A Comparative Study of UPI Awareness, Usage, and Satisfaction Levels Among Gen X, Millennials, and Gen Z Consumers in Junagadh and Rajkot Districts

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KEYWORDS

Adoption, Awareness, Digital Payments, Gen X, Gen Z, Gujarat, India,Millennials, Usage, UPI

ABSTRACT

UPI is a real-time payment system developed by NPCI that enables instant fund transfers between parties. In the blink of an eye, and without the need for an extensive list of bank details or bank cards, one can easily send money to anyone within seconds. With a surge in its usage and the merits it offers, UPI can rightly be considered a groundbreaking development in India's financial landscape. The integration of UPI services has become an indispensable aspect of banking and commerce in India because of its convenience and speed. The Indian government's dream of becoming a cashless, paperless economy has received a substantial boost from UPI. The COVID -19 pandemic further accelerated the adoption of UPI, with more consumers shifting to digital payment services. However, with India's vast and diverse population, there is still considerable scope for further adoption of UPI, particularly in rural areas and among older generations. This study focuses on the awareness, usage and satisfaction levels of UPI services in two prominent districts of the Saurashtra region of Gujarat—Junagadh and Rajkot. It examines the correlation between awareness and usage levels amongst consumers from three different generations, alongside their satisfaction levels. The findings of this study could provide valuable insights for banks and government institutions aiming to enhance UPI adoption and promote a cashless economy. This comparative analysis between Junagadh and Rajkot may also help strategists for further improving UPI adoption level in these areas.

1. INTRODUCTION

UPI is a powerful tool that integrates multiple bank accounts in one app allowing users to avail diverse banking features.It allows users to make instant payments within seconds just with the help of QR code / UPI ID / contact number etc. Though mostly used for payments, UPI allows users to request and receive money, get a loan, che ck bank balance, check CIBIL score etc.

UPI came into existence in 2016. NPCI conducted a pilot launch with 21 banks on 11th April,2016.Thereafter banks started uploading their UPI enabled apps on Play store from August 2016 onwards. Eversince then there has been an increase in the number of banks live with UPI.Data retrived from the statistics available from NPCI website reveals a consistent growth in the number of banks which can be represented graphically as follows :

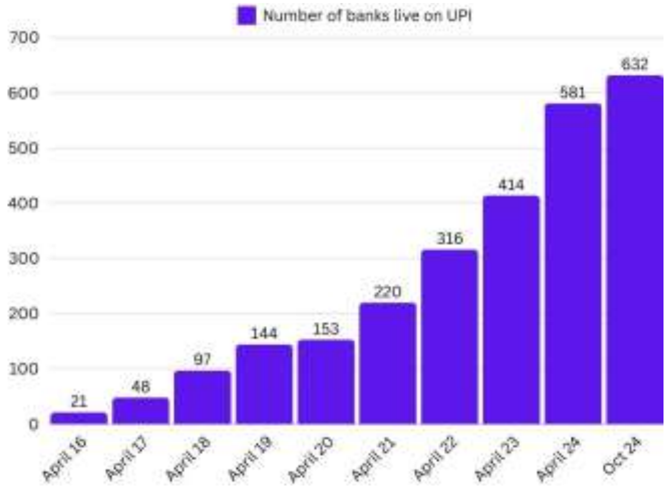


Fig : Banks live on UPI since inception till Oct 24

Graph : Author

Data Source: NPCI

https://www.npci.org.in/statistics

2. FEATURES OF UPI

- Money transfer through smartphone round the clock
- One App – Multiple bank accounts
- Two factor authentication for enhanced security.
- Easy to Scan and proceed with transaction.
- One of the best alternative to cash.
- Multiple uses such as utility bills, card payments, donations, loans, recharge etc

Since its inception, UPI usage has been continuously increasing in India. In October 2024, Unified Payments Interface (UPI) achieved a significant milestone by processing 16.58 billion financial transactions in one month, highlighting its undeniable role in India’s digital transformation. It has revolutionised payment ecosystem of India Following graph prepared by extracting data from NPCI statistics demonstrates steady rise in value of transactions via UPI

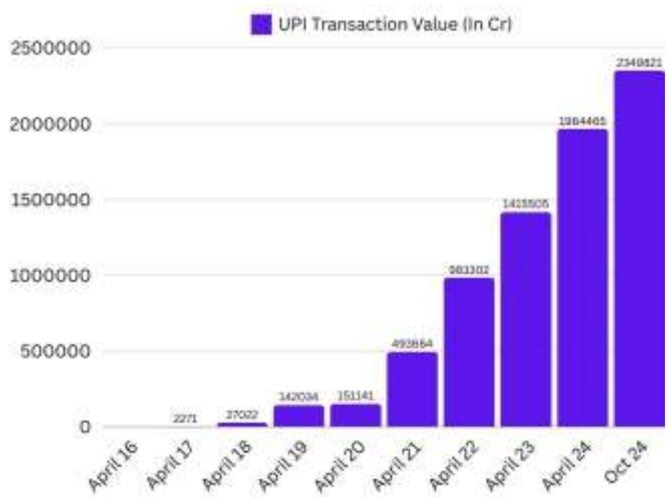


Fig : UPI transaction value since inception to Oct 24

Graph : Author

Data Source: NPCI

https://www.npci.org.in/statistics

There are many prominent platforms that provide UPI services.In India top 5 platforms as per NPCI records can be presented as follows based on Volume (Mn) in Nov 2024:

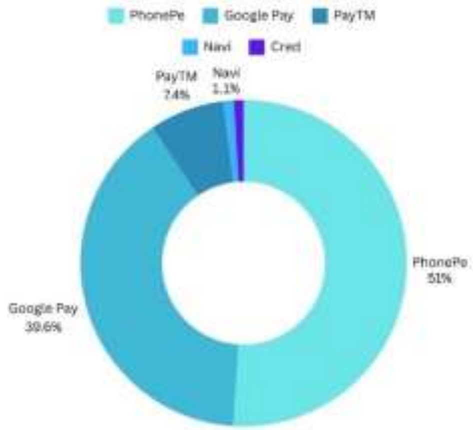


Fig : Top 5 UPI platforms in Nov 24

Graph : Author

Data Source: NPCI

https://www.npci.org.in/statistics

3. LITERATURE REVIEW:

Literature review can be defined as study of academic documents and sources that provide information regarding the existing knowledge, theoretical and methodological advancements in a particular field.The present study has been carried out after having referred following research articles that provides information regarding UPI and recent studies carried out in this field.

Sonali and Kamaraj (2024) [1] studied the level of awareness and satisfaction with UPI services in the Kelambakkam area.They analysed factors such as ease of use,security features, transaction speed and customer support to be influencing factors towards UPI adoption.With the help of survey, authors found that the level of awareness is high while there is gap in customer satisfaction due to concerns over security and frauds.

Dr. Kavita, Pooja, and Mohit Mohan (2023)[2] in their study reveal that customer awareness and usage of UPI among students, highlighting that most of the users are aged 20-22 years. Men using UPI more frequently than Women. Google Pay and Paytm are the most popular apps, while BHIM faces challenges due to frequent glitches. Students find UPI more convenient and prefer it more due to cashback rewards, and low transaction charges. Despite high awareness, many respondents face server-related issues. Over 80% of users find UPI convenient, and more than 90% intend to continue using it. Security concerns remain a challenge for UPI.

Kaur et al. (2022)[3] carried out study based on UTAUT model and analyzed data from 651 UPI users using Partial Least Square Structural Equation Modeling (PLS-SEM).The authors suggest that enhancing user satisfaction through improved performance expectancy, effort expectancy, social influence, facilitating conditions, and personal innovativeness can positively affect continuance intentions.

Khandal (2022)[4] in his study explores customer awareness with respect to UPI and mobile banking and conducted a study on a sample size of 300 respondents from Delhi.It highlights the fact that UPI is getting more popular due to its low cost and high convenience.It also highlights the lack of unawareness about the cyber risks and challenges regarding security issues.Hence the author suggests digital literacy and enhanced security to further popularize mobile banking.

This study by **Sundararaj and Priya (2023)**[5] reveals the influence of customer awareness on satisfaction levels towards digital banking services in the Andaman Islands. The study highlights the growing significance of digital payments. Based on a primary data of 600 respondents, authors assessed how the awareness of digital banking influences customer satisfaction. Results of the study suggest that factors such as technological infrastructure, privacy and security concerns, and digital literacy significantly influence customer usage and satisfaction. The study stresses upon the need for improving awareness foster greater adoption of digital banking.

4. OBJECTIVES

- To assess the levels of awareness of UPI services and its features amongst consumers of different generations.
- To check the level of usage of UPI services and its features amongst consumers of different generations.
- To study the satisfaction level of UPI services and its features amongst consumers of different generations.
- To compare the awareness, usage and satisfaction level of UPI services amongst consumers of Junagadh and Rajkot districts.
- To analyze the relationship between awareness, usage and satisfaction level.

5. RESEARCH METHODOLOGY

- **Type of Research** – Primary and Secondary. Websites were referred to collect factual information regarding UPI.
- **Data Collection -** Sampling: Random sampling method was used to select participants from both districts, ensuring representation from various generational groups and demographics.

  Sample size was determined using following formula. (Talati J & Sanghvi R, 2011)[6]

$$n = \frac{Z^2 \cdot p \cdot q}{d^2}$$

Here Z = 1.96, p = 0.20, q = 0.80, d = 0.05

$$n = \frac{1.96^2 \cdot 0.20 \cdot 0.80}{0.05^2}$$

n = 245.8624 ≈ 246.

  256 responses were collected, with 142 responses from Junagadh and 114 responses from Rajkot. Structured questionnaires were sent to gather data from participants through online mode. It consisted sections such as Demographic factors, Awareness, Adoption and Satisfaction.Questions were framed using a likert scale of 1 to 5.

- **Methodology and Tools** – Descriptive and Comparative study. Anova and Correlation have been used to determine statistical results using SPSS Statistics Data Editor.

6. DEMOGRAPHIC PROFILE

Total 256 responses from two prominent districts of Gujarat were collected - 142 responses from Junagadh district and 114 responses from Rajkot district.The demographic profile of respondents is as follows:-

Number of respondents from each district

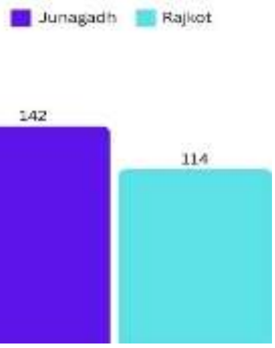
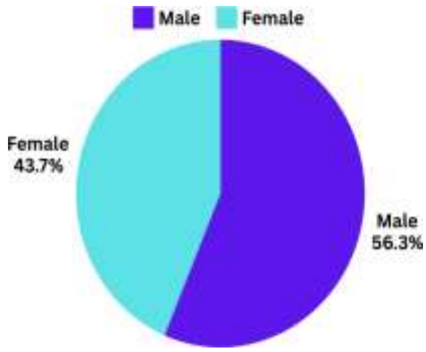
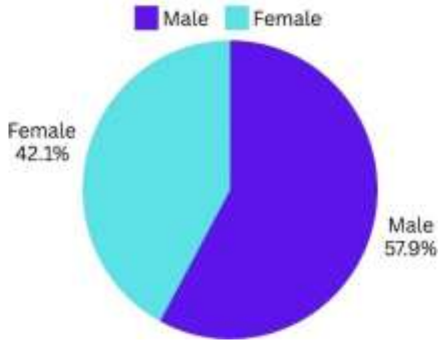
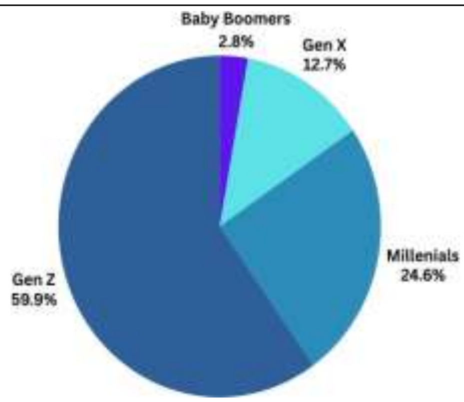
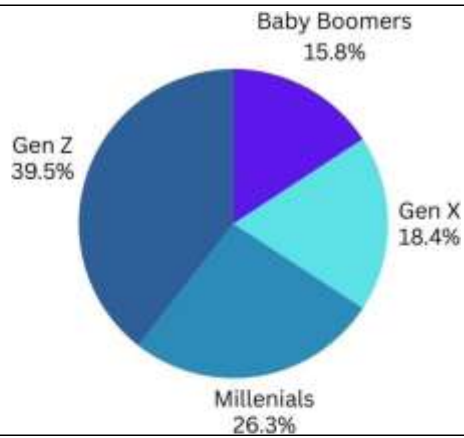


Fig : No of respondents from Junagadh and Rajkot

Source: Primary Data, Author

<table>
<tr><td>Demographic Variables</td><td>Junagadh (N = 142)</td><td>Rajkot (N = 114)</td></tr>
<tr><td>Gender</td><td>
</td><td>
</td></tr>
<tr><td colspan="3">From Junagadh district ,43.7% females and 56.3% males have responded while from Rajkot district 42.1 % were females while 57.9% were males in Rajkot which indicates slightly higher proportion of males. This also demonstrates the facts that women users of technology are slightly less than men[02].(02) (UNFPA,2023) (Dr. Kavita, Pooja, & Mohit Mohan, 2023)[2]</td></tr>
<tr><td>Age</td><td>
</td><td>
</td></tr>
<tr><td colspan="3">The generations have been identified as follows :
Baby Boomers: Born approximately between 1946 and 1964.
Generation X (Gen X): Born approximately between 1965 and 1980.
Millennials (Gen Y): Born approximately between 1981 and 1996.
Generation Z (Gen Z): Born approximately between 1997 and 2012.
The majority respondents from both districts are GenZ, followed by Millenials and GenX. The least respondents' age group is Baby boomers. This can be due to higher inclination of GenZ and Millenials towards technology compered to older generations[01] (01) (CTA Research: Exploring Gen Z Views and Preferences in Technology,2024)</td></tr>
</table>

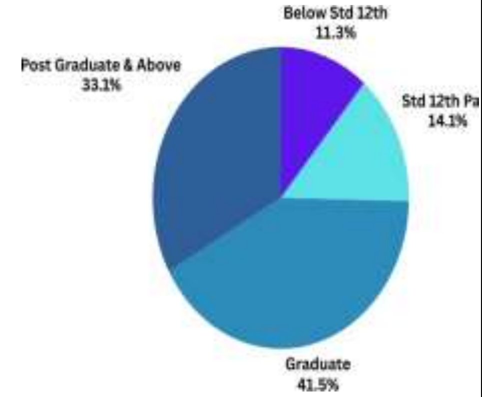
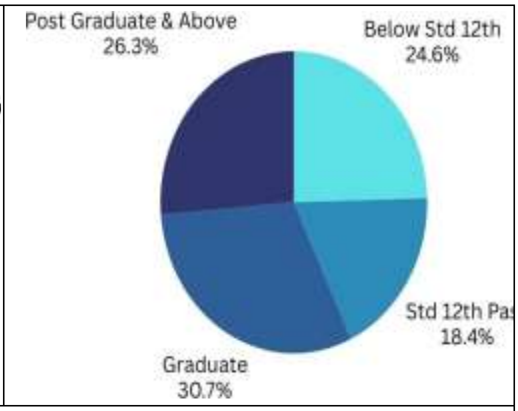
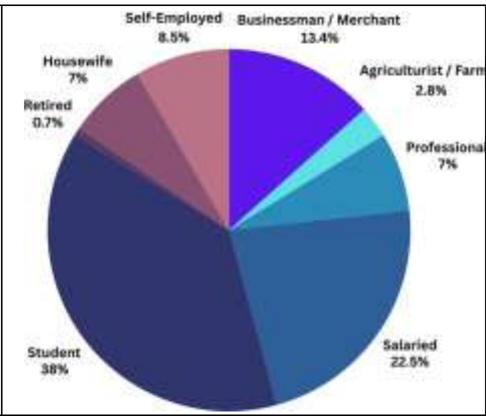
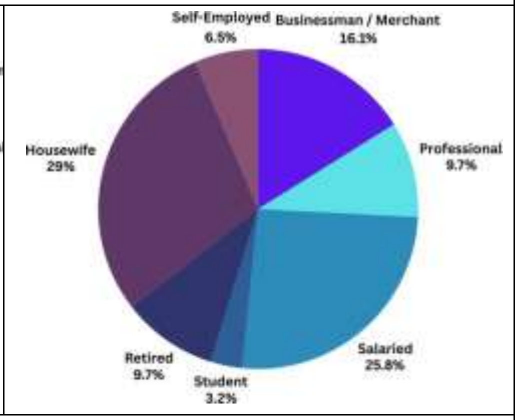
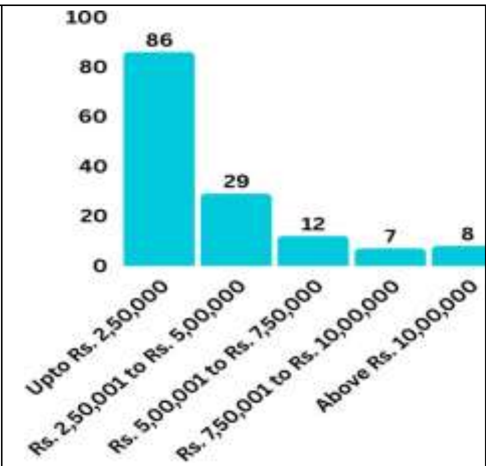
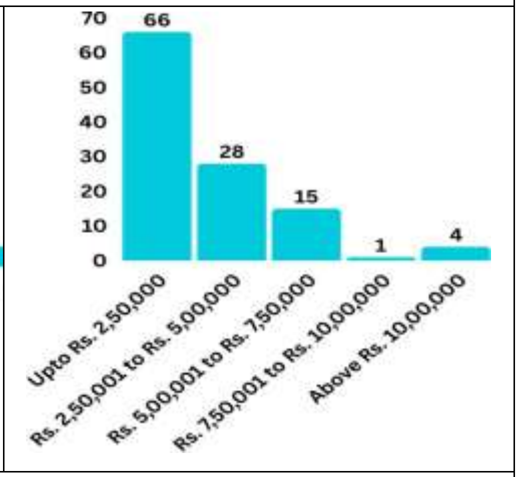
<table>
<tr><td>Education</td><td>
</td><td>
</td></tr>
<tr><td colspan="3">The majority respondents from both the districts are post graduates followed by graduates, probably due to more technology adoption by highly educated individuals.[03] (03)(TED, The Economics Daily,2001)</td></tr>
<tr><td>Occupation</td><td>
</td><td>
</td></tr>
<tr><td colspan="3">The majority of respondents in Junagadh were students followed by salaried employees while those in Rajkot were housewives followed by salaried employees. This varied sampling gives an opportunity to study the awareness and adoption patterns amongst different age groups irrespective of their occupation.</td></tr>
<tr><td>Income Levels</td><td>
</td><td>
</td></tr>
<tr><td colspan="3">Most of the respondents in both age groups had an income level upto Rs. 250000. This is also due to majority of responses from Junagadh from students and those from Rajkot being from housewives.</td></tr>
</table>

Fig : Demographic factors

Source: Primary Data, Author

7. IMPACT OF AGE ON AWARENESS OF UPI

- H_0 – There is no significant impact of Age on Awareness of UPI and hence all groups have same means.
- H_1 - There is significant impact of Age on Awareness of UPI and hence not all groups have same means.

Junagadh

ANOVA

AW_Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.425	3	11.142	9.806	.000
Within Groups	156.792	138	1.136		
Total	190.217	141			

Age group	Mean
Baby Boomers	1.4135
Gen X	2.6560
Millenials	3.6044
Gen Z	3.6855
Total	3.4710

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of awareness.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least awareness of UPI.

Gen X age group has moderate level of awareness.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of awareness of UPI.

Rajkot

ANOVA

AW_Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	72.223	3	24.074	22.324	.000
Within Groups	118.624	110	1.078		
Total	190.847	113			

Age group	Mean
Baby Boomers	1.5726
Gen X	1.9853
Millenials	3.1128
Gen Z	3.5966
Total	2.8529

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of awareness.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least awareness of UPI.

Gen X age group has moderate level of awareness.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of awareness of UPI.

Fig : Age impact on Awareness

Source: Primary Data, Author

Data Analysis : SPSS software.

- Both the districts exhibit similar results in terms of generational differences with respect to awareness level of UPI.
- Older the age, lesser the awareness and vice versa

8. IMPACT OF AGE ON USAGE OF UPI

- H_0 – There is no significant impact of Age on Usage of UPI and hence all groups have same means.
- H_1 - There is significant impact of Age on Usage of UPI and hence not all groups have same means.

Junagadh

ANOVA

USE_Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.214	3	5.738	7.161	.000
Within Groups	110.577	138	.801		
Total	127.791	141			

Age group	Mean
Baby Boomers	1.0000
Gen X	1.8205
Millenials	2.5319
Gen Z	2.5828
Total	2.4290

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of usage.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least usage of UPI.

Gen X age group has moderate usage level of UPI.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of usage of UPI.

Rajkot

ANOVA

USE_Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.586	3	10.195	16.538	.000
Within Groups	67.812	110	.616		
Total	98.398	113			

Age group	Mean
Baby Boomers	1.2222
Gen X	1.5476
Millenials	2.1846
Gen Z	2.5761
Total	2.0698

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of usage.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least usage of UPI.

Gen X age group has moderate usage level of UPI.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of usage of UPI.

Fig : Age impact on Usage

Source: Primary Data, Author

Data Analysis : SPSS software.

- Both the districts exhibit similar results in terms of generational differences with respect to usage level of UPI.
- Older the age, lesser the usage and vice versa.
- However, the millennials of Junagadh have slightly more usage level than those of Rajkot while baby boomers of Rajkot have slightly more usage level than those of Junagadh.

9. SATISFACTION LEVEL AMONGST DIFFERENT AGE GROUPS

- H_0 – There is no significant impact of Age on satisfaction level with UPI usage and hence all groups have similar satisfaction levels.
- H_1 - There is significant impact of Age on satisfaction level with UPI usage and hence all groups do not have similar satisfaction levels.

Junagadh

ANOVA

UPI_Overallsatisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	46.895	3	15.632	5.977	.001
Within Groups	360.915	138	2.615		
Total	407.810	141			

Age group	Mean
Baby Boomers	.5000
Gen X	2.3889
Millenials	2.9143
Gen Z	3.4353
Total	3.0915

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of satisfaction.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least satisfaction level with UPI.

Gen X age group has moderate satisfaction level with UPI.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of satisfaction with UPI.

Rajkot

ANOVA

UPI_Overallsatisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.376	3	7.459	2.720	.048
Within Groups	301.589	110	2.742		
Total	323.965	113			

Age group	Mean
Baby Boomers	2.2222
Gen X	2.6667
Millenials	3.1000
Gen Z	3.4444
Total	3.0175

The p-value is less than 0.05 and hence there is statistically significant difference between age groups and their level of satisfaction.

Thus, Null hypothesis is rejected

Baby boomers age group has lowest mean score which implies least satisfaction level with UPI.

Gen X age group has moderate satisfaction level with UPI.

Millenials and GenZ have higher mean scores which signifies than younger the age more the level of satisfaction with UPI.

Fig : Satisfaction level amongst different age groups

Source: Primary Data, Author

Data Analysis : SPSS software.

- Both the districts exhibit similar results in terms of generational differences with respect to satisfaction level with UPI.
- Older the age, lesser the satisfaction and vice versa.
- However, the millennials of Junagadh have slightly less satisfaction level than those of Rajkot indicating a neutral opinion. This can be due to some factors that affect their satisfaction level.

10. ANALYSIS OF INTERRELATIONSHIP BETWEEN AWARENESS, USAGE AND SATISFACTION LEVELS OF UPI

With the help of Pearson's correlation method, an analysis of correlation between three variables of this study can be presented as follows:

Correlations

		AW_Total	USE_Total	UPI_Overallsatisfaction
AW_Total	Pearson Correlation	1	.722**	.467**
	Sig. (2-tailed)		.000	.000
	N	256	256	256
USE_Total	Pearson Correlation	.722**	1	.288**
	Sig. (2-tailed)	.000		.000
	N	256	256	256
UPI_Overallsatisfaction	Pearson Correlation	.467**	.288**	1
	Sig. (2-tailed)	.000	.000	
	N	256	256	256

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

Fig : Correlation between awareness, usage and satisfaction level with UPI

Source: Primary Data, Author

Data Analysis : SPSS software.

Abbreviations used:

- AW_Total = Overall awareness
- USE-Total = Total Usage
- UPI_Overallsatisfaction = Overall satisfaction

1. **Awareness and Usage**

Awareness and Usage are highly correlated indicating an increase in level of awareness will significantly increase usage of UPI services.

2. **Awareness and Satisfaction**

Awareness and Satisfaction are correlated indicating an increase in level of awareness will increase satisfaction level w.r.t UPI services. (Sundararaj and Priya ,2023)[5]

3. Usage and Satisfaction

Usage and Satisfaction level are moderately correlated signifying that using the services increase satisfaction to some extent. This can be due to other factors such as security concerns, trust etc.(Sonali and Kamaraj, 2024)[1]

11. CONCLUSION

This study on the awareness, usage, and satisfaction levels of UPI services among Gen X, Millennials, and Gen Z consumers in Junagadh and Rajkot districts reveals noteworthy generational differences. Younger generations, particularly Gen Z and Millennials, showcase higher levels of awareness and usage of UPI, leading to greater satisfaction compared to older generations like Gen X and Baby Boomers. The study highlights the importance of increasing digital literacy and awareness among older age groups to promote wider UPI adoption. The research provides valuable insights for policymakers and financial institutions aiming to enhance the adoption of digital payment systems and create a more inclusive, cashless economy.

12. LIMITATIONS

The present study suffers from few limitation like geographical focus.A sample from different regions of India can better present the trends of awareness, usage and satisfaction with UPI.The focus in primarily on age factor while study can be carried out to find relationship of awareness, adoption and satisfaction with other demographic factors such as gender,income,education etc.

13. SCOPE OF FURTHER RESEARCH

UPI is a consistently growing and developing in India.Hence there are many aspects that can be studied.Few of them are outlined as under:-

- UPI awareness, adoption and satisfaction levels in various state, India and other countries
- UPI Platforms used by consumers of different geographical areas and their feedback after usage.
- The purpose for using UPI and most preferred modes of payment.
- Detailed analysis of awareness, adoption of features provided by UPI.
- A study can be carried out to decipher categories of people who
  - Are not aware about UPI and the reason behind it.
  - Are aware yet not using it to decipher the reason behind their decision

Much has been done yet a lot can be done to fulfil the dream of a cashless economy.

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- **https://www.npci.org.in/statistics**

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