Individuals across different demographic groups, including age, gender, income, education level, and geographic location. The research will also examine whether the changes in spending patterns differ between different demographic groups, and identify any challenges or opportunities that have emerged in the use of digital payment systems for financial management so that government can take necessary actions.

6. DATA ANALYSIS AND INTERPRETATION

Table 2: Demographic details of the Respondents

Variable	Groups	Frequency	Percentage
Gender	Female	272	68.3
	Male	117	29.4
	Prefer not to say	9	2.3
	Total	398	100.0
Age group	18-24	297	74.6
	25-34	68	17.1
	35-44	27	6.8
	45-54	3	0.8
	55 or Older	3	0.8
	Total	398	100.0
	PhD	9	2.3

Education	Postgraduate	332	83.4
	bachelor'sdegree	42	10.6

	Other	15	3.8
	Total	398	100.0
Occupation	Salaried	162	40.7
	other	159	39.9
	Professional	39	9.8
	SelfEmployed	32	8.0
	FamilyBusiness	6	1.5
	Total	398	100.0
FamilyIncomepermonth	LessthanRs.25,000	236	59.3
	Rs.25,000toRs.50,000	123	30.9
	Rs.50,000toRs.75,000	9	2.3
	Rs.75,000toRs.1,00,000	12	3.0
	AboveRs.1,00,000	18	4.5
	Total	398	100.0

From the above table it is clear that out of 398 respondents 272 (68%) are female and 117 (30%) are male and 9 (2%) respondents preferred not to say. Therefore, we can conclude that majority of the respondents are female. From the above table it is clear that out of 398 respondents 297 (74%) respondents belong to the age group of 18-24 years, 68 respondents (17%) belong to the age group of 25-34 years 27 (7%) respondents belong to the age group of 35-44 years. 3 (1%) respondents belong to the age group of 45-54 years and 3 (1%) respondents belong to the age group of 55 years or older. Therefore, we can conclude that majority of the respondents belong to the age group of 18 to 24 years. From the above table it is clear that out of 398 respondents 332 (83%) respondents are post graduates, 42 (11%) respondents have a Bachelor's Degree, 15 (4%) respondents have other qualifications, and 9 (2%) respondents have PhD degrees. Therefore, we can say that majority of the respondents are post graduates. From the above table it is clear that out of 398 respondents 6 (1%) respondents Run their own family business, 159 (40%) respondents belong to other occupations, 39 (10%) respondents are professionals, 162 (41%) respondents are salaried and 32 (8%) respondents are self-employed. We can conclude that majority of the respondents are salaried. From the above table it is clear that out of 398 respondents, 18 (5%) respondents have an annual income of above Rs. 1,00,000, 236 (59%) respondents have an annual income of below Rs. 25,000, 123 (31%) respondents have an annual income between rupees 25,000 to rupees 50,000, 9 (2%) respondents have an annual income of Rs. 50,000 to Rs. 75,000 and 12 (3%) respondents have an annual income of Rs. 75,000 to Rs. 1,00,000. Therefore, we can say that majority of the respondents have an annual income of less than Rs. 25,000.

Table 3: UPI usage of the Respondents

Variable	Groups	Frequency
Usage Frequency	Daily	156
	Weekly	110
	Monthly	48
	Rarely	69
	Never	15
Purpose of using UPI	Bill payments	182
	Online shopping	201
	Transfer of fund to family/friends	207
	Recharge of mobile/DTH	222
	Other	9

Increase of spending in UPI Era	Yes	242
	No	99
	Don't know	57
Proportion of Individuals spending from monthly income through UPI	0 (No usage of UPI)	69
	Less than 20% (1% - 20%)	45
	20% - 39%	72
	40% - 59%	111
	60% - 80%	62
	more than 80%	39
Preference to use UPI over hard cash transactions	Yes	278
	No	120
	Total	398
Respondents preferring UPI for various reasons	UPI is convenient way of doing monetary transactions	194
	No fear of cash getting misplaced or theft	132
	UPI applications provide valuable service	84
	Avoids Queue in case of withdrawals	99
	It saves the cost of travelling and other costs	108

From the above table it is clear that out of 398 respondents, 156 (39%) respondents use UPI daily, 110 (28%) respondents use UPI weekly, 48 (12%) respondents use UPI monthly, 69 (17%) respondents use UPI rarely and 15 (4%) respondents never use UPI. Therefore, we can say that majority of the respondents use UPI daily. From the above table it is clear that out of 398 respondents, 182 respondents use UPI for bill payments, 201 respondents use UPI for online shopping, 207 respondents use UPI for transfer of funds to friends/family and 222 respondents use UPI for recharge of mobile or DTH. Therefore, we can say that majority of the respondents use UPI for recharge of mobile or DTH. From the above table it is clear that out of 398 respondents 57 (14%) respondents said that they don't know whether spending has increased during the UPI era, 99 (25%) respondents said that they don't think there was increase in spending in UPI era and 242 (61%) respondents said that they feel there was an increase in the UPI era. Therefore, we can say that majority of the respondents think that spending has increased during the UPI era. From the above table it is clear that out of 398 respondents 69 (17%) respondents make no usage of UPI, 45 (11%) respondents make less than 20% usage of UPI, 72 (18%) respondents is between 20 to 39%, the UPI usage of 111 (28%) respondents is between 40% - 59%, the UPI usage of 62 (16%) respondents is between 60% to 80%. So, we can say that the majority of the respondents spend 40% to 59%, through UPI. From the above table it is clear that out of 398 respondents 278 (70%) respondents prefer to use UPI and 120 (30%) respondents don't prefer to use UPI. Therefore, we can say that majority of the respondents prefer to use UPI. From the above table and chart, it is clear that when asked about the reason for preferring the UPI, out of 398 respondents 194 respondents said that UPI is convenient way of doing monetary transactions, 132 respondents said that they have no fear of cash getting misplaced or theft, 84 respondents said that UPI applications provide valuable service, 99 respondents said that UPI avoids Queue in case of withdrawals and 108 respondents said that it saves the cost of travelling and other costs. Therefore, we can say that majority of the respondents think that UPI is convenient way of doing monetary transactions.

Table 4: Descriptive Analysis of the Trust on UPI

Trust	N	Mean	Std. Deviation	t	Sig. (2-tailed)
UPI application providers have an ethical and professional conduct	399	3.7669	.80408	93.578	.000
I consider UPI Payment transactions safe	399	3.7143	.78207	94.868	.000
My funds are safe while using UPI applications	399	3.6917	.80682	91.398	.000
There is no unauthorized access to harm my privacy	399	3.5940	.83309	86.173	.000

Table number 4 revealed the respondents agree that UPI applications providers have an ethical and professional conduct (3.77 ± 0.8) and they agree that UPI payment transactions are safe (3.71 ± 0.78). The respondents agree that their funds are safe while using UPI applications (3.69 ± 0.8) they also agree that there is no unauthorized access to harm their privacy (3.59 ± 0.83). Table Number 4 also exhibits one sample t test to know whether the mean of opinions given by the respondents significantly differ from the population mean; and the research shows that all statements significantly differ from the mean. So, we can conclude that the opinions given by the respondents are statistically significant ($p < 0.01$).

Table 5: Descriptive Analysis of the Relative Advantage of UPI over Hard cash

Relative Advantage	N	Mean	Std. Deviation	t	Sig. (2-tailed)
UPI is Convenient way of doing monetary transactions	399	4.0526	.68709	117.817	.000
I use UPI because there is no hassle of carrying physical cash	399	3.9549	.72498	108.967	.000
UPI applications provide valuable service	399	3.8496	.72114	106.631	.000
UPI systems are time saving	399	4.1353	.72412	114.074	.000

Table number 5 revealed that the respondents strongly agree that UPI is convenient way of doing monetary transactions (4.05 ± 0.69), there is no hassle of carrying physical cash (3.95 ± 0.72). The respondents agree that UPI applications provide valuable service (3.85 ± 0.72) and they strongly agree that UPI systems are time saving (4.14 ± 0.72). The table also exhibits one sample t test to know whether the mean of opinions given by the respondents significantly differ from the population mean; and the research shows that all statements significantly differ from the mean. So, we can conclude that the opinions given by the respondents are statistically significant ($p < 0.01$).

Table 6: Descriptive Analysis of Awareness of UPI

Awareness	N	Mean	Std. Deviation	t	Sig. (2-tailed)
I am aware of the services provided by UPI applications	399	4.0075	.65543	122.133	.000
I am willing to adopt the new payment technology (UPI)	399	3.9023	.73530	106.007	.000
I have the Know-how of UPI Transactions	399	3.9323	.71799	109.400	.000
I have the Knowledge of different usages of E-payments	399	3.8947	.76935	101.120	.000

Table number 6 shows that the respondents strongly agree that they are aware of the services provided by UPI applications (4.01 ± 0.66) and they agree that they are willing to adopt the new Payment Technology i.e. UPI (3.9 ± 0.74). The respondents agree that they have the know-how of UPI transactions (3.93 ± 0.72), they agree that they have the knowledge of different usages of E-payments. The results of one sample t test showed that all the opinions given to all the statements significantly differ from the mean since p value is less than 0.01. So, the opinions of the respondents are statistically significant.

Table 7: Descriptive analysis of Ease of Use of UPI

Ease of Use	N	Mean	Std. Deviation	t	Sig. (2-tailed)
I feel the e-banking to be flexible	399	3.9549	.70388	112.233	.000
I feel UPI is User-friendly	399	4.0075	.71061	112.650	.000
There is ease of performing E-Transactions in UPI	399	3.9774	.68874	115.354	.000
There is efficient handling of queries in UPI	399	3.7744	.73276	102.891	.000

Table 7 shows that the respondents agree that they feel the e banking to be flexible (3.95 ± 0.7) and they strongly agree that UPI is user friendly (4 ± 0.71). The respondents agree that there is ease of performing transactions in UPI (3.98 ± 0.69) and they strongly agree that there is efficient handling of queries in UPI (3.77 ± 0.73). The results of one sample t test showed that all opinions given to all statements significantly differ from the mean since p value is less than 0.01. So, the opinions of the respondents are statistically significant.

Table 8: Descriptive analysis of Financial Discipline in UPI usage

FinancialDiscipline	N	Mean	Std. Deviation	t	Sig. (2-tailed)
AvailabilityofUPIhasincreasedtheamountof spending	399	4.1128	.77318	106.254	.000
AvailabilityofUPIhasincreasedthefrequency of spending	399	4.0526	.76002	106.513	.000
Introduction of UPI has increased the tendency to purchase the products impulsively	399	3.9774	.78105	101.721	.000
Idon'ttrackmymonthlyUPIexpenditure	399	3.6241	.95582	75.737	.000

Table8 showsthat the respondentsstrongly agree thatavailability of UPI has increased theamountofspending (4.11 ± 0.77) and that they strongly agree that availability of UPI has increased the frequency of spending (4.05 ± 0.76). The respondentsagree that introduction of UPI has increased the tendency topurchase the product impulsively(3.98 ± 0.78)andalsothattheyagreetheydon'ttracktheirUPImonthlyexpenditure(3.62 ± 0.95).The results of one sample t test showed that all opinions given to all statements significantly differ from the mean since p value is less than 0.01. So, the opinions of the respondents are statistically significant.

Table9:AnalysisofIndividualexpendituretrendsbefortheintroductionofUPI

Individualexpendituretrends	N	Mean	Std.Deviation	t	Sig.(2-tailed)
Imademoresmall-valuepurchases (under ₹500).	399	3.0128	.76318	106.254	.000
Iusedtospendmorefrequently.	399	3.5270	.88112	67.737	.000
Imadeimpulsivepurchases.	399	2.5470	.99318	60.608	.000
Ifindmyselfspendingmoreonnon-essentialitems(entertainment,dining).	399	2.3462	.99115	58.667	.000

Table9showstheIndividualexpendituretrendsbefortheintroductionofUPI.The respondentsagreethatthey made more small-value purchases (4.01 ± 0.76) and they agree that they used to spend more frequently (3.53 ± 0.88). The respondents are neutral on they made impulsive purchases (2.55 ± 0.99) and again they are neutral on they foundthemselvespendingmoreonnon-essentialitems(2.34 ± 0.99).Theresultsofonesamplettestshowedthat all opinions given to all statements significantly differ from the mean since p value is less than 0.01. So, the opinions of the respondents are statistically significant.

Table10:AnalysisofIndividualexpendituretrendsaftertheintroductionofUPI

Individualexpendituretrends	N	Mean	Std.Deviation	t	Sig.(2-tailed)
SinceusingUPI,Imakemoresmall-value purchases (under ₹500).	399	4.1128	.77318	106.254	.000
Itendtospendmorefrequentlyafter adopting UPI.	399	4.0526	.76002	106.513	.000
Ifinditeasiertomakeimpulsivepurchases using UPI.	399	3.9714	.78105	101.721	.000
Ifindmyselfspendingmoreonnon-essentialitems(entertainment,dining) after using UPI.	399	3.6241	.95112	75.737	.000

Table 10 shows the Individual expenditure trends after the introduction of UPI. The respondents strongly agree that they made more small-value purchases (4.11 ± 0.77) and they strongly agree that they used to spend more frequently (3.53 ± 0.98). The respondents agree that they made impulsive purchases (3.97 ± 0.78) and again they agree thattheyfound themselvespendingmoreonnon-essentialitems(3.62 ± 0.95).Theresultsofonesample t testshowed thatallopinionsgiven toall statementssignificantlydifferfromthemeansince pvalueisless than 0.01.So,theopinionsoftherespondentsarestatisticallysignificant.

7. DISCUSSION:

The literature review supported that after the introduction of UPI there has been an increase in impulse buying and that spending has increased after the introduction of UPI and also that people don't track their monthly expenditure through UPI.

The study tried to understand the impact of UPI on saving and spending patterns in Indian Individuals. As for as UPI usage of the respondents is concerned respondents think that spending has increased during the UPI era.

Respondents prefer to use UPI and major portion of the respondents prefer to use UPI over hard cash.

As far as trust on UPI is concerned, respondents agree that UPI applications providers have an ethical and professional conduct and that UPI payment transactions are safe. They agree that their funds are safe while using UPI and that there is no unauthorized access to their privacy. The one sample t-test proved that the opinions given by the respondents are statistically significant.

The study also focused on the relative advantage of UPI over hard cash. The respondents strongly agree that UPI is a convenient way of doing monetary transactions. They agree that there is no hassle of carrying physical cash and they also agree that UPI applications provide valuable service. The respondents strongly agree that UPI systems are time saving. It was crude that the opinions given by the respondents are statistically significant.

The study also analysed the awareness of people in India about UPI. The respondents strongly agree that they are aware of the services provided by UPI applications and they agree that they are willing to adopt the new payment technology. The respondents agree that they have the know-how of UPI transactions and have the knowledge of different usages of e payments. All the opinions given by the respondents were statistically significant.

As far as ease of use of UPI is concerned, respondents agree that they feel the E-Banking to be flexible and they strongly agree that UPI is user friendly. The respondents agree that there is ease in performing e transactions in UPI and there is efficient handling of queries in UPI. The responses were proved to be statistically significant.

The study also dealt with the financial discipline in UPI usage. The respondents strongly agree that availability of UPI has increased the amount and frequency of spending. The respondents agree that introduction of UPI has increased the tendency to purchase the product impulsively and also that they don't track their UPI monthly expenditure. The opinions given by the respondents were seen to be statistically significant.

When we compare the trends of individual expenditure before the introduction of UPI and after the introduction of UPI, we come across noticeable differences. It is clear that the respondents said that they made more small value purchases and they used to spend more frequently in the post UPI era compared to the pre UPI era. The respondents found it easier to make impulsive purchases in the post UPI Era compared to the pre UPI era and they found themselves spending more on non-essential items in the post UPI era compared to the pre UPI era.

8. PRACTICAL IMPLICATION:

The study found that UPI users do not track their monthly expenditure through UPI. The study also found that spending has increased after the introduction of UPI. So, it might so happen that UPI users spend all their income at the start of the month and end up having no income to spend at the end of the month. UPI users will do well to follow the financial discipline. Impulsive buying which is so often associated with UPI usage which would hamper the financial discipline of the UPI user. Typically, income minus investments should be yours spending and not income minus spending your investment. An individual, out of his income, first has to invest in assets which can give him good returns and then he has to spend the amount remaining. For this reason, UPI applications providers need to take some steps to help the UPI users to control their spending while using UPI.

The UPI service provider can give monthly statements detailing the product and services on which they spend in a month and the amount of money spent on all these products and services in each month. UPI applications providers can also send intimation to those UPI users whose balance has reached a certain minimum limit.

Even today, some of the remote areas in India do not have internet facility or they have very low internet network. So, if UPI application providers can develop a system wherein payment can be done without using internet the UPI usage will increase even further compared to what it is today. It is also necessary to mention that sometimes the payment processing takes too much time causing delays for the customers. If the speed and efficiency of the transactions can be improved in terms of quickness and efficiency the customer base of UPI is sure to increase. UPI users instead of using UPI Direct will do well to use UPI Light for small transactions because charges are lower in UPI Light compared to UPI Direct.

The UPI service providers can levy a convenience fee on monthly expenditure on a particular product or service if it crosses a certain limit. If one individual's mobile number has been linked to several bank accounts UPI application providers have been finding it difficult to track to which bank account the mobile number has been linked and consequently that individual is finding it difficult to make payments. UPI service providers will do well if they can fix this issue.

The government can and should encourage UPI payments up to a certain limit so that the steps are in tune with the concept of Digital India while ensuring that UPI is not used for any unlawful intentions which can hamper the smooth functioning of the economy.

9. CONCLUSION:

This research contributes to the growing body of knowledge on digital payment systems, particularly the transformative effects of UPI on individual expenditure in India. The study underscores the importance of understanding the factors influencing spending patterns in the dynamic landscape of digital transactions.

Policymakers, financial institutions, and individuals stand to benefit from the nuanced insights provided, guiding their strategies and decisions in navigating the evolving realm of digital payments. The study serves as a timely exploration of the economic implications of UPI, shedding light on its multifaceted influence on individual expenditures.

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11. LIMITATIONS:

There are several limitations to consider for the study investigating the expenditure trends of individuals of India in the post-UPI era. Some of these limitations include:

- **Sample Size and Generalisability:** The study analyzes 398 Indian households, which may not be fully representative of the diverse Indian population. Regional, socio-economic, and cultural differences across India can influence household spending behaviors differently, limiting the ability to generalize findings to the entire country.
- **Time Frame of Data Collection:** The study may not account for long-term trends in UPI usage and spending behavior, as changes in consumer behavior often evolve over extended periods. Additionally, fluctuations in economic conditions (such as inflation or post-pandemic recovery) during or after the data collection period could have influenced the results, limiting the study's temporal relevance.
- **Self-Reported Data:** The data on household spending behaviors is likely based on self-reported responses, which are subject to biases such as recall bias, social desirability bias, and inaccuracies in reporting. This could affect the accuracy of the findings, particularly regarding spending patterns and frequency of UPI usage.
- **Lack of Control over External Factors:** The study does not account for external factors like macroeconomic changes, government policies, or technological advancements that might influence spending patterns. Other digital payment platforms and changing financial conditions could also play a role in altering expenditure trends, which is not fully explored.
- **Limited Scope of Analysis:** Although the study explores multiple dimensions such as trust, awareness, and ease of use, it might have overlooked other relevant factors that could influence household expenditure, such as income stability, financial literacy, or the psychological aspects of digital payment adoption.

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