

Perceived Dominance and Ecosystem Lock-In in Indian Upi Duopoly and Their Influence on Consumer Behaviour

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Abstract— This study explores how users' perceptions and habits influence their choice of UPI applications in India, with a focus on Google Pay and PhonePe. Even though several UPI platforms are available, most users continue to rely on these two apps, creating a duopoly-like situation. The research is based on primary data collected from 101 respondents through a structured questionnaire. Various statistical tools were used to analyse user behaviour and preferences. The findings show that factors such as trust, familiarity, rewards, and social influence strongly affect users' decisions and reduce their willingness to switch to other apps. It is observed that users are not just choosing based on features, but also on comfort and habit. The study concludes that behavioural factors play a key role in maintaining platform dominance and limiting user movement across alternatives.

Index Terms— Perceived Dominance, Ecosystem Lock-in, UPI Applications, Consumer Behaviour, Switching Resistance, Digital Payments.

I. INTRODUCTION:

Digital payment systems have rapidly transformed the way financial transactions are carried out in India, with UPI emerging as a widely preferred platform. Among various applications, Google Pay and PhonePe have gained strong user dominance, creating a duopoly-like structure in the market. Despite the availability of multiple alternatives, users continue to rely on these platforms. This behaviour is influenced not only by features but also by perception, trust, and habitual usage. The concepts of perceived dominance and ecosystem lock-in help explain this continued

preference. Understanding these behavioural aspects is important to analyse user decision-making in the UPI ecosystem. This study focuses on how these factors shape consumer behaviour and limit switching to alternative platforms.

II. STATEMENT OF PROBLEM:

Even though many UPI applications are available in India, most users continue to prefer Google Pay and PhonePe for their transactions. This shows that users are not actively exploring other options, even when similar features are offered. Over time, users develop a sense of comfort and trust in these dominant platforms, making it difficult for them to switch. This behaviour creates a form of dependency and limits the growth of other competitors in the market. Therefore, it is important to understand how user perception and habits influence this continued preference.

III. OBJECTIVES:

- 1.To examine how strongly users perceive Google Pay and PhonePe as dominant UPI applications.
- 2.To analyse users' willingness to switch to other UPI platforms.
- 3.To identify the key factors that create dependency and lock-in among UPI users.

IV. RESEARCH METHODOLOGY:

The study focuses on understanding consumer behaviour in the UPI ecosystem, particularly in relation to the dominance of Google Pay and PhonePe.

It is based on primary data collected from 101 respondents who actively use UPI applications. A convenience sampling method was adopted to gather responses within a limited time frame. Data was collected through a structured questionnaire. The collected data are classified and tabulated. The data was analysed using the following statistical tools:

- Simple percentage
- Garrett Ranking
- Regression

V. REVIEW OF LITRATURE:

Razi-ur-Rahim (2024) analysed UPI adoption behaviour using an extended UTAUT model. The study found that user attitude, social influence, and perceived benefits strongly affect usage behaviour. It also showed that these factors explain a large portion of user adoption patterns.

Jacob (2024) examined behavioural intention toward UPI among users. The study revealed that trust, ease of use, and facilitating conditions significantly influence adoption decisions. It highlighted that behavioural factors play a key role in continued usage of UPI platforms.

VI. DATA ANALYSIS AND INTERPRETATION:

Table 1: Most Frequently Used UPI Application

Application	Frequency	Percentage
GPay	84	83.2
PhonePe	10	9.9
Others	7	6.9
Total	101	100.0

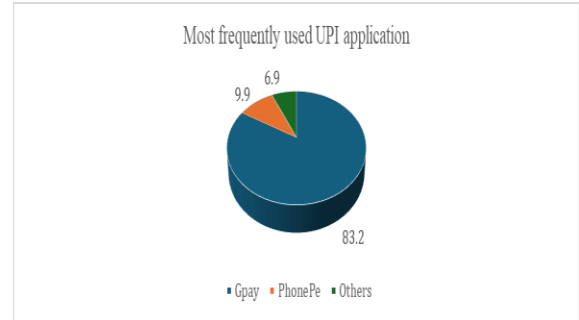
(Source: Primary Data)

Interpretation:

The data shows that out of 101 respondents, the majority 84 (83.2%) use GPay most frequently,

followed by 10 (9.9%) using PhonePe and 7 (6.9%) using other applications.

Therefore, GPay is the most frequently used UPI application, followed by PhonePe. These two applications dominate user preference.



(Source: Primary Data)

Table 2: Ranking The Benefits Associated with Factors of Upi Application

FACTORS	1	2	3	4	5	Total
Ease of use	21	6	11	28	35	101
Transaction speed	16	26	16	23	20	101
Security and trust	16	23	38	13	11	101
Cashback and rewards	17	36	19	17	12	101
Wide acceptance	31	11	17	19	23	101
TOTAL	101	101	101	101	101	101

(Source: Primary Data)

Interpretation:

Cashback and rewards are the most important factor influencing users (Rank 1, Avg. 52.83), followed by security and trust (Rank 2) and wide acceptance (Rank 3). Transaction speed holds a moderate position (Rank 4), while ease of use is ranked lowest (Rank 5). This indicates that users prioritize monetary benefits and security over convenience-related factors.

Therefore, the end result shows that value-driven incentives and trust are the key determinants of user preference.

FACTORS	R1 X 75	R2 X 60	R3 X 50	R4 X 39	R5 X 24	SUM	AVG.	RANK
Ease of use	1575	360	550	1092	840	4417	43.73	5
Transaction speed	1200	1560	800	897	480	4937	48.88	4
Security and trust	1200	1380	1900	507	264	5251	51.99	2
Cashback and rewards	1275	2160	950	663	288	5336	52.83	1
Wide acceptance	2325	660	850	741	552	5128	50.77	3

(Source: Primary data)

Table 3: Relationship Between Perceived Benefits and Actual Switching Intention

Hypothesis:

H₀ (Null Hypothesis): There is no significant relationship between perceived rewards and switching intention.

H₁ (Alternative Hypothesis): There is a significant relationship between perceived rewards and switching intentions.

ANOVA						
MODEL		SUM OF SQUARE	DF	MEAN SQUARE	F	SIG.
1	Regression	6.990	1	6.990	6.392	.013 ^b
	Residual	108.258	99	1.094		
	Total	115.248	100			
DV – How likely are you to switch to another UPI Application if these benefits are provided						
PREDICTORS – (Constant) If another UPI provide better rewards, I would consider switching						

(Source: Primary data)

COEFFICIENT						
MODEL		Understanding Coefficient		Standard Coefficient	T	SIG.
		B	STD. ERROR	BETA		
1	(Constant)	2.523	.402		6.273	.000
	If another UPI App provide better reward, I would consider switching	.277	.110	.246	2.528	.013
		.277	.110	.246	2.528	.013
DV – How likely are you to switch to another UPI Application if these benefits are provided						

(Source: Primary data)

Interpretation:

The p-value (0.013) is less than the significance level of 0.05.

Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

This indicates that there is a statistically significant relationship between perceived rewards and switching intention.

Therefore, better rewards significantly influence users' likelihood to switch UPI applications. So, alternative hypothesis is accepted.

VII. FINDINGS

Simple Percentage Analysis

Most (83.2%) of the respondents prefer using Google Pay, followed by PhonePe (9.9%), indicating a strong concentration of users on these platforms.

Only a small proportion (6.9%) use other UPI applications, showing limited adoption of alternatives. This clearly reflects the dominance of a few applications in the UPI ecosystem.

Garrett Ranking Analysis

Most of the respondents ranked Cashback and rewards as Rank I, indicating it is the most important factor influencing usage.

Security & Trust (Rank II) and Wide Acceptance (Rank III) are also highly ranked, showing the importance of convenience and reliability.

Transaction Speed (Rank IV) and Ease of use (Rank V) are given lower ranks, indicating they are secondary factors.

Regression Analysis

The regression analysis shows a significant relationship between perceived rewards and switching intention (p = 0.013 < 0.05).

The coefficient value (B = 0.277) indicates a positive influence of perceived benefits on users' willingness to switch.

The model is statistically significant with an F value of 6.392, confirming the validity of the regression model.

The beta value (β = 0.246) shows a moderate level of impact of perceived rewards on switching intention.

Since the significance value is less than 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted.

VIII. SUGGESTION:

1. UPI platforms should focus on improving user trust and simplifying interface design to reduce dependency on dominant applications. This can encourage users to explore and adopt alternative platforms.

2. Service providers should offer meaningful incentives beyond cashback, such as better features and user experience, to attract and retain users. This can gradually reduce switching resistance among consumers.

3. Regulators should promote fair competition by supporting smaller UPI players and increasing awareness about multiple platforms. This will help in reducing market concentration and improving consumer choice.

IX. CONCLUSION

The study highlights that user preference in the UPI ecosystem is largely driven by perception and habitual usage rather than just technical features. Google Pay and PhonePe continue to dominate due to strong user trust, convenience, and wide acceptance. The findings show that ease of use and reliability play a major role in influencing consumer behaviour. At the same time, users exhibit low willingness to switch, indicating the presence of ecosystem lock-in. This behavioural dependency limits the growth of alternative platforms and reinforces market concentration. Overall, the study concludes that addressing behavioural factors is essential to promote balanced competition in the digital payment space.

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