



India's Growth Engine: Online Transactions and Mudra Yojana Powering Entrepreneurs

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ABSTRACT

This study examines the synergistic influence of India's Pradhan Mantri Mudra Yojana (PMMY) and the revolution in digital payments in relation to entrepreneurial sustainability. It argues that while PMMY is helping resolve the credit default issue of micro-entrepreneurs via collateral-free loans, and digital payments create democratic access to markets and therefore, financial traceability, the two together create a powerful virtuous cycle, which is core to India's entrepreneurial-led development model. The descriptive and diagnostic research design involves primary data collection from 96 PMMY beneficiaries in Bengaluru. The collected data were then subjected to multiple regression analysis as well as t-tests and Chi Square tests. The analysis indicated that: access to credit and digital transaction value are both significant positive predictors of annual revenue growth but with a



more significant and stronger unique contribution from digital payments (Beta = 0.512). Further, three out of four (81.3%) entrepreneurs adopted digital payments and this adoption of digital payments was significantly and strongly related to business sustainability (83.3% vs. 33.3% for non-users) and also showed average revenue growth was significantly larger (20.8% vs. 8.2%). The study concludes that the policy-technology pairing of PMMY and digital infrastructure is a disruptive force and recommends a dual approach not only to improve access to credit, but also to reinforce digital literacy campaigns in order for entrepreneurs to decide to adopt digital payments and to create inclusive and resilient entrepreneurial growth.

I. INTRODUCTION

The Paradigm of Entrepreneurial-Led Growth

The economic trajectory of India in the 21st century is based on a growing strategic shift toward a development model based on entrepreneurial-led growth with the explicit notion that micro, small and medium enterprises (MSMEs) act not only as a participant but as the engine for creating jobs, engendering innovation and driving inclusive economic development. The underperformance of the MSME sector historically has been due to a critical twin deficit, evidenced by a systemic lack of access to formal credit, combined with a failure to establish themselves in formally structured markets more widely. Helping to address these interrelated challenges, two transformations have coincided to become the keystone of India's new economic approach: the digital payments revolution, and the policy intervention of Pradhan Mantri Mudra Yojana (PMMY). The argument we present here is that the powerful combination of digital infrastructure and policy-enabled finance is fuelling a new wave of entrepreneurship that is increasingly contributing to national economic growth.

The Digital Infrastructure Pillar: Democratizing Market Access

The first pillar, the rapid and completely unprecedented uptake of online transactions, represents a fundamental change to India's economic infrastructure. The digital economy in India has taken off, pioneered by the Unified Payments Interface (UPI), mobile wallets, and banking platforms, which has allowed citizens to embrace digital banking and commerce as an everyday occurrence. For the new



entrepreneur, this is beyond convenience. Transaction costs have been almost eliminated, visibility has improved, cash flow is much easier to manage, and most importantly, market entry has been obliterated. A small artisan working in a third-tier city or a home-based entrepreneur can now receive payments, access working capital through fintech apps, and have product offerings to a national audience through e-commerce sites that are tied to these payment systems. The digital economy provides the essential arteries for commerce, allowing even the smallest of enterprises to now externally operate, and with the same reach and efficiency as larger established businesses. It is a little difficult to contemplate the ecosystem of a formally organized business with a Culture of Financial Literacy, economic formalization pulling micro & informal businesses, startup ventures into formal national economic economy entities.

The Policy Pillar: Democratizing Access to Capital

The second element supporting this digital transformation is the Pradhan Mantri Mudra Yojana (PMMY), which was initiated in 2015 as a policy response to weak credit access in India's non-corporate sector. The Mudra Yojana scheme delivers collateral-free loans of up to ₹10 lakh in three tiers (Shishu, Kishore and Tarun) based on the enterprise level, and is integral to provide this important initial capital infusion. Its greatest success is that it has provided "funding to the unfunded", with a specific focus on funding (although not exclusively meant for) non-farm micro/small enterprises on a non-corporate basis. Accessible formal credit measures empower first generation entrepreneurs (often individuals from previously excluded socio-economic backgrounds) to taken ideas that they may have not previously been able to start, on as enterprises, purchase equipment, improved working capital, and stabilize operations. By addressing the largest barrier to starting a business, the scheme takes informal businesses formal, creates income at the grassroots level, and is a significant mechanism for creating employment, all of which enhance economic participation.

The Synergy: Catalyzing a Virtuous Cycle of Growth

Although powerful in their own right, the real transformational impact of these initiatives leverages their mutual dependence. This research argues that Mudra Yojana and online transactions are not simply two parallel forces, but instead are twin components within a virtuous cycle (rather than a 'twin engine' described in the original literature). Mudra provides the capital for an individual to buy a sewing machine to start a garment unit; the digital payments infrastructure allows that same individual to accept payment digitally, to build a transaction history, to source customers online, and to be nurtured with financial management tools. This financial record breeds credit-worthiness for future loans thus creating an ongoing cycle of self-improvement. The capital (from Mudra) enables the enterprise to be established as



a stand-alone while the digital infrastructure (via online transactions) allows the enterprise to be sustained, scaled, and integrated into the market space. Such symbiosis mitigates default and risk exposure of funds, accelerates the speed and availability of capital to be deployed together and builds resilience into the overall ecosystem with all market participants.

Navigating Challenges and Defining the Research Scope

While there has been significant progress, the journey so far is not without challenges. Factors like regional inequalities in digital literacy and infrastructure, variations in credit deployment across states and socio-economic classes, and the question of the sustainability and default rates of enterprises funded by Mudra, need to be carefully scrutinised. Digital divides seem likely to foster new forms of exclusion, while making sure that credits are used efficiently on the end-spending remains a policy challenge.

It is in this framework that this research paper positions itself. This study seeks to critically examine the conjunction between Mudra Yojana and online transactions using an outcome-based focus as an alternative to research focused on policy or technology.

II. PURPOSE OF THE STUDY

This study will investigate the combined impact of the digital transaction ecosystem in India and the Pradhan Mantri Mudra Yojana (PMMY) on entrepreneurial growth. In particular, it will consider how access to formal credit through Mudra increases/create the role of online payment platforms for micro-entrepreneurs. Ultimately, the study will assess the joint impact of the PMMY and digitization on business sustainability, scaling, and job creation and assess geographic and sectoral differences in their implementation. Finally, it will inform policy intervention to improve this synergy for inclusive economic development.

III. BENEFITS OF THE STUDY

The findings will be useful to policymakers so that Mudra Yojana and digital infrastructure can be improved to maximize impact. It will help financial institutions and technical developers so they can create more accessible end products for micro-entrepreneurs. Contribution to prospective entrepreneurs is that it shows ways to access credit and digital tools to create success. Ultimately this will contribute to helping India support a more inclusive, resilient, and formalized entrepreneurial ecosystem.

**IV. REVIEW OF LITERATURE**

SL NO	VARIABLES	AUTHOR(S)	IMPLICATIONS
1	Financial Inclusion & Literacy	Mol (2014)	Highlights foundational challenges. Digital Payments can mitigate these through user-friendly tech, while Mudra Yojana requires financial literacy for effective credit utilization.
2	Innovations in Financial Inclusion	Mehar (2014)	Directly links to the rise of Digital Payments (mobile banking). These innovations create the infrastructure that makes schemes like Mudra Yojana more accessible and efficient.
3	Significance of Small Enterprises	Roy (2016)	Establishes the target beneficiary. Mudra Yojana provides the capital for these enterprises, while Digital Payments provide the modern infrastructure for their operation and growth.
4	Support for Solo Entrepreneurs	Dr. J. Venkatesh & Ms. R. Lavanya Kumari (2017)	Mudra Yojana is a key program offering direct support. Digital Payments empower these solo entrepreneurs by lowering transaction costs and expanding their customer base.
5	MUDRA Yojana's Design & Objective	Verma (2015)	Focuses on Mudra Yojana's role in solving credit problems. The efficacy of this credit is multiplied when paired with Digital Payments for business management and sales.
6	Transformational Potential	Drawar & Uttarwar (2016)	This potential is fully realized through synergy. Mudra Yojana provides the seed capital, and Digital Payments are the tool that ensures the sustainability and scalability of the ventures.
7	Regional Success of PMMY	Rupa (2017)	Shows Mudra Yojana's effectiveness on the ground. The role of Digital Payments in these regions can be studied as a factor in the scheme's high repayment and success rates.
8	SME Financing	Rashid R.	Mudra Yojana is a direct response to these chronic



	Trends & Challenges	Pansare (2017)	challenges. Digital Payments help overcome non-credit challenges like market access and cash flow management.
9	Recommendations for SME Growth	Upadhva (2015)	Digital Payments are a key tool for SMEs to become "professional and adaptable." Mudra Yojana is the "substantial financial support" recommended for growth.
11	Disparity in Institutional Lending	Raja (2005)	Mudra Yojana is designed explicitly to correct this disparity. Digital Payments help bridge the subsequent gap in market access that newly funded entrepreneurs face.
12	Digital Payments & Formalization	Karnani (2021)	Digital Payments directly drive formalization and transparency. This creates a more reliable ecosystem for Mudra Yojana to disburse loans to traceable, formalized entities.
13	Impact of Digital Infrastructure	ICRIER (2020)	Provides empirical evidence for the transformative impact of Digital Payments on MSMEs, which are the primary beneficiaries of Mudra Yojana credit.
14	Research Gap on Combined Impact	<i>Synthesized from literature</i>	While the individual impacts of Mudra Yojana and Digital Payments are studied, their conjunctive effect on entrepreneurial success metrics remains a critical area for research.

V. OBJECTIVES OF STUDY

- To assess the role of digital payments in enhancing the operational efficiency and market reach of Mudra-funded enterprises.
- To evaluate how access to formal credit through Mudra influences the adoption and utilization of digital financial tools.
- To analyze the symbiotic relationship between this policy-technology nexus and key metrics of entrepreneurial success.

VI. RESEARCH METHODOLOGY



A. *Research Design*

This study utilized a descriptive and diagnostic research design. The descriptive research design is for systematically describing the characteristics of the sample with respect to the sample entrepreneurs and their use of Mudra Yojana and digital transactions, while the diagnostic research design is for describing the relationship between the variables and for testing the hypotheses about the impact of these variables on the outcomes of entrepreneurs.

B. *Data Sources*

- **Primary Data:** Data was gathered using a structured, closed-ended questionnaire administered through online and off line means. The sample will comprise 96 micro and small entrepreneurs from the urban and peri-urban regions of Bengaluru districts, Karnataka, who have taken a loan under the Pradhan Mantri Mudra Yojana (PMMY).
- **Secondary Data:** Derived from annual reports of PMMY, the Reserve Bank of India (RBI), Ministry of Statistics and Programme Implementation (MoSPI), NITI Aayog, the Periodic Labour Force Survey (PLFS), peer-reviewed journals, and news articles from credible sources.

C. *Sampling Technique*

- **Method:** A **stratified random sampling** technique will be employed to ensure representation across the three Mudra loan categories (Shishu, Kishore, Tarun) and key sectors (e.g., retail, services, manufacturing).
- **Sample Size: 96 respondents.** This sample size is deemed statistically sufficient for the planned analytical tests and to ensure the reliability of the findings.

D. *Data Analysis Plan*

- ❖ **Questionnaire Check (Reliability Test):** Used Cronbach's Alpha to make sure our survey questions are reliable and consistent.
- ❖ **Descriptive Stats** to summarize the data. A **t-test** to compare two groups.
- ❖ A **Chi-Square test** to find an association between categories.
- ❖ **Multiple Regression** to predict impact and understand relationships between key metrics.

V. DATA ANALYSIS AND INTERPRETATION

This chapter contains the analysis of data obtained from 96 entrepreneurs who were given loans under the Pradhan Mantri Mudra Yojana (PMMY). The analysis is organized according to the objectives of research and utilizes a variety of statistical tools.

Descriptive Analysis: Profile of Respondents and Key Variables

Tool Used: Percentage Analysis, Mean, and Standard Deviation.

Table V.1: Demographic and Business Profile of Respondents (N=96)

Variable	Category	Number of Respondents	Percentage (%)
Gender	Male	62	64.6%
	Female	34	35.4%
Age Group	21-30 years	28	29.2%
	31-40 years	45	46.9%
	41-50 years	23	24.0%
Mudra Loan Category	Shishu (\leq ₹50,000)	55	57.3%
	Kishore (₹50,001–₹5,00,000)	36	37.5%
	Tarun (₹5,00,001–₹10,00,000)	5	5.2%
Adoption of Digital Payments	Yes	78	81.3%
	No	18	18.8%
Sector	Retail/Trading	50	52.1%
	Services	35	36.5%
	Small Manufacturing	11	11.5%

Table V.2: Descriptive Statistics of Key Variables (N=96)

Variable	Mean	Standard Deviation
Loan Amount (₹)	1,85,000	1,20,150



Monthly Digital Transaction Value (₹)	42,500	31,200
Annual Revenue Growth (%) post-intervention	18.5%	12.8%

Interpretation:

- The sample was largely male (64.6%) and were mainly in the most active entrepreneurial cohort of 31-40 years (46.9%).
- Notably, the majority of MSBE (or 57.3%) availed of Shishu loans, suggesting that the scheme was able to reach the smallest enterprises.
- High take up rate of digital payments at 81.3%, meaning some significant penetration.
- The average loan amount availed was ₹185,000 with a high variation (SD = ₹120,150). The average amount transacted monthly through digital means was ₹42,500, and respondents were able to report an average revenue growth of 18.5% per year.

Reliability of the Questionnaire

Tool Used: Cronbach's Alpha

The internal consistency of the questionnaire scales (e.g., questions measuring business performance on a Likert scale) was measured. The calculated Cronbach's Alpha value was **0.78**.

Interpretation: Since the value is above the acceptable threshold of 0.7, the questionnaire used for data collection is deemed reliable and consistent.

Objective 1: TO ASSESS THE IMPACT OF MUDRA YOJANA AND DIGITAL PAYMENTS

Tool Used: Multiple Linear Regression Analysis

Dependent Variable (Y): Annual Revenue Growth (%)

Independent Variables (X):

1. Loan Amount (₹)
2. Monthly Digital Transaction Value (₹)
3. Entrepreneur's Experience (Years)



Table V.3: Regression Model Summary

Model R	R Square	Adjusted R Square	Std. Error of the Estimate
0.692	0.479	0.458	9.52124

Table V.4: Coefficients

	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t-stat	Sig. (p-value)
(Constant)	5.112		2.105	.038
Loan Amount	0.0000312	0.285	3.112	.002
Digital Txn Value	0.0002045	0.512	5.224	.000
Experience	0.587	0.198	2.154	.034

Interpretation:

- The R Square value of 0.479 indicates that **47.9% of the variation** in annual revenue growth can be explained by the three independent variables in the model.
- The p-values for all three variables are less than 0.05, confirming they are statistically significant predictors of revenue growth.
- The **Standardized Beta Coefficients** show the relative strength of the predictors. Digital Transaction Value (Beta = 0.512) has a stronger unique contribution to predicting growth than Loan Amount (Beta = 0.285) or Experience (Beta = 0.198).

Objective 2: TO ANALYZE THE ROLE OF DIGITAL TRANSACTIONS

Tool Used: Independent Samples t-test

Hypothesis: H₀: There is no significant difference in the average revenue growth between entrepreneurs who use digital payments and those who do not.
H₁: There is a significant difference.

Group Statistics:

- Group 1 (Uses Digital Payments): N=78, Mean Revenue Growth = 20.8%, SD=11.5
- Group 2 (Does Not Use Digital Payments): N=18, Mean Revenue Growth = 8.2%, SD=9.1



t-test Result:

- t-statistic = 4.215
- p-value = 0.000

Interpretation:

- The mean revenue growth for entrepreneurs using digital payments (20.8%) is substantially higher than for those who do not (8.2%).
- Since the p-value (0.000) is less than 0.05, we **reject the null hypothesis**.

Objective 3: TO IDENTIFY ASSOCIATIONS AND BUSINESS SUSTAINABILITY

Tool Used: Chi-Square Test of Independence

Hypothesis: H_0 : There is no association between the adoption of digital payments and the sustainability of the business.

H_1 : There is a significant association.

Table V.5: Cross-tabulation - Digital Payments * Business Sustainability

	Business Sustainable? (Yes)	Business Sustainable? (No)	Total
Uses Digital Payments	65	13	78
Does Not Use Digital Payments	6	12	18
Total	71	25	96

Chi-Square Test Result:

- χ^2 Value = 15.842
- p-value = 0.000

Interpretation:

- The cross-tabulation shows that a much higher proportion of digital payment users (65/78 = 83.3%) have sustainable businesses compared to non-users (6/18 = 33.3%).
- The p-value of 0.000 is less than 0.05, leading us to **reject the null hypothesis**.

VI. FINDINGS OF THE STUDY



- **High Adoption of Digital Payments:** A considerable majority (81.3%) of micro-entrepreneurs had adopted digital payments in their businesses, suggesting high penetration of fintech among micro-entrepreneurs.
- **Significant Impact on Revenue Growth:** The action of using digital transaction and the amount of Mudra loan were statistically significant predictors of annual revenue growth according to the results of Multiple Regression. The unique contribution (Standardized Beta = 0.512) of digital transaction to annual revenue growth was found to be greater than the amount of loan (Beta = 0.285).
- **Digital Payments Drive Business Sustainability:** The association between usage of digital payments and business sustainability was statistically significant, with Chi-Square test showing p-value of 0.000. Out of the business using digital payments, 83.3% were sustainable against 33.3% of those not using digital payments.
- **Clear Performance Gap Between User Groups:** The Independent Samples t-test indicates there is a significant difference (p-value = 0.000) in annual revenue growth (average) between users (20.8%) of Digital payments in comparison with non-users (8.2%). Evidence for the benefits of digital payments.
- **Profile of the Beneficiary:** In terms of gender, the typical beneficiary is male (64.6%). In terms of age, the typical beneficiary is in the 31-40 age cohort (46.9%) and in terms of loan category/size the typical beneficiary availed a Shishu category loan (57.3%). In terms of business activity, the beneficiary has a retail/trading business (52.1%) .

VII. CONCLUSION

This research report establishes beyond a reasonable doubt that Pradhan Mantri Mudra Yojana (PMMY) and uptake of online digital transactions are not independent activities but rather two integral parts of the force that is driving entrepreneurial growth in India. While the provision of collateral-free credit via PMMY provides the essential 'seed' capital for new and expanding businesses, the digital payment ecosystem acts as an entirely new level of force multiplier that allows the 'doing of business' to be more efficient, opens the possibility of going to emerging and bigger markets, provides legitimate and verifiable financial traceability, and ensures a much higher level of sustainability and scalability of these new businesses. The results suggest very strongly that the combination of formal credit and digital tools represent a virtuous cycle and clearly much more powerfully than either the one or the other. However, the findings also highlight challenges, particularly with respect to the other 18.8% of still transactional entrepreneurs at the bottom end of the market, likely not accessing these technologies due to digital literacy or infrastructure. Hence, policy must continue to build on the same dual strategies. On the one hand, provide access to credit through financial schemes such as PMMY, while on the other hand,



implement more extensive digital literacy campaigns and development of infrastructure that will allow every benefit of a loan to leverage technology and grow their business. The collision of these twin forces represents a super-powerful force for entrepreneurial growth, and ultimately economic development to form the basis for a modern, productive, inclusive and resilient Indian economy.

VIII. REFERENCES

- i. Drawar, A., & Uttarwar, S. (2016). PMMY: A game-changing concept for strengthening India's economy. *Journal of Entrepreneurship and Economic Development*, 3(2), 45-52.
- ii. Mehar, N. (2014). Innovations in financial inclusion: The role of mobile banking and ultra-small branches in India. *International Journal of Banking and Finance*, 11(1), 78-91.
- iii. Mol, T. S. (2014). Financial inclusion in India: Challenges and initiatives. *Economic Affairs*, 59(3), 405-414.
- iv. Pansare, R. R. (2017). Trends and challenges in SME financing in India. *Indian Journal of Finance*, 11(8), 51-63. <https://doi.org/10.17010/ijf/2017/v11i8/117451>
- v. Raja, J. D. (2005). *Credit disbursement to the small scale industries sector: A comparative analysis*. Indian Institute of Banking & Finance. <https://www.iibf.org.in/documents/research-report/credit-disbursement-ssi-sector.pdf>
- vi. Rani, P. S., & Rao, C. S. (2019). Strengthening the SME sector in India: The role of institutional support mechanisms. *Journal of Small Business and Enterprise Development*, 26(3), 345-362.
- vii. Roy, A. (2016). Small enterprises as the foundation of economic growth: An Indian perspective. *South Asian Journal of Management*, 23(4), 112-128.
- viii. Rupa, K. (2017). Success of MUDRA scheme in Tamil Nadu: The role of microfinance institutions. *International Journal of Management and Social Sciences Research*, 6(5), 15-20.
- ix. Upadhva, S. (2015). Strategies for SME growth and development in a competitive economy. *The Indian Journal of Industrial Relations*, 50(4), 643-655.
- x. Venkatesh, J., & Kumari, R. L. (2017). Empowering solo entrepreneurs: Government initiatives for small-scale enterprises. *Journal of Global Entrepreneurship*, 5(1), Article 12. <https://doi.org/10.1186/s40497-017-0074-2>
- xi. Verma, S. (2015). Designing the MUDRA scheme: Addressing financial challenges for MSMEs and new entrepreneurs. *Yojana*, 59, 35-39. <https://yojana.gov.in/>



- xii. Bhuvaneshwary M, Kamalasaravanam S, Kanimozhi V. A Study on Consumer Behaviour towards UPI (Unified Payment Interface) Payment Application Based in Nilgiris District, International Journal of Advanced Research, Ideas and Innovations in Technology, Vol. 2021;7(3):1096-1101.
- xiii. Bijin Philip. Unified Payment Interface-Impact of UPI in Customer Satisfaction, Research Guru: Journal of Multidisciplinary Subjects (Peer Reviewed). 2019;12 (4):124-129.
- xiv. Bugade Laxmi Arvind, Rajesh R. Customer perception of UPI as a Digital Mode of Payment (with Reference to Coimbatore District), International Journal of Creative Research Thoughts (IJCRT). 2021;9(1):3988 – 3999
- xv. Devadutta Indoria, Devi K. An Analysis on the Customers Perception towards UPI (Unified Payment Interface), International Journal of Aquatic Science. 2011;12 (2):1967-1976.
- xvi. Elina Kanungo, Sonalika Pati. Customer's Preference in Adoption of Different Payment Methods: A Study on Pre, During and Post Lockdown period of COVID-19 in India; 2020. Available: <https://www.researchgate.net/publication/341741430>
- xvii. Kumar T, Saravankumar R. Customers Perception and attitude Towards Unified Payment Interface, Journal of Emerging Technologies and Innovative Research (JETIR). 2022; 9 (2):82-87.
- xviii. Kanagavalli, U Arumugam, Effect of Social Media on Purchase Decision, Aegaeum 8 (3), 787-793, Volume 8, Issue 3, 2020.
- xix. Malla Reddy, Perception of Street Vendors towards Digital Payments: a Study of Sircilla Town of Telangana State, International Research Journal, July 2023 Volume 10, Issue 7, www.tijer.org
- xx. Mayilsamy R, Gokula Krishnan D. A Study on Customers Perception towards Digital Payment System with Special Reference to Tiruppur City, EPRA International Journal of Research and Development. 2020; 5 (11):518-524.
- xxi. Poorna Pushkala C, Pappeswari C. A Study on Awareness and Customer Satisfaction of Unified Payment Interface (UPI) for Digital Payments with Reference to Ambasamudram Area, Annals of R.S.C.B. 2021;25(4):177783-17789.
- xxii. Pragya Chawla, Arun Singhal, Pawan Bajaj. A study on awareness and adoption of unified payments interface (UPI) for digital payments A Journal of Composition Theory. 2019; XII(X):472-485



- xxiii. Ravi Akula. Emerging Trends in Digital Payments in India – A Study, *Osmania Journal of International Business Studies*.2019; 14 (1) & (2):49-58.
- xxiv. Reddy, Anuradha, Ravi Akula. Status of Cashless Transactions – A Case Study of Mahabubnagar District, *Osmania Journal of International Business Studies*. 2019; 14(1) & (2):15-22.
- xxv. Shakeel Shaik (2019), Impact of Brand Name on Customer Buying Decision Towards an Emerging Mobile Phone Market in Hyderabad, *Aegaeum Journal* 8 (4), https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=v2Mx3fkAAAAJ&cstart=20&pagesize=80&citation_for_view=v2Mx3fkAAAAJ:P5F9QuxV20EC
- xxvi. Sreekanth, (2019), A Study on Online Shopping Behaviour of College Students in Hyderabad Region, *Aegaeum Journal* 8 (4), 911-919
- xxvii. Shinki Katyayani Pandey (2022), A Study on Digital Payments System & Consumer Perception: An Empirical Survey, *Journal of Positive School Psychology*, 2022, Vol. 6, No. 3, 10121 – 10131
- xxviii. Shamsher Singh. Study of Consumer Perception of Digital payment Mode, *Journal of Internet Banking and Commerce*. 2017;22 (3):2-14.
- xxix. Sowbarnika S, Vasanthakumar V. A study on Customer Satisfaction of UPI with Reference to Coimbatore City, *Infokara Research*. 2019;8(8):511-524
- xxx. Virshree Tungare. A Study on Customer Insight Towards UPI (Unified Payment Interface) - An Advancement of Mobile Payment System, *International Journal of Science and Research*. 2019;8 (4) :1408-1412
- xxxi. Mallieswari R, Debolina Gupta, Mudit Kumar Rai (2020), Digital and Other Payment Platforms: Factors Influencing Choice among Youths, *International Journal of Management, IT & Engineering*, Vol. 10 Issue 02, February 2020, ISSN: 2249-0558
- xxxii. Klas Håkan Alm, Veerisa Chotiyaputta, and Sasi Bejrakashem (2022), Factors Influencing Mobile Payment Adoption by Silver Generation in Thailand and Sweden, *Social Science Asia*, Volume 8 Number 2, 2022, p: 22-44
- xxxiii. Etim, A. S. (2014). Mobile banking and mobile money adoption for financial inclusion. *Research in Business and Economics Journal*, 9, 1–13
- xxxiv. Henningsson, S., & Hedman, J. (2014). Transformation of digital ecosystems: The case of digital payments. In *Lecture Notes in Computer Science* (including subseries *Lecture Notes in*



Artificial Intelligence and Lecture Notes in Bioinformatics) 2014 (Vol. 8407 LNCS, pp. 46–55). Springer Verlag.

- xxxv. Singh, S. (2017). Study of Consumer Perception of Digital Payment Mode. *Journal of Internet Banking and Commerce*, 2017, 22(3), 1–7.
- xxxvi. Kathryn and Tina Harrison (2002). “Consumer exceptions of online information provided by bank websites”. *Journal of Financial Services Marketing*. 2002, Vol. 6. no 4. pp. 309-322
- xxxvii. Waite, Kathryn and Tina Harrison (2004), “Online banking information: what we want and what we get”, *Qualitative Market Research: An International Journal*, 2004, Vol. 7 No. 1, pp. 67-79.
- xxxviii. Wang, Y., Wang, Y., Lin, H., and Tang, T. (2003), “Determinants of user acceptance of internet banking: an empirical study”, *International Journal of Service Industry Management*, 2003 Vol. 14 No.5, pp. 501-19