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The Impact of Digital Payment Apps on Consumer Behaviour: A Study of Nagpur City

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ABSTRACT:
This study aims to explore **gpur** City. It will also examine factors such as ease of use, perceived security, promotional offers, and the influence of these factors on consumer decision-making. By analyzing the behavioural shifts caused by digital payment platforms, this research seeks to provide valuable insights for businesses, policymakers, and financial service providers in understanding and adapting to the evolving consumer landscape.
Keywords: Consumer, Preferences, Digital Payments, Promotional Offers

I. INTRODUCTION

The emergence of digital technology in recent years has completely changed how financial transactions are carried out worldwide. India has seen a dramatic change in payment methods as a result of its quickly growing digital infrastructure and government-led programs like Digital India. The adoption of digital payment apps, like Google Pay, PhonePe, Paytm, and others, which provide convenience, speed, and security in daily transactions, is one of the most noticeable developments.[1]

This digital wave has also affected Nagpur, a major urban center in Central India and one of Maharashtra's fastest-growing cities. The city offers a distinctive setting for researching how digital payment platforms are affecting consumer behavior because of its expanding number of tech-savvy consumers and rising smartphone usage.[1]

Apps for digital payments have become increasingly popular worldwide because they provide a safe and easy way to make financial transactions. This change has had a major impact on consumer behavior, changing money management techniques, financial preferences, and spending patterns. The impact of digital payment apps on consumer behavior is examined in this study, with particular attention paid to shifts in spending habits and the elements that encourage adoption, including perceived utility, ease of use, and trust.It also looks at how these apps have changed consumer attitudes and financial transactions. to This article seeks to educate businesses, financial institutions, politicians, and app developers about the implications of digital payment apps by adding to the body of existing research. The results will satisfy changing

customer needs while enhancing app functionality and design.[2]

Literature Review:

1. **The Impact of Digital Payment Implementation on Consumer Behavior (Ramkumar Soundarapandian Senior Manager at Capgemini America Inc, United States of America, 2020)** research highlights the transformative role of digital payment technologies in reshaping consumer behaviour and vendor operations. Studies by Chavali & Dulam (2022) and Kaur & Singh (2021) demonstrate that consumers increasingly prefer digital payment systems due to enhanced speed, security, and transactional convenience. Research further shows a marked reduction in cash-based transactions, accompanied by a rise in online purchasing patterns. Scholars such as Gupta (2023) note that vendors adopting digital payment solutions experience improved operational efficiency, reduced cash-handling costs, and growth in their customer base. Literature also suggests that seamless fund transfers influence consumers' spending behaviour by reducing the perceived limitation of cash availability. Additionally, financial management studies indicate the need for both consumers and suppliers to maintain structured bank accounts to ensure transparency, accurate record-keeping, and regulatory compliance in the digital economy.
2. **A Study on Consumer Perception towards use of E-Wallet in Nagpur City (Ms Madhuri Barua1 , Dr Aarti Deshpande, 2024)** research establishes that digital payment technologies significantly reshape consumer behaviour and vendor operations. Prior studies (Chavali & Dulam, 2022; Kaur & Singh, 2021) indicate that consumers increasingly favour digital modes due to their speed, security, and convenience. Researchers consistently report a decline in cash usage alongside rising online purchasing trends. Gupta (2023) emphasises that vendors adopting digital payment systems benefit from improved operational efficiency, reduced cash-handling costs, and expanded clientele. Scholars also highlight that instant fund transfers alter spending behaviour by reducing cash-availability constraints. Financial management literature further underscores the need for consumers and suppliers to maintain structured bank accounts to ensure transparency and accurate record-keeping in the digital economy.

Research Objectives:

1) To measure how many consumers in Nagpur are using digital payment apps.
2) To explore consumers' perceived benefits of using digital payment apps.

3) To examine the role of awareness, trust, and perceived ease of use in influencing usage.
4) To investigate whether using digital payment apps influences consumers to spend more (or less) than they would if paying in cash.

Limitations:

1) This study is limited to Nagpur City only.
2) Only 30 samples are taken for the study.
3) The study likely covers a specific period.

Research Hypothesis:

H0 :The usage of digital payment apps doesn't influence consumer behaviour in Nagpur city.

H1 : The usage of digital payment apps significantly influences consumer behaviour in Nagpur city.

Research Methodology:

Research design

This study adopts a quantitative research approach using a descriptive and analytical research design. The aim is to measure and analyze the influence of digital payment apps on consumer behaviour patterns in Nagpur City.

- Descriptive: To identify and describe the current trends, usage patterns, and perceptions related to digital payment apps.
- Analytical: To examine the relationships between various demographic, behavioural, and attitudinal factors using statistical tools.

Sample Area

The research is focused on **Nagpur City,** covering only urban populations to ensure diverse consumer representation.

Sample Size

A total of 30 respondents will be surveyed. This sample size provides sufficient data for statistical analysis while remaining manageable within time and resource constraints.

Sampling Method

Convenience Sampling is used to quickly collect data from easily reachable individuals.

Sources of Data

There are two major source for data collection : Primary Data & Secondary Data.

Primary Data: First-hand, unprocessed information obtained straight from the source for a particular study goal, as opposed to having been previously gathered by another party, is known as primary data. It can be gathered using techniques including surveys, interviews, experiments, focus groups, and observations

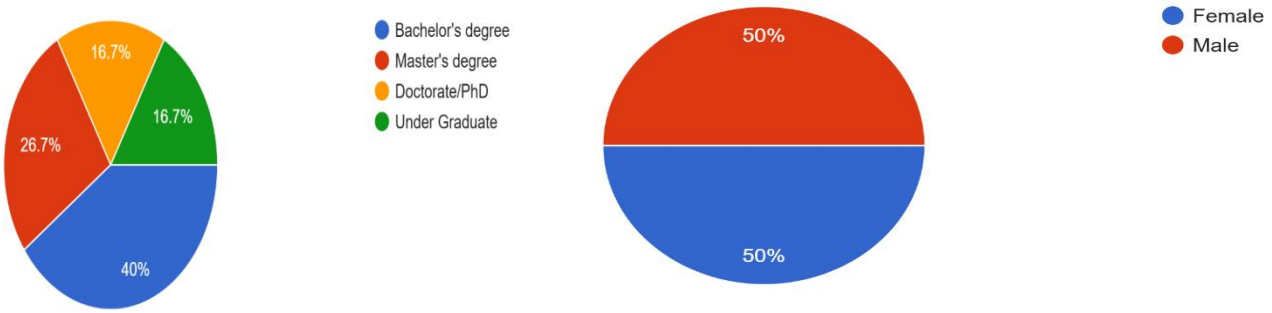
and provides fresh and distinctive insights pertinent to the study's issues.

Secondary Data: Information that has been gathered and disseminated by another party for a purpose other than the current research project is known as secondary data. Since it is derived from pre-existing records, reports, or datasets rather than being collected directly by the researcher, it is easily accessible and frequently less expensive and quicker to acquire than primary data. Government data, scholarly works, business reports, and earlier research surveys that are employed in a new study are a few examples.

Data Collection:

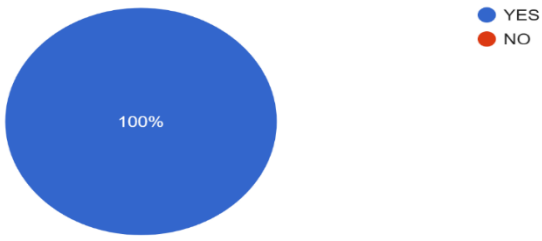
Primary Data Collection is used which involves collecting first-hand data directly from the target population (consumers in Nagpur). Data is collected through structured questionnaire by framing some questions. All the questions are closed ended.

Data Analysis & Interpretation



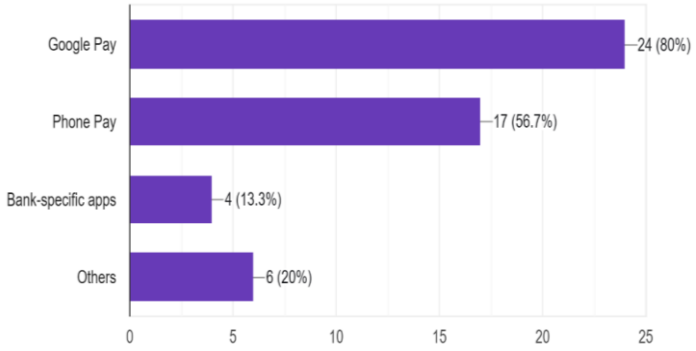
The data was collected through primary data by using questionnaire. The questionnaire included closed ended questions. 30 people responded for it, out of which 15 were male and 15 were female. The age of respondents were below 50. 16.70% respondents were Undergraduates, 40% were graduates, 26.70% were Post Graduates and remaining 16.70% respondents were doctorates. [3]

- **Do you use mobile payment system?**



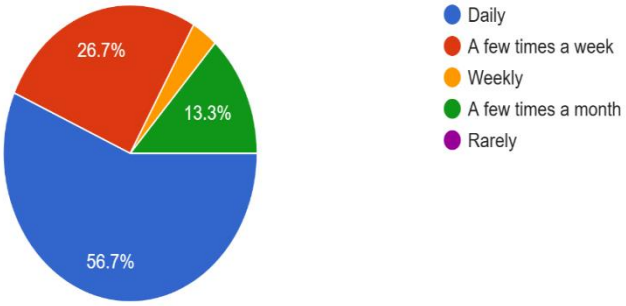
All 30 respondents responded yes. They all are using digital payment system for making or receiving payments. It means that digitalization in payment system has made people habitual for using digitalised payment system.[3]

➢ **Which mobile payment apps do you use regularly?**



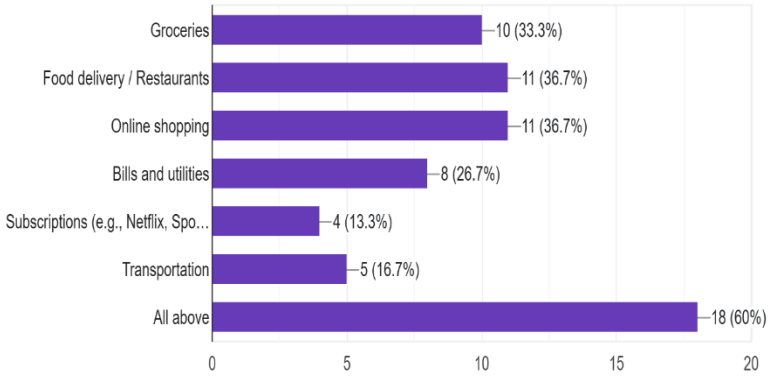
Maximum respondents responded that they use Google pay and phone pay app for making payments, few responded for bank specific app and other applications also. From all these it is cleared that phone pay and google pay both are playing important role in digitalized payment system.[3]

➢ **How often do you use mobile payments?**



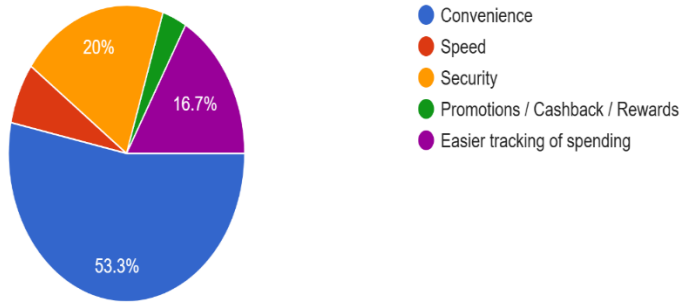
More than half (56.7%) of the respondents use mobile payments daily, showing high dependence on digital payment methods in their routine life. Around 26.7% use it a few times a week, which also indicates regular usage. 13.3% use it a few times a month, suggesting occasional reliance. Only 1 respondent uses it weekly, and none said rarely, which means almost everyone is comfortable with mobile payments. We can say that mobile payment systems are widely adopted, with nearly 97% using them at least weekly or more, reflecting a strong trend toward digital transactions.[3]

➢ **What types of purchases do you usually make using mobile payments?**



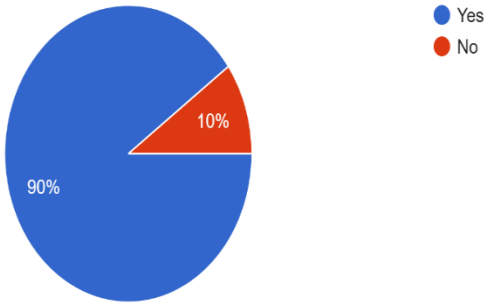
A majority of respondents (60%) use mobile payments for all types of purchases listed. Among specific categories, food delivery/restaurants and online shopping are the most common (both at 36.7%). Groceries are also a frequent use case (33.3%). Bills and utilities (26.7%) and transportation(16.7%) are less common but still notable. The least common usage is for subscriptions (13.3%). Overall, the data suggests that mobile payments are widely used across different spending categories, with a strong preference for convenience in daily essentials (food, groceries, and online shopping).[3]

- **Why do you prefer mobile payment over cash or card?**



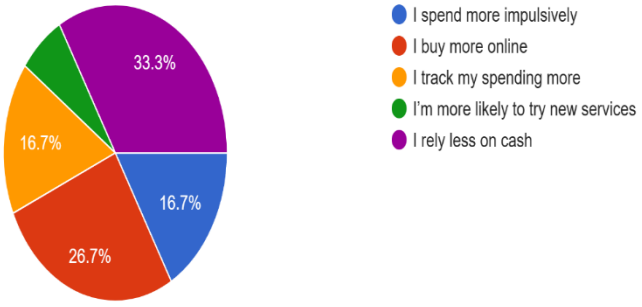
Convenience is the most important reason (53.3%) why people prefer mobile payments, showing that users value hassle-free transactions.Security (20%) also plays a significant role, suggesting users feel safer with mobile payment compared to cash or cards.Easier tracking of spending (16.7%) is another strong motivator, as mobile apps often provide transaction histories.Speed (6.7%) and Promotions/Cashback/Rewards(3.3%) are less influential but still add value for some users.Overall, the results indicate that ease of use and trust (convenience + security)are the dominant reasons people prefer mobile payments.[3]

- **Has your spending behavior changed since you started using mobile payment systems?**



90% of respondents answered "Yes," indicating their spending behavior has changed after starting to use mobile payment systems. 10% of respondents answered "No," suggesting their spending habits have not been affected by the use of mobile payments. The vast majority experienced a change in spending behavior due to mobile payments, suggesting these systems have a significant influence on consumer habits. Only a small portion (10%) felt that mobile payments had no impact on how they spend money.[3]

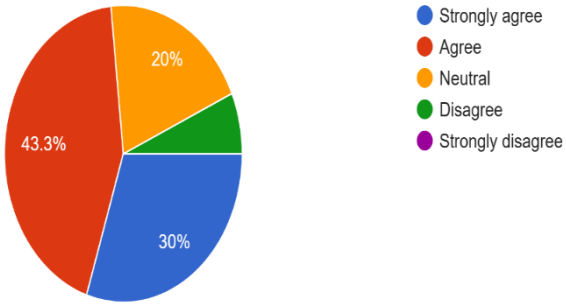
- **If yes, how has it changed?**



33.3% respondents rely less on cash. This is the most common change, indicating that mobile payments have reduced people's dependence on physical currency. 26.7% buy more online. Over a quarter of respondents report increased online purchasing activity since adopting mobile payments. 16.7% spend more impulsively. Some users find that the convenience of mobile payments leads to more spontaneous purchases. 16.7% track their spending more. An equal percentage report becoming more conscious about monitoring their expenses. 6.7% are more likely to try new services. A smaller portion indicates increased willingness to experiment with new products or services. Overall, The primary impact of mobile payments is reducing cash dependency, which aligns with the digital transformation of financial transactions.There's a notable increase in online shopping behavior, suggesting mobile payments facilitate e-commerce

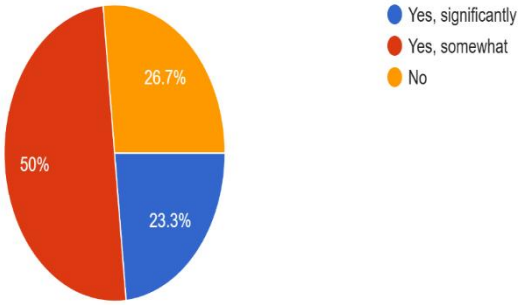
adoption.The data shows both positive (better tracking) and potentially concerning (impulsive spending) behavioral changes in equal measure.[3]

- **Do mobile payments make it easier to overspend?**



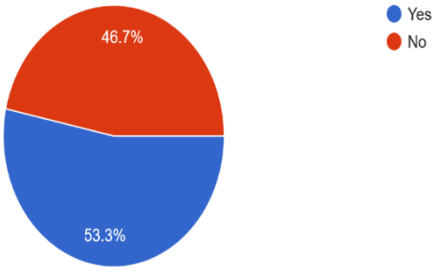
The largest segment of respondents believes that mobile payments do make it easier to overspend. Nearly one-third of respondents have strong conviction that mobile payments facilitate overspending. One-fifth of respondents remain undecided or feel that mobile payments have no particular impact on their spending behavior. This data indicates a widespread perception among users that mobile payment systems, while convenient, may compromise financial discipline and spending awareness.[3]

- **Do promotions or cashback offers influence your decision to use mobile payments?**



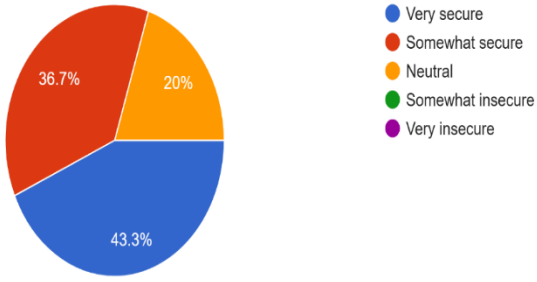
Half of the respondents indicate that promotions and cashback offers have some influence on their mobile payment usage decisions. About a quarter of respondents report that promotional offers do not affect their choice to use mobile payments. Nearly a quarter of users are strongly influenced by promotions and cashback offers when deciding to use mobile payments.This data indicates that promotional strategies like cashback offers and discounts are largely successful in encouraging mobile payment usage, with varying degrees of effectiveness across different user segments.[3]

- **Have you ever chosen a specific store or service because they accept mobile payments?**



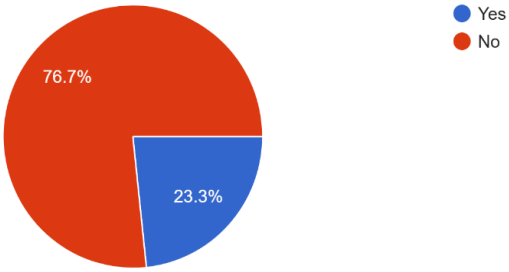
More than half of the respondents have specifically chosen stores or services based on their acceptance of mobile payments. Nearly half of the respondents have not made buying decisions based on mobile payment acceptance. Mobile payment acceptance is a deciding factor for just over half of consumers when choosing where to shop or which services to use. The results show a relatively balanced divide, with a difference of only 6.6% between yes and no responses. The fact that over half of consumers consider mobile payment acceptance suggests that businesses without these payment options may be missing potential customers. This data indicates that mobile payment infrastructure is becoming an increasingly important factor in consumer decision-making, though it's not yet universally decisive.[3]

- **How secure do you feel using mobile payment systems?**



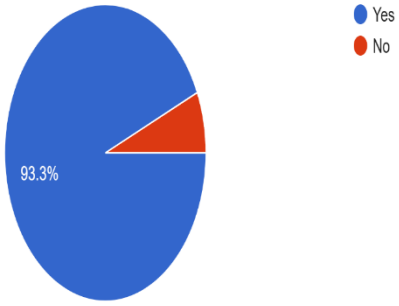
43.3% respondents feel Very secure, 36.7% feel Somewhat secure and 20% are Neutral. Very few feel insecure (minimal segments for Somewhat insecure and Very insecure) 80% of users feel secure (very + somewhat secure) using mobile payments, indicating high confidence in these systems.[3]

- **Have you ever experienced fraud or loss while using a mobile payment system?**



The vast majority (76.7%) of users have never experienced fraud or loss with mobile payments. About one-quarter (23.3%) of respondents have experienced some form of fraud or loss. Over three-quarters of users have had no negative experiences with mobile payment securityNearly 1 in 4 users have encountered fraud or loss, indicating that security incidents do occur but are not widespread. The low fraud rate (23.3%) helps explain why 80% of users feel secure using mobile payments (as shown in previous surveys). This data suggests that while mobile payment systems are generally secure, there's still room for improvement in fraud prevention and security measures.[3]

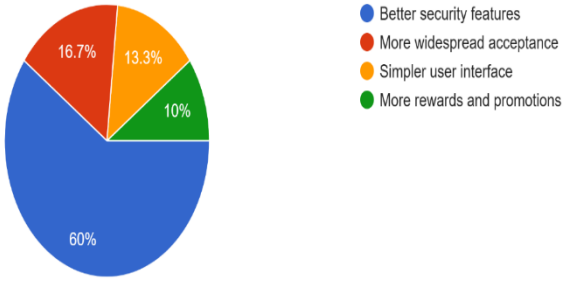
- **Would you recommend mobile payment systems to others?**



An overwhelming majority would recommend mobile payment systems to others. Only a very small portion would not recommend these systems. More than 9 out of 10 users would recommend mobile payments to others. The 93.3% recommendation rate indicates extremely high satisfaction with mobile payment experiences. Less than 7% of users have reservations about recommending mobile payments. The high recommendation rate demonstrates strong confidence in mobile payment technology. Such high recommendation rates suggest continued expansion of mobile payment adoption through word-of-mouth. This data shows that despite some concerns about overspending and occasional fraud experiences (from previous surveys), users overwhelmingly view mobile payments positively enough to actively recommend them to others.[3]

- **What improvements would make you more likely to use mobile payments more often?**

The majority of users want enhanced security as the top improvement. 16.7% users want mobile payments to be accepted at more locations. 13.3% users desire easier-to-use mobile payment apps. A smaller group (10%) wants better incentive programs. Six out of ten respondents identify better security features as the most important improvement needed. Nearly 17% of users are limited by where they can use mobile payments, indicating acceptance needs to expand. Over 13% want simpler interfaces, suggesting current



apps may be too complex for some users. Only 10% prioritize better promotions, showing that functionality and security matter more than incentives. This finding connects to earlier survey results where 23.3% experienced fraud and many felt mobile payments enable overspending. The data clearly shows that while users are generally satisfied with mobile payments (93.3% would recommend them), they still want stronger security measures to feel completely comfortable increasing their usage frequency.[3]

Findings :

1. The study reveals 100% adoption of mobile payment systems, indicating complete acceptance and habitual usage among respondents irrespective of gender or educational background.
2. Google Pay and PhonePe emerge as the most widely used applications, demonstrating their dominance and user trust in the Indian digital payment ecosystem.
3. A significant majority of respondents (56.7% daily users) show high dependency on mobile payments, with nearly 97% using them at least weekly, reflecting deep integration of digital payments in routine transactions.
4. Consumers primarily use mobile payments for a wide range of purchases, with all-category usage at 60%, particularly in food delivery, online shopping, and groceries, indicating preference for convenience-driven consumption.
5. Mobile payments have altered consumer behaviour, with 90% reporting spending-related changes—such as reduced cash dependence, increased online shopping, improved tracking of expenses, and some impulsive spending.
6. Although 80% of respondents feel secure, about 23.3% have experienced fraud or loss, and many perceive mobile payments as enabling overspending, indicating existing concerns about financial discipline and security.

Suggestions :

1. Mobile payment service providers should strengthen security features, including multi-layer authentication, fraud alerts, and real-time monitoring, to reduce fraud incidents and enhance user confidence.

2. Businesses should expand mobile payment acceptance across more physical and online locations to address the 16.7% user demand for broader accessibility and convenience.
3. App developers must focus on creating simpler and more user-friendly interfaces, ensuring that digital payment applications remain accessible to users across all age and education groups.
4. Providers should offer balanced promotional strategies, such as cashback and reward programs, to retain users without encouraging overspending or impulsive behaviour.
5. Financial literacy initiatives should be promoted to help users manage spending discipline, track expenses, and avoid the ease of overspending often associated with mobile payments.
6. Mobile payment companies and regulatory bodies must collaborate to enhance fraud-prevention mechanisms, conduct regular awareness programs, and provide quick grievance-redressal systems to protect users and reduce security-related risks.

Conclusion:

The study reveals that digital payment apps have increasingly become integral to consumer behaviour in Nagpur City, influencing how people shop, pay and interact with merchants. Several key takeaways emerge:

1. **Convenience & Speed** - One of the most important drivers of adoption is the ease and quickness of transactions. Consumers in Nagpur increasingly prefer digital payment modes that reduce friction—less time queuing, fewer cash handling issues. The availability of multiple options enhances user flexibility.
2. **Trust & Security Concerns Remain Key Barriers** - While many users find digital payments acceptable, concerns persist around security, privacy, and technical glitches. For a subset of consumers—especially older users or those less tech-savvy—these are substantial deterrents.
3. **Influence on Spending Patterns** - Digital payment apps seem to have modified spending behaviour somewhat. With smoother payment experiences and offers/incentives from apps (cashbacks, discounts), some consumers are making more frequent purchases or shifting from cash to digital even for small-value transactions.
4. **Digital Divide is Visible** - Differences across demographics—age, education, income, comfort with technology—persist. Not everyone is equally benefitting. For instance, lower-income or older demographics tend to use cash more, or are more worried about fraud.
5. **Toward Cash-Light Economy, Not Completely Cashless (Yet)** - The trend is clearly in favour of reducing reliance on cash, but for many transactions, particularly informal ones, cash still plays a role. Cultural comfort, habit, and trust issues mean cash has not yet fully disappeared.

Overall, the impact of digital payment apps in Nagpur is strongly positive, they are reshaping

consumer behaviour toward more digital, convenient, and frequent transactions. But there are clear challenges—risk perceptions, digital literacy, infrastructure—that must be addressed to fully realize benefits for all sections of society. From all above our alternate hypothesis hold true i.e the usage of digital payment apps significantly influences consumer behaviour in Nagpur city.

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