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UPI AND ITS IMPACT ON BUSINESS PERFORMANCE OF RETAILERS

P. Roopa*
Assistant Professor, Department of Business Management,
Sri Padmavati Mahila Visvavidyalayam, Tirupati.
roopauday.p@gmail.com

B. Vijayalakshmi
Professor, Department of Business Management,
Sri Padmavati Mahila Visvavidyalayam, Tirupati.
vijayamba65@yahoo.com

and

P. Nishitha
Assistant Professor, Department of Business Management,
Sri Padmavati Mahila Visvavidyalayam, Tirupati.
nishithareddy511@gmail.com

Abstract

This research proposes to examine the transformative impact of Unified Payments Interface (UPI) technology on retail transactions in India. With UPI rapidly gaining prominence, accounting for an estimated 90% of retail transactions within a mere five years, understanding its dynamics, benefits, and challenges becomes paramount. Through a descriptive study, focusing on small retailers in the Rayalaseema region of Andhra Pradesh, this research examined the demographic factors influencing digital payment adoption and the impact of UPI implementation on retailers. Data analysis, employing SPSS, included frequency and factor analysis. Findings revealed that UPI emerged as the preferred digital payment method among retailers, offering convenience and efficiency. Recommendations include targeted support for nascent businesses, awareness campaigns, fostering business cooperation, and technological enhancements to streamline digital payment processes. This research offers important insights into the changing digital payments landscape, helping policymakers, industry players and retailers to navigate this evolving field.

*** Corresponding Author**

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1. Introduction

In recent years, India has experienced a profound transformation in retail transactions, primarily driven by the widespread adoption of the Unified Payments Interface (UPI). This innovative digital payment system has fundamentally changed the landscape of financial transactions by offering a seamless, secure, and highly convenient method for handling payments. According to the Reserve Bank of India (RBI), UPI is projected to account for a remarkable 90% of retail transactions within the next five years, illustrating its rapid acceptance and the significant role it plays in India's financial ecosystem **(RBI, 2023)**. UPI's impact stems from its ability to unify various banking functions into a single, easy-to-use mobile application. This technology streamlines fund transfers, merchant payments and overall financial management, by allowing users to access multiple bank accounts from a single platform. The system supports instant money transfers around the clock, providing users with unparalleled flexibility and convenience. Additionally, UPI enables peer-to-peer collection requests and features Single Click 2-Factor Authentication, which enhances both the security and efficiency of transactions. Several popular applications such as PhonePe, Paytm, GooglePay, and BHIM have integrated UPI technology into their platforms. These apps utilize UPI to facilitate transactions via Virtual Payment Addresses (VPA), allowing users to send and receive funds directly from their bank accounts. This method eliminates the need for cumbersome bank procedures and ensures a smooth, error-free payment experience **(NPCI, 2023)**.

The rapid growth of UPI underscores its crucial role in shaping India's digital payment landscape. By offering a secure, efficient, and user-friendly approach to financial transactions, UPI is not only simplifying everyday payments but also driving the broader adoption of digital financial solutions across the country. As UPI continues to evolve and expand, its significance in India's digital economy is set to increase even further, consolidating its position as a transformative force in the financial sector.

2. Review of Literature

Alkhowaiter (2020) reviewed 46 studies on digital payment adoption in Gulf countries and identified trust, security, and usefulness as crucial factors. The study proposed a conceptual model to guide future research addressing these predictors. **Ashok Botta's (2022)** study highlights positive relationships between behavioral intentions and factors such as perceived utility, usability, and social norms, emphasizing the impact of digital payments on consumer convenience and business creation. **Kerviler et al. (2016)** explore proximity mobile payment adoption, emphasizing how perceived utilitarian, hedonic, and social benefits, along with financial and privacy risks, affect consumer behavior in physical retail environments. **Madhvi Julka and Harinder Singh (2022)** filled a critical gap in the literature by studying the adoption of digital payment methods at small retail establishments

in the Punjabi Districts of Amritsar, Jalandhar, and Ludhiana. **Kumar et al. (2022)** examined UPI's rapid growth in India's digital payments, assessing its transformative impact and global expansion. The study identifies key drivers and challenges, including transaction failures and fraud, while highlighting future potential with Near Field Communication (NFC) technology.

Liao and Yang (2020) explore mobile payments in Taiwan's online-to-offline retail models, emphasizing their role in enhancing consumer purchase experiences. The research employed data mining methods, such as clustering and association rules, to examine the transition towards omni-channel retailing. **Manoharan et al. (2021)** observed a shift in consumer attitudes toward digital wallets, with a decline in physical currency usage post-demonetization, further exacerbated during the COVID-19 pandemic due to transmission concerns. Similarly, **Shinki Katyayani Pandey (2022)** examined the changing user perceptions of Indian digital payments before and after the pandemic, focusing on how these perceptions evolved. **Shahid, M. (2022)** applied the Diffusion of Innovation Theory, to examine UPI adoption factors in India. It concluded that relative advantage, complexity, and observability positively influenced usage and recommendation intentions among users. **Singh et al. (2024)** conducted a usability study on UPI-based digital payment apps, assessing accessibility for visually impaired users. The research identified significant design flaws in screen reader compatibility and navigation, offering insights for enhancing these applications to better serve the community. **Sowmya Praveen K and C.K. Hebbar (2021)** examined the rapid expansion of digital payment systems in the financial sector and its impact on retail establishments in Mangalore City. **Hena Iqbal, Udit Chawla, and Subrata Chattopadhyay (2021)** examined the demographic factors, influencing e-wallet brand preferences in India, during COVID-19.

3. Statement of the Problem

Despite the rising popularity of digital payment systems like Unified Payments Interface (UPI) in India's retail sector, a comprehensive understanding of the factors driving their adoption and the challenges retailers encounter during integration, warrant deeper analysis. This study aims to address this gap by examining how demographic factors impact digital payment usage, evaluating the advantages of adopting UPI, and providing strategic recommendations to enhance the adoption and effective utilization of digital payment solutions in retail.

4. Need of the Study

The study is justified since it offers insightful information about the transformative effect of UPI on retailers' operational efficiency. The outcomes will assist in making strategic decisions, identifying best practices of the industry and formulating policy recommendations to support the growth of the digital economy.

5. Objectives of the Study

a. To explore how demographic variables influence digital payment usage among retailers and determine their relationship with business performance metrics.

b. To analyse the impact of adoption of UPI payment systems on business performance like operational efficiency of retailers, including cost reduction and process optimization.

6. Hypothesis of the Study

H_1: Operational efficiency, convenience, safety and security, and service quality exert significant impact on the business performance of retailers, using UPI.

7. Research Methodology

7.1 Sample Selection

The study adopted a descriptive research approach, focusing on small retailers in the Rayalaseema region of Andhra Pradesh. To select participants, the study employed the Convenience Sampling Technique, which involves choosing samples based on their availability and accessibility. This method allows for the inclusion of a diverse range of retailers, from small local shops to larger retail establishments. By targeting a variety of retail businesses within the Rayalaseema region, the study could capture a comprehensive understanding of the retail landscape in this area.

7.2 Sources of Data

The data were collected through a well-structured questionnaire, which included questions for assessing the perception of retailers about growth in revenue, cash flow efficiency, service quality, safety issues etc. The data were collected from 245 respondents. Secondary data were used for literature review.

7.3 Study Period

The study was done during the period, December, 2023 to April, 2024.

7.4 Tools used for the Analysis

Data collected were analysed, using the Statistical software SPSS. Factor analysis was used to analyse the data.

8. Analysis of Data

Table-1 presents the demographic segmentation of respondents. Female respondents accounted for 38.8% while males constituted 61.2%. 50.4%, of respondents reported school or diploma qualification, followed by 29.3%, with UG/PG degrees and 20.2% were professionals. Sole proprietorship was the dominant ownership type, reported by 61.6%, with partnership firms at 38.4%. Business age distribution revealed that 38% were 1 to 5 years old, 19.0% were 5–10 years, 23.6% were 11–15 years, and 20.7% were over 15 years. Majority of respondents (84%) were owners, with 15% as managers. **Table-2** shows the reliability statistics for factors, impacting the business performance of retailers, using UPI. Cronbach's Alpha was used to assess internal consistency, with a coefficient of 0.5 or higher deemed to be acceptable. The factors studied yielded a Cronbach's Alpha of .959, indicating high internal reliability. This high coefficient revealed that the items within the constructs were reliable and revealed strong consistency across the scale's individual items.

Table - 3 shows a KMO value of 0.915 and a p-value of .000, indicating that factor analysis was appropriate for the study. Factor Analysis identified key factors affecting the business performance of UPI-using retailers. **Table-4** displays initial commonality of 1.0 for all variables, confirming full involvement in the analysis. Principal Component Analysis (PCA) highlighted those variables like linking credit/ debit cards with digital wallets (Variable 7), enhancing service reliability (Variable 9), and reducing transaction risks (Variable 14) to be significant loadings. While operational cost reduction (Variable 1) reported a moderate impact, convenience, reliability, and risk mitigation were considered crucial in UPI adoption among retailers.

Table-5 presents the results of Principal Component Analysis (PCA), showing variance explained by each component, before and after extraction and rotation. The initial eigenvalues revealed the first component to have the highest eigenvalue of 13.534, indicating its major role in

data variability. Post-extraction, this component could explain 56.392% of the total variance. Rotation examined component clarity, keeping the first component dominant. The cumulative variance percentages and the scree plot in **Figure 1,** illustrate the key components.

Table - 6 displays the rotated component matrix from Principal Component Analysis (PCA), using Varimax rotation and Kaiser normalization, to highlight the relationship between variables and the extracted components. Component 1 highlights variables related to cost reduction, reliability, and security, and they are expressed in statements like "UPI significantly reduces operational costs," "enhances retailer service reliability," and "protects customer information." Component 2 features variables emphasizing convenience and flexibility, and they are stated as "linking credit/ debit cards with digital wallets" and "UPI provides ease of use." Component 3 focuses on customer comfort and risk reduction. Component 4 covers attributes related to flexibility, speed, and cost-saving benefits of UPI. Overall, the matrix outlines key factors, shaping the UPI adoption, including cost efficiency, convenience, security, flexibility, and comfort. **Table -7** shows factor loadings for each item across four components. Factor 1, 'Operational Efficiency,' includes items 4 (suitable for small transactions, loading 0.786), 11 (reduces cash handling losses, 0.775), and 13 (reasonable transaction charges, 0.656). Factor 2, 'Convenience,' is driven by items 15 (spends beyond available cash, 0.789) and 17 (no need to count currency, 0.729). Factor 3, 'Safety & Security,' features items 1 (reduces operational costs, 0.703) and 12 (latest encryption technology, 0.652). Factor 4, 'Service Quality,' includes items 19 (protects personal information, 0.756) and 22 (improves service quality, 0.640). These factors emphasized key aspects, influencing UPI adoption and perception.

9. Findings of the Study

This study examined the impact of Unified Payments Interface (UPI) adoption on retail business performance, revealing key factors shaping retailers' attitudes towards this payment solution. By analyzing demographic data, the study captured diverse perspectives across gender, qualifications, ownership, business age, and roles. Reliability analysis confirmed the survey's high internal consistency. Principal Component Analysis (PCA) identified four crucial factors, influencing UPI perceptions: operational efficiency, convenience, safety & security, and service quality. These factors highlight UPI's benefits, including cost reduction and enhanced service reliability. The findings offer valuable insights for policymakers, financial institutions, and retailers, to support UPI adoption and improve the payment ecosystem.

10. Suggestions

The study examined UPI as a transformative solution for retailers in India, especially in Rayalaseema, Andhra Pradesh. Robust methodology and analysis demonstrated that UPI offers high operational efficiency, convenience, safety, and service quality. To fully harness UPI's benefits, targeted awareness campaigns, training, incentives and partnerships with financial institutions are crucial. Implementing these recommendations and supportive policies can drive widespread UPI adoption, enhancing the efficiency and security of the payment ecosystem for retailers and consumers.

11. Conclusion

The study highlights UPI's transformative impact on the retail sector, positioning it as a leading payment method due to seamless app

integration and broad institutional support. As consumer preferences shift towards digital payments, UPI's ongoing innovation could revolutionise retail transactions, shaping the future of payment methods.

12. Limitations

The research was carried out exclusively in the Rayalaseema region of Andhra Pradesh. There are chances of bias since respondents may have given socially accepted answers which may not be truthful. Further, few respondents were reluctant to give proper financial information required for the study.

13. Scope for Further Research

This research paper examined the effect of the UPI payment system on the business performance of retailers, focusing specifically on the Rayalaseema region of Andhra Pradesh. While the study was confined to this geographic area, it could be expanded to include other regions. Additionally, future research could explore how UPI adoption impacts consumer behaviour.

14. References

Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic literature review. *International Journal of Information Management*, *53*, 102102.

Amnas, M. B., Selvam, M., & Parayitam, S. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy and the Moderating Influence of Perceived Regulatory Support. *Journal of Risk and Financial Management,* 17(3), 108.

Amnas, M. B., Selvam, M., & Kathiravan, C. (2024). The Potential of a Fintech-Driven Model in Enabling Financial Inclusion. In Data-driven Modelling and Predictive Analytics in Business and Finance (pp. 172-185). Auerbach Publications.

Botta, A. (2022). Digital payment adoption by small retail stores in Visakhapatnam. *Journal of Positive School Psychology*, 6(10), 61-66.

De Kerviler, G., Demoulin, N. T., & Zidda, P. (2016). Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers? *Journal of Retailing and Consumer Services*, *31*, 334-344.

Julka, M., & Singh, H. (2022). Digital Payment Acceptance at Small Scale Retail Outlets: An Empirical Analysis. *Envision Journal of Commerce Department of ACFA*, *16*.

Kumar, A., Choudhary, R. K., Mishra, S. K., Kar, S. K., & Bansal, R. (2022). The growth trajectory of UPI-based mobile payments in India: Enablers and inhibitors. *Indian Journal of finance and banking*, *11*(1), 45-59.

Liao, S. H., & Yang, L. L. (2020). Mobile payment and online to offline retail business models. *Journal of Retailing and Consumer Services*, *57*, 102230.

Manoharan, S., Saravanan, M. P., & Paneerselvam, S. (2021). Digital Payment and Its Growth in the Time of COVID-19. *Transnational Marketing Journal*, *9*(2), 319-334.

National Payments Corporation of India (2023). UPI System Overview. Retrieved from https://npci.org.in.

Pandey, S. K. (2022). A Study on Digital Payments System & Consumer Perception: An Empirical Survey. *Journal of Positive School Psychology*, *6*(3), 10121-10131.

Reserve Bank of India (2023). Digital Payments in India. Retrieved from https://rbi.org.in

Shahid, M. (2022). Exploring the determinants of adoption of Unified Payment Interface (UPI) in India: A study based on diffusion of innovation theory. *Digital Business*, *2*(2), 100040.

Singh, S., Jatana, N., Sehgal, S., Anand, R., Arunkumar, B., & Ramesh, J. V. N. (2024). Making Digital Payments Accessible Beyond Sight: A Usability Study of UPI-Based Smartphone Applications. *IEEE Access*.

Sowmya, P. K., & Hebbar, C. K. (2021). Impact of Digital Payment on Retail Shops-With Reference to Mangalore City. *EPRA International Journal of Research and Development (IJRD)*, 187-191.

Iqbal, H., Chawla, U., & Chattopadhyay, S. (2022). E-wallets technology: Their cause, rise and relevance post covid 19. *SMART Journal of Business Management Studies*, *18*(1), 1-11.

Table-1: Demographic Segmentation of the Retailers in Rayalaseema

Demographic Element	Frequency	Percent	Cumulative Per cent
Gender			
Female	94	38.8	61.2
Male	148	61.2	100
Qualification			
Professionals	49	20.2	20.2
School/Diploma	122	50.4	70.7
UG/PG	71	29.3	100
Type of Ownership Owned			
Family	65	26.9	26.9
Partnership Firm	28	11.6	38.4
Sole Proprietorship	149	61.6	100
Age of the Business			
1-5	89	36.8	36.8
5-10	46	19.0	55.8
11-15	57	23.6	79.3
Above 15	50	20.7	100
Job Position			
Manager/In-Charge	37	15.3	15.3
Owner	205	84.7	100

Source: Primary Data computed using IBM SPSS Statistics 23

Table-2: Reliability Statistics of the Instruments used in the Study

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.959	0.963	24

Source: Primary Data computed using IBM SPSS Statistics 23

Table 3: KMO and Bartlett's test for the study Regarding UPI and its Impact on Business Performance of Retailers

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.915
Bartlett's Test of Sphericity	Approx. Chi-Square	7266.018
	Df	276
	Sig.	0.000

Source: Primary Data computed using IBM SPSS Statistics 23

Table-4: Communalities of Variables Impacting Performance of Retailers Before and After Extraction in Principal Component Analysis

Variables	Initial	Extraction	Variables	Initial	Extraction
1. UPI Option significantly reduces the operational costs of the retailers.	1.000	0.606	11.The losses due to handling cash would decrease in case Digital Wallet Option.	1.000	0.774
7. Consumers can link their credit / debit cards with Digital Wallet, which makes them to purchase goods conveniently.	1.000	0.933	18. UPI option provides convenience and ease in usage.	1.000	0.72
23. UPI Option avoids the storage and security costs of maintaining cash.	1.000	0.765	9. UPI Payment Option enhances the reliability of the service of retailers.	1.000	0.924
2. UPI Option is best suitable for small value transactions.	1.000	0.648	14. UPI Payment Option reduces the risk of receipt of fake currency.	1.000	0.892
20. UPI Payment Option increases the repeated purchasing behavior of consumers.	1.000	0.412	15. UPI Payment Option allows the consumers to spend more than cash they possess.	1.000	0.664

Table-4 Continued...

10. Value of transactions are increased due to the usage of UPI Option.	1.000	0.556	12. UPI System provides latest encryption technology to prevent unauthorized intrusion.	1.000	0.844
22. The quality of service of retailers would increase in processing time.	1.000	0.743	5. There is no more waiting line for payment of goods.	1.000	0.884
3. UPI Payment Option is more sophisticated than cash	1.000	0.432	6. A lower level of cash transactions decreases the expenses for retailers.	1.000	0.534
17. No need of counting or checking currency when UPI Option is used.	1.000	0.891	4. Impulse purchases will increase when the UPI payments are used.	1.000	0.808
21. Usage of UPI Option saves the time of the customers and retailers	1.000	0.782	13. Transaction charges for using UPI is reasonable.	1.000	0.9
8. UPI option avoids the theft or robbery of cash.	1.000	0.849	24. UPI provides greater flexibility and faster payment options.	1.000	0.794
19. UPI System protects the customers personal and financial information and not shared with others.	1.000	0.634	16. UPI Option provides a more comfortable transaction process.	1.000	0.798
Extraction Method: Principal Component Analysis.					

Source: Primary Data computed using IBM SPSS Statistics 23

Table-5: Total Variance Explained for the study Regarding UPI and its Impact on Business Performance of Retailers

Comp-onent	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu-lative%	Total	% of Variance	Cumu-lative%	Total	% of Variance	Cumulati ve %
1	13.534	56.392	56.392	13.534	56.392	56.392	5.765	24.022	24.022
2	1.610	6.708	63.100	1.610	6.708	63.100	4.539	18.914	42.936
3	1.458	6.073	69.173	1.458	6.073	69.173	4.000	16.666	59.602
4	1.187	4.944	74.117	1.187	4.944	74.117	3.484	14.515	74.117
5	0.939	3.911	78.027						

Table-5 Continued...

Comp-onent	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu-lative%	Total	% of Variance	Cumu-lative%	Total	% of Variance	Cumulati ve %
6	0.857	3.573	81.600						
7	0.730	3.041	84.642						
8	0.680	2.834	87.476						
9	0.469	1.955	89.431						
10	0.399	1.664	91.095						
11	0.351	1.461	92.557						
12	0.339	1.411	93.967						
13	0.286	1.193	95.160						
14	0.248	1.033	96.193						
15	0.221	0.919	97.112						
16	0.168	0.699	97.811						
17	0.134	0.559	98.370						
18	0.120	0.502	98.871						
19	0.075	0.314	99.185						
20	0.063	0.261	99.446						
21	0.054	0.225	99.671						
22	0.043	0.181	99.852						
23	0.030	0.126	99.977						
24	0.005	0.023	100.000						
Extraction Method: Principal Component Analysis.									

Table - 6: Rotated Component Matrix for UPI and Digital Wallet Factors

	Component			
	1	**2**	**3**	**4**
1. UPI Option reduces the operational costs of the retailers.			0.703	
7. Consumers can link their credit / debit cards with Digital Wallet, which makes them to purchase goods conveniently.	0.645		0.526	
23. UPI Option avoids the storage and security costs of maintaining cash.				0.646
2. UPI Option is best suitable for small value transactions.	0.786			
20. UPI Payment Option increases the repeated purchasing behavior of consumers.		0.556		
10. Value of transactions are increased due to the usage of UPI Payment Option.		0.528		
22. The quality of service of retailers would increase in terms of processing time and comfort.				0.64
3. UPI Payment Option is more sophisticated than cash.			0.596	
17. No need of counting or checking the currency when UPI Option is widely used which makes serve customer better.	0.521	0.729		
21. Usage of UPI Option saves the time of the customers and retailers in making/receiving payments.	0.578	0.634		
8. UPI option avoids the theft or robbery of cash.	0.568		0.531	
19. UPI Payment System protects the customers personal and financial information and not shared with others.				0.756
11.The losses out of handling cash would decrease in case Digital Wallet Payment Option is used by the retailers.	0.775			
18. UPI option provides convenience and ease in usage.		0.559		0.557
9. UPI Payment Option enhances the reliability of the service of the retailers.	0.601			
14. UPI Payment Option reduces the risk of fake or counterfeit currency received as payment.	0.645			
15. UPI Payment Option allows the consumers to spend more than the cash they possess in a moment of time.		0.789		
12. UPI System Provides the latest encryption technology to Prevent unauthorized intrusion.	0.51		0.652	
5. There is no more waiting line for payment of goods.	0.596			
6. A lower level of cash transactions decreases the expenses and the uncertainty of cash management of retailers.			0.683	
4. Impulse purchases increases with use of UPI payments.	0.864			
13. Transaction charges for using UPI is reasonable.	0.656			
24. UPI provides greater flexibility and faster payment.			0.595	0.616
16. UPI provides more comfortable transaction process		0.693	0.508	

Source: Primary Data computed using IBM SPSS Statistics 23

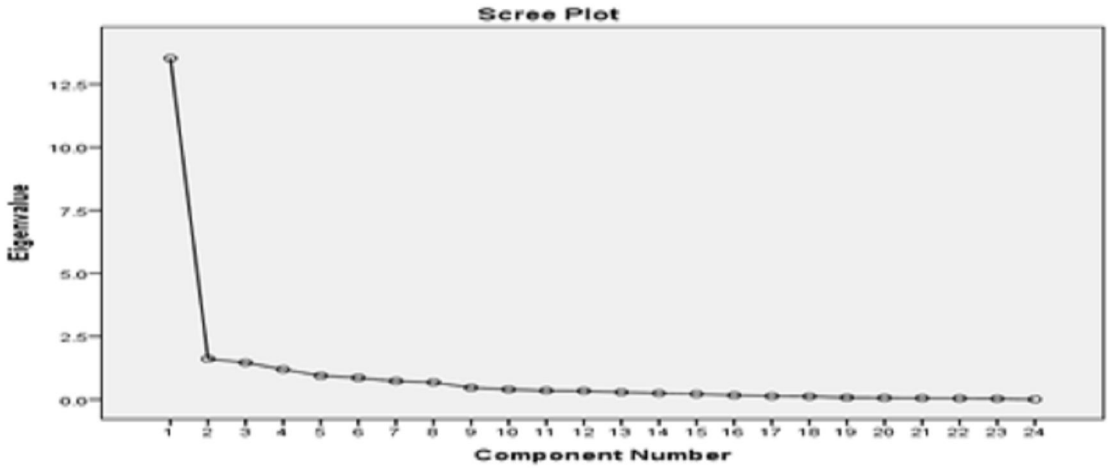
Table-7: Final Solution of Factors showing Impact of UPI on Retailers Performance

Name of the Factor	Items	Factor Loadings	Eigen Values	Percent-age of Variance	Cumu-lative %
Factor 1: Operational Efficiency					
4. Impulse purchases will increase when the UPI payments are used.	4	0.864	13.534	56.392	24.022
2. UPI Option is best suitable for small value transactions.	2	0.786			
11. The losses out of handling cash would decrease in case Digital Wallet Payment Option is used by the retailers.	11	0.775			
13. Transaction charges for using UPI is reasonable.	13	0.656			
7. Consumers can link their credit and debit cards with Digital Wallet, which makes them to purchase goods conveniently.	7	0.645			
14. UPI Payment Option reduces the risk of fake or counterfeit currency received as payment.	14	0.645			
9. UPI Payment Option enhances the reliability of the service of the retailers.	9	0.601			
5. There is no more waiting line for payment of goods.	5	0.596			
8. UPI option avoids the theft or robbery of cash.	8	0.568			
Factor 2: Convenience					
15. UPI Payment Option allows the consumers to spend more than the cash they possess.	15	0.789	0.61	6.708	42.936
17. No need of counting or checking the currency when UPI Option is widely used.	17	0.729			
16. UPI Option provides a more comfortable transaction process to the customers.	16	0.693			
21. Usage of UPI Option saves the time of the customers and retailers.	21	0.634			
18. UPI option provides convenience and ease in usage.	18	0.559			
20. UPI Payment Option increases the repeated purchasing behavior of consumers.	20	0.556			
10. Value of transactions are increased due to the usage of UPI Payment Option.	10	0.528			

Name of the Factor	Items	Factor Loadings	Eigen Values	Percent-age of Variance	Cumu-lative %
Factor 3: Safety & Security					
1. UPI Option significantly reduces the operational costs of the retailers.	1	0.703	1.458	6.073	59.602
6. A lower level of cash transactions decreases the expenses and the uncertainty of cash management of retailers.	6	0.683			
12. UPI System Provides the latest encryption technology to Prevent intrusion.	12	0.652			
3. UPI Payment Option is more sophisticated than cash.	3	0.596			
Factor 4: Service Quality					
19. UPI Payment System protects the customers personal and financial information and not shared with others.	19	0.756	1.187	4.944	74.117
23. UPI Option avoids the storage and security costs of maintaining cash.	23	0.646			
22. The quality of service of retailers would increase in terms of processing time and comfort.	22	0.64			
24. UPI provides greater flexibility and faster payment options than other option.	24	0.616			

Source: Primary Data computed using IBM SPSS Statistics 23

Figure 1: Key Components Driving Observed Patterns



Source: Primary Data computed using IBM SPSS Statistics 23