

A Study on the Adoption of Digital Payments by Indian Youth

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Abstract. There are many instances in the near past like Demonetization, Digital India campaign etc. where payments which do not require any physical contact came in demand. But after the lockdown due to a pandemic hit India, the demand for digital payments saw a tremendous increase as people did not want to come in contact with anyone. So digital payments played a very important role during these times. As youth forms a major and important part of our country, this study tries to uncover and comprehend the key elements driving Indian youth's adoption of digital payments. After reviewing the literature, three variables were identified as independent while one variable was identified as dependent. For this, primary research with the help of a questionnaire was conducted. The sampling technique adopted here was purposive sampling (non-probability sampling) and 205 responses were collected and analyzed by using statistical tool SPSS.

Keywords: Digital Payments, Security, Acceptance, Convenience, Digital Payment platform, youth

1 Introduction

Digital payment is clearly a form of a transaction which lacks physical exchange of cash. The aforementioned arrangement takes place with the help of a mobile phone and the internet. It eliminates the hard currency exchange. It is also known as electronic payments. The extensive use of smartphones, continuous improvements in the mobile and broadband industry, cutting edge technology and certain movements like Demonetization, Digital India and the sudden pandemic had an instrumental impact on the adoption of Digital Payments. This is crucial as it is growing at a rapid speed and it has the potential to curb black money.

The Digital Payment mechanism is a milestone in the era of a cashless economy of Digital India. It has been observed that till 2020, less than 5% of total payments take place electronically. The volume of digital payments in India has increased by 33% during the financial year 2021-2022. Digital payments save our time and are convenient to use but cash is still a major part of Indian Youth's life. A report on the topic "Digital payments in India projected to reach \$10 trillion by 2026" [1] stated that UPI had observed a 9 times transaction volume increase in the last 3 years. *RBI has unveiled a Payments Vision 2025 which has the core theme of 'E-Payments for Everyone, Everywhere, Every Time' (4Es)* [2] and aims to

provide every user with safe, secure, fast, convenient, accessible and affordable e-payment options.

Digital Payment Mode used in India:

- UPI: the Unified Payment Interface (UPI)
- Online or mobile wallets
- Debit Cards
- Credit Cards
- Mobile Banking
- Internet Banking

2 Scope of The Study

This study will help to study different factors which have a major impact on the adoption of Digital Payments. In this study, the focus will be on youths (Ages 15- 29) as they cover a major part of India's population and are the major tech-savvy people.

3 Rationale and Research Gaps

Even though the use of Digital Payment is increasing day by day still there are some setbacks which slow its growth. It has been observed that the factors stated by some scholars are rejected by other scholars. It has also been observed that the scholars have focused more on gender than the factors that are impacting the adoption of digital payments. There has been no specific study on the adoption of digital payments by Indian youth even though they form major part of India's population. The research will help to understand the barriers and factors that affect the growth of digital payment and what could be the solutions or strategies for increasing the adoption of digital payments among Indian youth.

4 Literature Review

Mohammed Arshad Khan in his research article on "Netizens' Perspective towards Electronic Money and Its Essence in the Virtual Economy" (2021) [3] examined the impact of demographic factors and other variables like satisfaction, reliability etc. on the adoption of the digital payment system. It also mentioned that the Indian economy will take considerable time to adopt digital payments.

Kartik Aggarwal , Sushant Malik , Dharmesh K. Mishra , Dipen Paul in their research on "Moving from Cash to Cashless Economy: Toward Digital India" (2021) [4] [5] indicated that consumers' age group, educational qualification etc. has an impact on the adoption of a cashless economy.[6] It stated that two types of amenities, wallet-based and UPI-based platforms have been trending in recent years.

Dr. Dilip Singh, Ms. Aishwarya Singh in their research on "E-Wallets: An Innovation and its Perception Among Youth" (2022) [7] provided how various factors like convenience in ease of use, quick online transaction, prompt customer services and usefulness of e-wallet in terms of prioritizing the transactions play an important role in the adoption of digital payments (E-wallets). They observed that the most liked feature of E- wallets is that they are a hassle-free

and quick way to make payments.

Sudiksha Shree, Bhanu Pratap, Rajas Saroy, Sarat Dhal in their research on “Digital payments and consumer experience in India: a survey based empirical study” (2021) [8] [9] studied how consumer’s experience with online fraud affects their payment behaviour. They also stated that the socio-economic development of the population will increase with the adoption of digital payments.

Mala Goplani, Jewel Sabhani, Akash Gupta in their research journal on “A Study on Use of Digital Payment Application for E-Commerce among Youth” (2021) [10] observed that majority of people are users of digital payments and they use it for shopping of clothes, electronic gadgets, paying utility bills, booking tickets etc.

Ashish Baghla in his research on “A Study on the Future of Digital Payments in India” (2018) [11] [13] stated that the biggest challenge faced is the lack of education, digital literacy, knowledge and awareness among people and fear of loss of money.

Shamsher Singh in his research on “Study of Consumer Perception of Digital Payment Mode” (2027) [12] [14] observed that only education is the factor that influences the adoption of digital payments. The increasing use of the internet and smartphones in India is acting as a major factor in the growth of digital payments.

C. Chaudhari and A.Kumar in their research on “Study on Impact of Covid-19 Outbreak on Digital Payment in India” [15] [16] stated that the value of digital payments in 56th retail sector increased during the pandemic-hit period which shows how the Indian economy was ready to absorb and adjust to the economic shocks.

M. Thirupathi, Dr.G. Vinayagamoorthi, Dr. Sp. Mathiraj (2019) [17] in their research on “Effect Of Cashless Payment Methods: A Case Study Perspective Analysis” emphasised that the number of digital payment users have been increasing day by day, especially the students and employees working in the private and government sector. There has been a 440% increase after demonetization.

Dr Ranjith P.V.1 , Dr. Swati Kulkarni2 , Dr. Aparna J Varma in their research on “A Literature Study Of Consumer Perception Towards Digital Payment Mode In India” (2021) [18] predicted that the technology like blockchain and bitcoin along with artificial intelligence will play a major role in the overall development of digital payment in India. Majority of consumers are comfortable using digital transactions.

Gagandeep Singh in his research on “A Review of Factors Affecting Digital Payments and Adoption Behaviour for Mobile e-wallets” (2019) [19] observed that latest technologies for digital payments have improved the banking sector’s performance and is moving towards the motive of cashless country.

Ms. Rashi Singhal in her research on “Impact and Importance of Digital Payment in India” (2020) [20] stated that digital payments are one of the engaging frameworks in India that helps in the advancement of the Digital India campaign started by Prime Minister Narendra Modi, which aims at controlling the black money of the country.

Ms. S. Ruthrani and Dr. V. Darling Selvi in their research on “Consumer Perception Towards Digital payment” (2019) [21] [22] observed that internet is playing an important role in the field of digital payments. The 24 hours availability, customer loyalty, easy access to

information etc. are important factors that give strength to digital payments.

K. Pushparaj in his research on “Digital Payment System–Innovative Practices of Banks and Perception of Customers” (2021) [23] [24] suggested that banks should organize awareness programs regarding the Digital payment system to overcome the misconceptions about the Digital Payment system and develop confidence in the customers.

Pachpande Bhagyashri R. in the research on “Study of E-wallet Awareness and its Usage.” (2018) [25] stated that the presence of mobile wallets spreading from urban to rural areas on a large scale. Hence, wallet money sees a bright future in near time.

G. Raghunath in his research on “Digital Payments in India” (2022) [26] [27] observed that Google Pay is the most used mode of digital payments. He also advised that people should be made aware of the safety procedures that are being taken to make digital payments safer to use.

5 Research Objectives

- To study the adoption of digital payments by Indian Youths.
- To study factors (Awareness, Convenience and Security) affecting the adoption of digital payment.
- To find out the most used digital payment platform.

6 Hypothesis

- **Hypothesis 1:** There is a significant relationship between the dependent variable “Acceptance” and independent variable “Convenience”.
- **Hypothesis 2:** There is a significant relationship between the dependent variable “Acceptance” and independent variable “Security”.
- **Hypothesis 3:** There is a significant relationship between the dependent variable “Acceptance” and independent variable “Awareness”.
- **Hypothesis 4:** There is a significant impact of variables on adoption of digital payments.

7 Research Design

The research design applied in this research is a Descriptive Research Design. Descriptive Research Design describes the characteristics of a sample and relationships between the population or phenomenon and events observed by the researcher (Rubin & Babbie, 2008; Thomlison, 2001). It explains the event under consideration. This design was chosen because it helps in describing the customers or competitors, understanding market size, segmenting markets and measuring the performance. The research will also include applied research which is designed to solve practical problems of the modern world and the quantitative method which will be used to survey and collect quantifiable data.

Population: The population to be covered in this research is people residing in Delhi/NCR. Individuals might be either male or female.

Sample: The study of this sample reveals and validates information about the entire population. The sample to be covered in this research is Indian youths between the age group of 15 and 29 years residing in Delhi/NCR.

Sample Size- The sample size for this research is 200 Indian youths.

Unit of Analysis- The unit of analysis applied is Indian youth.

Sampling Technique- The sampling technique applied in this research is Non-Probability Sampling- Purposive Sampling. Purposive sampling (also known as judgement, selective, or subjective sampling) is a sampling technique in which the researcher uses his or her discretion in selecting members of the population to participate in the study.

Survey Instrument: Both primary and secondary data have been used for the research. For collecting primary data, a questionnaire was circulated and data was collected from 200 people. Secondary data has been collected from various online sources like research papers, journals, websites etc.

8 Data Analysis Tools & Techniques

For this research, the tool used for data analysis is SPSS which stands for “Statistical Package for the Social Sciences”. It is applied because it will help in finding out the relation between two variables.

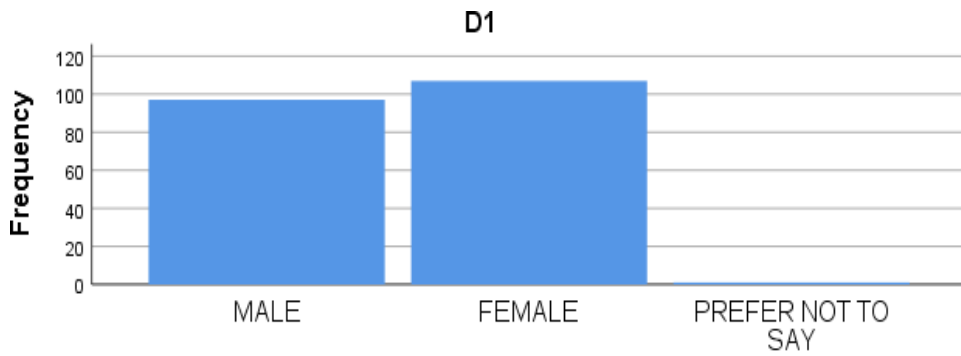
9 Data Analysis and Results

9.1. Profile of Respondent

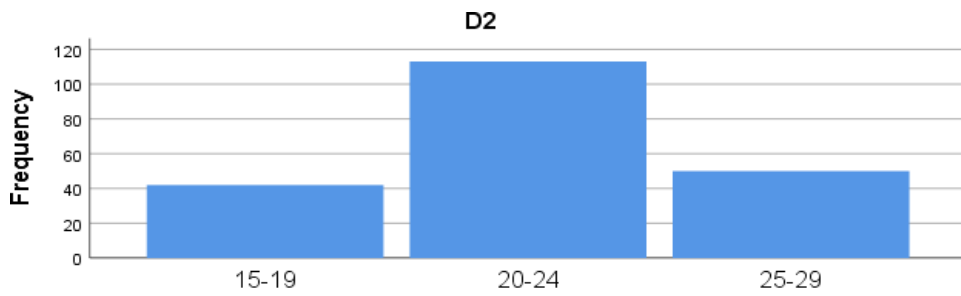
Respondents are categorised on the basis of their demographic factors such as gender, age, education qualification, occupation and annual family income. 52.2% of respondents are female, 47.3% are male while .5% preferred not to say gender. Most of the respondents are students of the age group 20-24. Most respondents are post graduates (42.4%) followed by under-graduates (40.5%). The annual family income of respondents below Rs 5 lakhs is 41%, 5-10 lakhs is 36.1% and above 10 lakhs is 22.9%.

Table 1: Frequency of Demographics

		Statistics				
		D1	D2	D3	D4	D5
N	Valid	205	205	205	205	205
	Missing	0	0	0	0	0
Mean		1.54	2.04	4.16	2.50	1.82
Std. Deviation		.528	.670	.937	.790	.781



D1
Chart.1: Demographic(Gender)



D2
Chart 2: Demographic(Age Group)

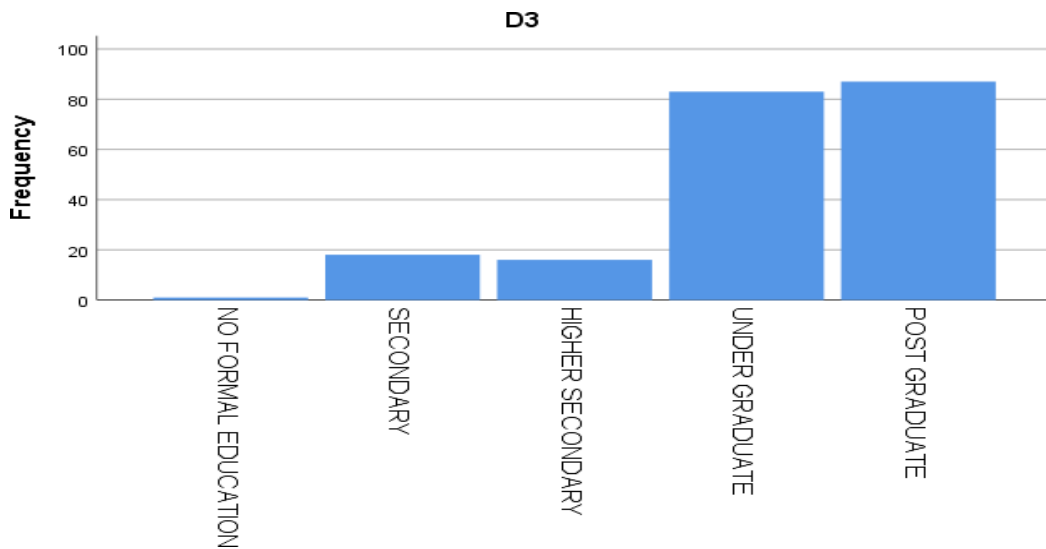
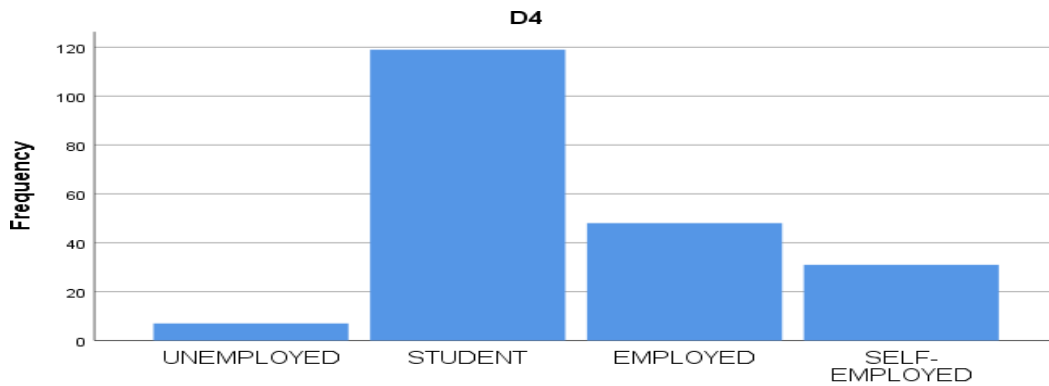
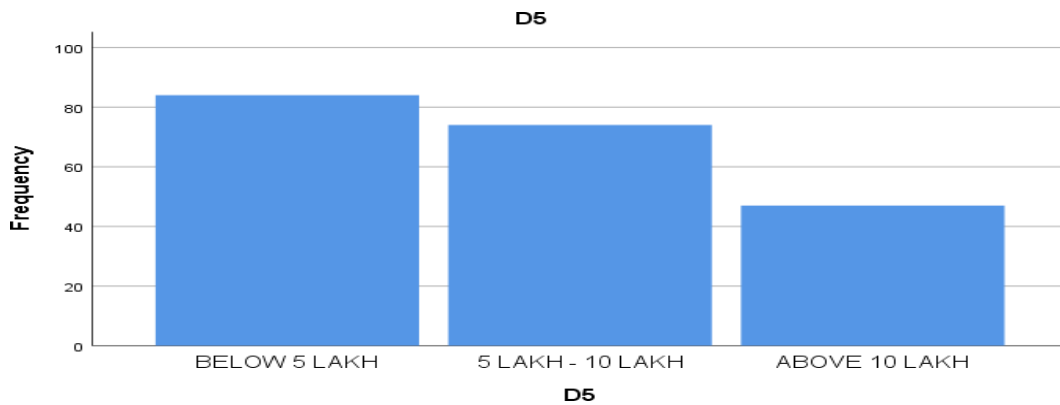


Chart 3: Demographic(Education Qualification)



D4
Chart 4: Demographic(Occupation)



D5
Chart 5: Demographic(Annual Family Income)

9.2. Correlation Analysis

A correlation is a single number that describes the direction and the degree of relationship between two variables. It is a measure of the extent to which two variables are related. In this research, it will help in analysing the relation between the dependent variable “Acceptance” with independent variables “Convenience”, “Awareness” and “Security”.

Hypothesis 1:

Ho: There is no significant relation between the variable Acceptance and Convenience.

H1: There is a significant relationship between the variable Acceptance and Convenience.

Table 2: Correlation between Acceptance and Convenience

Correlations		
	ACCEPTANCE	CONVENIENCE

ACCEPTANCE	Pearson Correlation	1	.686**
	Sig. (2-tailed)		.000
	N	205	205
CONVENIENCE	Pearson Correlation	.686**	1
	Sig. (2-tailed)	.000	
	N	205	205

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation between Acceptance and Convenience is $r = 0.686$ and significant values is 0.000. This indicates that Acceptance and Convenience are not independent to each other. The Value of $r=0.686$ which shows that it is forming a moderately strong correlation.

Hypothesis 2:

Ho: There is no significant relationship between the variable Acceptance and Security.

H1: There is a significant relationship between the variable Acceptance and Security.

Table 3: Correlation between Acceptance and Security

Correlations			
		ACCEPTANCE	SECURITY
ACCEPTANCE	Pearson Correlation	1	.564**
	Sig. (2-tailed)		.000
	N	205	205
SECURITY	Pearson Correlation	.564**	1
	Sig. (2-tailed)	.000	
	N	205	205

The correlation between Acceptance and Security is $r = 0.564$ and significant values is 0.000. This indicates that Acceptance and Security are not independent of each other.

The Value of $r=0.564$ which shows that it is forming a moderately positive correlation.

Hypothesis 3:

Ho: There is no significant relationship between the variable Acceptance and Awareness.

H1: There is a significant relationship between the variable Acceptance and Awareness.

Table 4: Correlation between Acceptance and Awareness

Correlations			
		ACCEPTANCE	AWARENESS
ACCEPTANCE	Pearson Correlation	1	.622**
	Sig. (2-tailed)		.000
	N	205	205
AWARENESS	Pearson Correlation	.622**	1
	Sig. (2-tailed)	.000	
	N	205	205

The correlation between Acceptance and Awareness is $r = 0.622$ and significant values is 0.000. This indicates that Acceptance and Awareness are not independent of each other. The Value of $r=0.622$ which shows that it is forming amoderately strong correlation.

Hypothesis 4:

Ho: There is no significant impact of variables on adoption of digital payments.

H1: There is a significant impact of variables on adoption of digital payments.

9.3. Regression Analysis

The general purpose of regressions is to learn more about the relationship between one independent and one dependent variable. In this, multiple regression is performed so that the relation between dependent variable “Acceptance” and independent variables “Awareness”, ” Convenience” and “Security” can be obtained.

Table 5: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.724 ^a	.524	.516	.66082
a. Predictors: (Constant), AWARENESS, SECURITY, CONVENIENCE				

Table 6: ANOVA

ANOVA ^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96.441	3	32.147	73.615	.000 ^b
	Residual	87.775	201	.437		
	Total	184.215	204			
a. Dependent Variable: ACCEPTANCE						
b. Predictors: (Constant), AWARENESS, SECURITY, CONVENIENCE						

Table 7: Regression Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.595	.302		5.275	.000
	CONVENIENCE	.446	.084	.409	5.317	.000
	SECURITY	.113	.052	.145	2.170	.031
	AWARENESS	.194	.051	.259	3.798	.000
a. Dependent Variable: ACCEPTANCE						

The formula used to identify the beta value of standardized coefficients is :

$$\text{Acceptance} = .409 * \text{Convenience} + .145 * \text{Security} + .259 * \text{Awareness}$$

The result indicates that there is significant impact of independent variable “Convenience” on dependent variable “Acceptance” (B=.446, t=5.317, p=.000). The result indicates that there is significant impact of independent variable “Security” on dependent variable “Acceptance” (B=.113, t=2.170, p=.031). The result indicates that there is significant impact of independent variable “Awareness” on dependent variable “Acceptance” (B=.194, t=3.798, p=.000). This shows that there is significant impact of variables on adoption of digital payments.

Table 8: Regression Hypothesis Result:

Hypo theses	Regressionweighs	B	T	p- value	Results
<i>H1</i>	Convenience > Acceptance	.446	5.317	0.000	Supported
<i>H2</i>	Security > Acceptance	.113	2.170	0.031	Supported
<i>H3</i>	Awareness >Accept	.194	3.798	0.000	Supported

10 Discussions

1. First, correlation was tested to find out the relation between variables, out of which one is dependent variable and the other were independent variables. The variables showed positive correlation.
2. After correlation, multiple regression was performed to understand how different factors impact acceptance of Digital payments among Indian youth.
3. The research proved that independent variables “Convenience”, “Awareness” and “Security” had a significant impact on dependent variables “Acceptance”.
4. The findings show that the more the youth will be made aware about digital payments, the more they will be ready to accept and finally adopt digital payments.
5. The findings show that the more secure the youth will feel about using digital payments platforms, the more accepting they will be about adopting it in their daily life.
6. It has also been observed that the respondents have used at least one or more digital payments mode and platform. The most used platform is PayTM.

11 Implications

Digital Payments have seen growth in the last few years but still a lot of people are not completely aware about it so digital payment platform providers should try to create awareness about their platforms. Digital payments platform providers should improve their technology so that there are less technical glitches as this leads to dissatisfied customers who do not want to take risk of their money getting stolen or blocked due to some technical error. The study shows that convenience is very important to consumers so new updates should come in an adequate manner so that the unnecessary errors can be prevented. More and more youth will start using Digital Payments when they gain relevant knowledge about it. The bank’s website and applications should be easy to use and fast. Cashback or Coupons could be given to youth for using digital payments. This will encourage youth to adopt digital payments as a method of

payment.

12 Conclusion

This research was initiated to analyse some major aspects that influence the adoption of digital payments by Indian youth. After reviewing a variety of literature, important variables were recognized which have a great impact on acceptance of digital payments. These variables are Convenience, Security and Awareness. It was observed that all independent variables had a favourable relation with dependent variables. They all had a considerable effect on the acceptance of digital payments.

References

- [1] Abrar, P. reported about 'Digital payments in India projected to reach \$10 trn by 2026: Report' by BusinessStandard News (business-standard.com), 2022.
- [2] Payments Vision 2025, retrieved from Reserve Bank of India - Press Releases (rbi.org.in), 2022.
- [3] Khan, M. A., "Netizens' perspective towards electronic money and its essence in the virtual economy: an empirical analysis with special reference to Delhi-NCR, India". Complexity, 2021.
- [4] AGGARWAL, K., MALIK, S., MISHRA, D. K., & PAUL, D., "Moving from cash to cashless economy: Toward digital India", The Journal of Asian Finance, Economics and Business, 8(4), 43-54, 2021.
- [5] Hodiwalla, Fali & Aneja, Dheeraj, "Emergence of e-wallets in India, here is how the payment industry is growing rapidly". Financial Express. <https://www.financialexpress.com/industry/technology/emergence-of-e-wallets-in-india-here-is-how-the-payments-industry-is-growing-rapidly/451008/>, 2016.
- [6] Brahmabhatt, D. M., "A Study on Customers' Perception towards E-Wallets in Ahmedabad City". 6(1), 5
- [7] Singh, D., & Singh, M. A., "E-WALLETS: AN INNOVATION AND ITS PERCEPTION AMONG YOUTH". EPRA International Journal of Environmental Economics, Commerce and Educational Management (ECEM), 9(2), 10-15, 2022.
- [8] Shree, S., Pratap, B., Saroy, R., & Dhal, S., "Digital payments and consumer experience in India: a survey based empirical study. Journal of Banking and Financial Technology, 5(1), 1-20, 2021.
- [9] Kolandaisamy, R., & Subaramaniam, K. "The Impact of E-Wallets for the Current Generation. Journal of Advanced Research in Dynamical and Control Systems" 12 <https://doi.org/10.5373/JARDCS/V12SP1/20201126.2020>.
- [10] Goplani, M., Sabhani, J., & Gupta, "A. A STUDY ON USE OF DIGITAL PAYMENT APPLICATIONS FOR E-COMMERCE AMONG YOUTH". S. Chakraborty and D. Mitra, "A study on consumers' adoption intention for digital wallets in India," International Journal on Customer Relations, vol. 6, no. 1, pp. 38-57, 2018.
- [11] Baghla, A., "A study on the future of digital payments in India", International Journal of Research and Analytical Reviews, 5(4), 85-89, 2018.
- [12] Singh, S. K., "E-wallets are similar to bank accounts, but more convenient: Experts", Business Standard India. https://www.business-standard.com/article/pf/e-wallets-are-similar-to-bank-accounts-but-more-convenient-experts-121040900055_1.html, 2021.
- [13] Singh, S., & Rana, R., "Study of consumer perception of digital payment mode", Journal of Internet Banking and Commerce, 22(3), 1-14, 2017.
- [14] Adharsh, R., Harikrishnan, J., Adarsh, P., & Venugopal, J., "Transformation towards EWallet Payment Systems Pertaining to Indian Youth", Journal of Pure and Applied Mathematics, 119(12),

2583-2593, 2018.

[15] Kamath, K., "Students Perception towards digital payment system- A study with reference to Mangalore University", *International Journal of Creative Research Thoughts (IJCRT)*, 12(6), 237-242, 2018.

[16] Chaudhari, C., & Kumar, A., "Study of Impact of The Covid-19 Outbreak on Digital Payment in India", *Vidyabharati International Interdisciplinary Research Journal*, 12(02), 99-102, 2021.

[17] Thirupathi, M., Vinayagamoorthi, G., & Mathiraj S. P., "Effect Of cashless payment methods: A case study perspective analysis", *International Journal of scientific & technology research*, 8(8), 394-397, 2019.

[18] Ranjith, P. V., Kulkarni, S., & Varma, A. J., "A Literature Study Of Consumer Perception Towards Digital Payment Mode In India", *PSYCHOLOGY AND EDUCATION*, 58(1), 3304-3319, 2021.

[19] Singh, G., "A review of factors affecting digital payments and adoption behaviour for mobile e-wallets", *International Journal of Research in Management & Business Studies*, 6(4), 89-96, 2019.

[20] Singhal, R., "IMPACT AND IMPORTANCE OF DIGITAL PAYMENT IN INDIA" *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH*, 10(2), 3, 2021.

[21] G. Ghosh , "Adoption of digital payment system by consumer: a review of literature," vol. 9, no. 2, pp. 412–418, 2021.

[22] K. Suma Vallyand KHemaDivya , "A study on Digital Payments in India with perspective of Consumer's Adoption", *International Journal of Pure and Applied Mathematics*, Vol. 119, No. 15, 2018.

[23] Mishra, S., & Rajora, V., "A study on Digital Payment System with special reference to Youth", *International Journal of Creative Research Thoughts (IJCRT)*, 237-242, 2018.

[24] M. Chauhan and I. Shingari, "Future of e-wallets: a perspective from under graduates," *International Journal of Advanced Research in Computer Science and Software Engineering*, vol. 7, no. 8, p. 146, 2017.

[25] Pachpande, B., & Kamble, A., "Study of E-wallet Awareness and its Usage", *Journal of Commerce and Management Thought*, 9, 33 <https://doi.org/10.5958/0976-478X.2018.00004.6>, 2018.

[26] V. K. Research Scholar and M. Sumathy, "Digital payment systems: perception and concerns among urban consumers," vol. 3, no. 6, pp. 1118–1122, 2017.