

Customer Preferences for Mobile Banking Apps: A Comparative Study of Public, Private, and Small Finance Banks

Sunita Sharma

Research Scholar

Department of Commerce & Management
Jayoti Vidyapeeth Women's University, Jaipur

Abstract:

India's mobile banking market is served by three distinct ownership groups public sector banks (PSBs), private sector banks and Small Finance Banks (SFBs) whose customer bases, legacies and technology strategies differ markedly. While a large literature examines the adoption of and satisfaction with mobile banking in general, comparatively little is known about how customer preferences for mobile banking app attributes differ across these bank groups, and whether banks are delivering the attributes their own customers value most. This paper undertakes a comparative empirical analysis of customer preferences for mobile banking applications across public, private and small finance banks in India.

Secondary data on the digital footprint of the three bank groups are drawn from Reserve Bank of India (RBI) and National Payments Corporation of India (NPCI) sources for 2019–20 to 2024–25, and primary evidence is presented through an illustrative structured survey of 450 mobile banking users (150 from each bank group), analysed using Garrett ranking of preference attributes, weighted mean scores, one-way ANOVA, chi-square tests and correlation analysis. The analysis reveals a stable core of preferences shared by all customers transaction reliability, security assurance and ease of use rank at the top for every group surrounded by significant group-wise differences: PSB customers place relatively higher weight on trust in the institution, branch-linked support and vernacular access; private bank customers prioritise speed, feature richness, integration with payments and investment ecosystems, and interface quality; and SFB customers value doorstep-linked service continuity, higher deposit rates visibility, simplicity and assisted usage. Perceived delivery lags preference most severely on grievance redress for PSBs, on human support for private banks, and on app stability for SFBs. Attribute importance differs significantly across groups for eight of twelve attributes (ANOVA, $p < 0.05$), and switching intent is highest where the preference–delivery gap is widest. The paper concludes that a one-size-fits-all app strategy misallocates technology investment, and offers group-specific recommendations for aligning app roadmaps with the revealed preferences of each customer base.

Keywords: Mobile Banking, Customer Preference, Public Sector Banks, Private Banks, Small Finance Banks, Garrett Ranking, ANOVA, Comparative Study, App Attributes, Switching Behaviour.

Introduction

The mobile application has become the decisive arena of banking competition in India. With the Unified Payments Interface (UPI) making payments interoperable across banks and apps, customers can hold an account with one bank and transact through another's interface; engagement, data and cross-sell opportunities flow to whichever app the customer prefers. In such a market, understanding customer preferences which attributes of a mobile banking app customers value, in what order, and how intensely is the foundation of digital strategy. Preferences determine which investments in the app roadmap will move satisfaction, retention and primacy of relationship, and which will be cosmetic.

India's banking system, however, is not homogeneous. Public sector banks command the largest customer base, skewed toward government-linked, older, rural and mass segments, and carry both a legacy of trust and a legacy of technology debt. Private sector banks serve urban, affluent and digitally native segments with substantially larger technology budgets and design capabilities. Small Finance Banks most converted from microfinance institutions after 2015 serve small-ticket, semi-urban and rural customers, many newly banked, combining doorstep-rooted relationships with young digital platforms. It is implausible a priori that the app preferences of these three customer bases coincide; yet bank groups frequently benchmark against the same handful of leading apps, implicitly assuming a single preference structure. Testing that assumption is the purpose of this study.

Public sector banks (12 banks post-consolidation) hold roughly two-fifths of deposit market share and operate flagship apps at very large scale; their digital transformation accelerated after the 2019–20 mergers and the EASE (Enhanced Access and Service Excellence) reform agenda, though app-store ratings and complaint volumes indicate persistent experience gaps. Private banks lead in mobile engagement per customer, embedding payments, cards, loans, wealth and lifestyle features into 'super-app' strategies. Small Finance Banks (a dozen licensed entities) are deposit-hungry challengers whose apps emphasise account opening, attractive deposit rates and simple journeys for first-generation digital users, while their field forces sustain assisted usage. The three groups thus differ systematically in customer demography, product emphasis and app maturity differences that should surface as measurable differences in customer preferences.

This study is a companion to satisfaction research but asks a logically prior question. Satisfaction measures how well delivery meets expectations on given attributes; preference measures which attributes matter and how much. Two banks can earn identical satisfaction scores while their customers weight attributes entirely differently implying different optimal roadmaps. Methodologically, preferences are elicited here through importance ratings and Garrett ranking of attributes, and are then juxtaposed with perceived delivery to compute preference–delivery gaps, the most actionable diagnostic for prioritising app investment.

Significance of the Study

The study matters to four audiences. For bank managements, group-specific preference maps direct scarce technology budgets to the attributes their own customers value, rather than to imitation of market leaders serving different segments. For SFBs in particular, whose viability depends on low-cost deposit gathering through digital channels, preference alignment is existential. For regulators pursuing inclusive digital banking, evidence on the preferences of PSB and SFB customer bases more rural, older and less digitally fluent informs accessibility and customer-protection standards. For the literature, comparative

preference evidence across ownership groups in the post-UPI Indian market is scarce; this paper contributes an integrated, gap-based comparative framework.

Review of Literature

The adoption stream TAM (Davis, 1989), UTAUT/UTAUT2 (Venkatesh et al., 2003, 2012) and their mobile banking applications (Luarn & Lin, 2005; Alalwan et al., 2017) establishes usefulness, ease of use, trust, risk and facilitating conditions as the generic determinants of mobile banking behaviour. Preference-oriented studies go further by ranking or trading off attributes: conjoint and ranking studies of digital banking find security, transaction success and speed consistently at the top of attribute hierarchies, with interface aesthetics and feature breadth valued more by younger, urban and experienced users. Indian studies using Garrett ranking and factor analysis on internet/mobile banking (e.g., studies of channel preference in Tamil Nadu, Gujarat and Delhi-NCR samples) similarly report safety and convenience as the leading preferred attributes, with notable heterogeneity by age, education and location heterogeneity that motivates group-wise comparison.

A substantial Indian literature compares public and private banks on service quality and customer satisfaction in the branch era, generally finding private banks ahead on responsiveness, tangibles and empathy, and public banks competitive on reliability of core services and institutional trust (e.g., SERVQUAL-based comparisons across several states). Digital-era comparisons are fewer: studies after 2016 report private bank customers more satisfied with e-channel experience while PSB customers report higher trust and lower fee sensitivity concerns; analyses of app-store ratings show persistent gaps between leading private and public bank apps, though flagship PSB platforms have narrowed the distance. Research on Small Finance Banks is nascent, focused mainly on their transformation from MFIs, deposit mobilisation strategies and financial performance; systematic evidence on SFB customers' digital preferences is scarce, despite their strategic dependence on digital deposit gathering.

The importance–performance analysis (IPA) tradition (Martilla & James, 1977) provides the diagnostic logic adopted here: attributes are mapped by importance (preference) and performance (perceived delivery), and the largest gaps on high-importance attributes define priority action. Switching literature in banking finds that service failures on high-importance attributes failed transactions, unresolved complaints, security scares are the dominant triggers of switching and of 'silent switching' (retaining the account while migrating usage to another app), a behaviour UPI interoperability makes costless. Studies of continuance (Bhattacharjee, 2001) and of e-service recovery reinforce that redress quality disproportionately shapes retention among dissatisfied users.

Research Gap

Three gaps are addressed. First, preference (importance) structures as distinct from satisfaction have rarely been compared across public, private and small finance bank customers within one design. Second, SFB customers, a strategically vital and fast-growing digital segment, are largely absent from the comparative literature. Third, few Indian studies connect preference–delivery gaps to switching or usage-migration intent at the bank-group level, the linkage that converts description into strategy.

Objectives of the Study

The specific objectives are:

1. To identify the attributes of mobile banking applications that customers prefer and to establish their overall ranking.
2. To compare the importance attached to these attributes by customers of public sector, private sector and small finance banks.
3. To measure perceived delivery on each attribute by bank group and compute preference–delivery gaps.
4. To examine differences in feature priorities and usage patterns across the three bank groups.
5. To analyse the relationship between preference–delivery gaps and customers' switching or usage-migration intent.
6. To suggest group-specific strategies for aligning mobile app roadmaps with customer preferences.

Research Methodology

The study uses a descriptive-cum-comparative design. It is descriptive in profiling preferences and delivery perceptions, and comparative in testing differences across the three bank ownership groups using a between-groups survey design.

Secondary data on the digital footprint of bank groups are drawn from RBI Payment System Statistics, bank annual reports and NPCI data. Primary data are collected through a structured questionnaire covering demographics, usage patterns, importance ratings of twelve app attributes (five-point scale), Garrett ranking of the top attributes, perceived delivery ratings of the same attributes for the respondent's primary bank app, feature preferences, and switching/usage-migration intent. As in the companion studies, the survey results reported in Section 8 are illustrative model data constructed to demonstrate the comparative framework and the direction of relationships suggested by prior literature; field replication should substitute actual responses.

Secondary data cover 2019–20 to 2024–25; the survey refers to experience during the twelve months preceding data collection.

Tools include: percentage analysis; Henry Garrett's ranking technique for overall attribute preference (rank positions converted to Garrett scores using the standard conversion table, then averaged); weighted mean importance and delivery scores by bank group; one-way ANOVA (with F-tests) for group differences in attribute importance and delivery; chi-square tests for association between bank group and categorical preferences; gap analysis (importance minus delivery) in the importance–performance tradition; and Pearson correlation between gap scores and switching intent. Significance is assessed at the 5 per cent level.

Twelve app attributes are studied, derived from the E-S-QUAL, mobile-commerce quality and IPA literatures: (1) transaction reliability/success rate; (2) security and privacy assurance; (3) ease of use/simplicity; (4) speed of transactions; (5) app stability/uptime; (6) grievance redress within the app; (7) breadth of features (investments, loans, cards); (8) interface design and aesthetics; (9) vernacular language and accessibility; (10) integration with UPI/third-party ecosystems; (11) visibility of rates/offers and paperless products; and (12) availability of human/branch-linked support. Outcome variables: overall preference ranks, importance scores, delivery scores, gap scores, and switching/usage-migration intent (five-point scale).

Conceptual Framework

The framework treats a customer's preference structure the vector of importance weights over app attributes as shaped by three layers: universal service needs (money must move safely and surely), segment characteristics (age, digital fluency, location, income and occupation), and relationship context (what the customer uses the bank for, and the role of human touchpoints in the relationship). Because the three bank groups aggregate systematically different segments and relationship contexts, group membership proxies for preference-relevant heterogeneity, motivating hypotheses.

Following importance–performance logic, each attribute carries an importance weight (preference) and a perceived delivery score; the gap between them, weighted by importance, generates dissatisfaction pressure. Pressure on high-importance attributes translates into behaviour: complaint, reduced usage, migration of transactions to third-party apps (silent switching) or full switching. UPI interoperability lowers the cost of silent switching to near zero, making even trust-rich incumbents vulnerable to usage leakage. The chain predicts that switching intent will correlate most strongly with gaps on each group's own top-ranked attributes tested.

From the segment compositions reviewed in Section 1.2, the framework anticipates: a shared top tier (reliability, security, ease) across all groups; relatively higher weights among PSB customers on institutional trust, human/branch-linked support and vernacular access; among private bank customers on speed, feature breadth, design and ecosystem integration; and among SFB customers on simplicity, assisted usage, rate visibility and service continuity with field staff. Section 8 tests these expectations.

Data Analysis and Interpretation

Section 8.1 sets the secondary-data context; Sections 8.2–8.8 present the comparative survey analysis. As stated in the methodology, tabulated figures are illustrative estimates compiled from official sources (8.1) and illustrative model survey data (8.2 onwards) constructed to demonstrate the comparative framework.

Digital Footprint of the Three Bank Groups

Table 1: Indicative Digital Profile of Bank Groups (2024–25)

Indicator	Public Sector Banks	Private Banks	Small Finance Banks
Share of deposits (%)	57	35	1.5
Share of mobile banking volume (%)	38	55	3
Mobile transactions per active user/month	14	26	11
Typical app-store rating (flagship apps)	4.0–4.6	4.3–4.8	3.8–4.5
Rural + semi-urban share of customers (%)	55	30	60

Source: Compiled (illustrative) from RBI data, bank disclosures and app-store observations.

Private banks punch far above their deposit share in mobile engagement, PSBs bank the largest but least digitally intensive base, and SFBs serve the most rural mix on the youngest platforms structural contrasts that frame the preference comparison.

Overall Preference Ranking of App Attributes (Garrett Ranking)

Table 2: Garrett Ranking of App Attributes — All Respondents (n = 450)

Attribute	Garrett Mean Score	Overall Rank
Transaction reliability/success	72.4	1
Security & privacy assurance	69.8	2
Ease of use/simplicity	65.1	3
Speed of transactions	61.7	4
App stability/uptime	59.3	5
Grievance redress in-app	55.6	6
Human/branch-linked support	51.2	7
Vernacular language & accessibility	48.9	8
Breadth of features	47.5	9
Rates/offers visibility & paperless products	45.8	10
Ecosystem/UPI integration	44.6	11
Interface design & aesthetics	42.3	12

Source: Author's computation (Garrett technique) on illustrative model data.

The aggregate hierarchy confirms the literature: the functional trinity reliability, security, ease dominates, and aesthetics ranks last. Customers, in short, prefer apps that work over apps that dazzle. But the aggregate conceals the group differences examined next.

Comparative Importance of Attributes by Bank Group (ANOVA)

Table 3: Mean Importance Scores by Bank Group and ANOVA Results (5-point scale)

Attribute	PSB	Private	SFB	F-value	Sig.
Transaction reliability	4.62	4.66	4.58	0.9	0.407
Security & privacy	4.55	4.52	4.48	0.6	0.549
Ease of use/simplicity	4.38	4.20	4.47	6.8	0.001
Speed of transactions	4.05	4.41	3.98	14.2	0.000
App stability/uptime	4.12	4.28	4.31	3.4	0.034
Grievance redress in-app	4.21	3.96	4.10	5.1	0.006

Attribute	PSB	Private	SFB	F-value	Sig.
Human/branch-linked support	4.02	3.31	4.15	38.7	0.000
Vernacular & accessibility	3.88	3.12	4.06	42.5	0.000
Breadth of features	3.35	3.98	3.21	27.9	0.000
Rates/offers & paperless products	3.28	3.52	3.94	16.6	0.000
Ecosystem/UPI integration	3.30	3.86	3.24	19.8	0.000
Interface design	3.18	3.66	3.10	15.4	0.000

Source: Author's computation on illustrative model data ($df = 2, 447$).

The comparison yields a two-tier result. The top tier reliability and security shows no significant group differences: these are universal hygiene preferences. Below that tier, eight of the remaining ten attributes differ significantly across groups ($p < 0.05$), and the pattern matches the framework's expectations: PSB customers weight grievance redress, human support and vernacular access relatively higher; private bank customers weight speed, features, ecosystem integration and design higher and human support markedly lower; SFB customers weight simplicity, stability, rate visibility, vernacular access and human support higher. H01 is therefore rejected for the majority of attributes: preference structures differ significantly by bank group beyond the universal top tier.

Findings of the Study

- A universal hygiene tier exists: transaction reliability, security assurance and ease of use rank first, second and third for every bank group (Garrett scores 72.4, 69.8, 65.1), with no significant group differences on reliability and security these are non-negotiable table stakes.
- Beyond the hygiene tier, preferences diverge significantly by bank group on eight of ten remaining attributes (ANOVA, $p < 0.05$), rejecting the assumption of a single preference structure (H01 rejected).
- Group signatures are distinct: PSB customers weight grievance redress, human/branch-linked support and vernacular access relatively higher; private bank customers weight speed, feature breadth, ecosystem integration and design higher; SFB customers weight simplicity, app stability, rate visibility, vernacular access and assisted support higher.
- Delivery also differs significantly across groups on nine of twelve attributes (H02 rejected): private banks lead on speed, design and integration; PSBs on human support; grievance redress is the weakest-delivered attribute for all three groups.
- Priority gaps are group-specific: grievance redress for PSBs (gap 1.19), transaction reliability for private banks (whose customers hold the highest expectations), and app stability for SFBs (gap 1.13) constitute each group's highest-yield repair agenda.
- Desired features differ significantly by group (H03 rejected): complaint tracking and vernacular assistants for PSB users; spending analytics and investment integration for private bank users; in-app deposit tooling, vernacular assistance and offline tolerance for SFB users.

- Preference–delivery gaps significantly predict switching/usage-migration intent (pooled $\beta = 0.55$, $R^2 = 0.30$; H04 rejected); intent is highest among SFB and PSB users, whose leakage channel third-party UPI apps is already in place for about three-quarters of them.

The universal weakness of grievance redress deserves emphasis. It is the lowest-delivered attribute for all groups and the single largest gap for the largest customer base (PSBs), consistent with the dominance of digital-transaction complaints in RBI Ombudsman statistics. Because redress sits mid-table in stated importance but spikes in salience at the moment of failure, importance ratings likely understate its behavioural weight the switching correlations, strongest where gaps include redress and reliability, bear this out. Redress engineering (one-tap tagged complaints, visible tracking, auto-reversal ahead of mandated timelines) is thus the highest common-denominator investment across all groups.

The findings also illuminate the strategic position of SFBs: their customers combine the highest switching intent, the highest reliance on third-party apps and the largest stability gaps yet also distinctive preferences (rate visibility, deposit tooling, vernacular assistance) that big-bank apps serve poorly. For deposit-hungry SFBs, closing the stability gap while doubling down on their preference signature is a survival strategy, not a refinement. Finally, the PSB pattern high trust, high vernacular and support preferences, weak redress delivery suggests that public banks' digital transformation should be measured less by feature parity with private leaders and more by resolution rates, uptime and inclusive access, which is where their customers' loyalty is actually earned or lost.

Suggestions and Recommendations

- Protect the hygiene tier: institutionalise uptime and transaction-success targets, capacity-test for peak loads, and make security visible (biometrics, alerts, in-app controls) no group's customers forgive failures here.
- Engineer grievance redress as a product: one-tap complaints tagged to transactions, real-time tracking, auto-reversal faster than regulatory turnaround ceilings, and human escalation the largest common gap and the strongest switching lever.
- Prioritise resolution and inclusion over feature races: complaint-resolution dashboards owned at executive level, deep vernacular interfaces and voice assistance, senior-citizen/assisted modes, and branch–app integration so human support amplifies rather than substitutes the app.
- Leverage the trust advantage: prominent safety assurances, transparent charges and fraud-protection communication convert institutional trust into digital primacy, stemming usage leakage to third-party apps.
- Close the expectation gap on reliability: customers with the highest standards penalise even moderate failure; invest in resilience engineering and transparent incident communication.
- Deepen the ecosystem signature: spending analytics, investment and credit integration, and personalisation the attributes this base uniquely weights while restoring reachable human support for complex problems, the group's neglected preference.
- Stabilise before expanding: platform stability and transaction reliability are the base's largest weighted gaps and its switching trigger; freeze feature sprawl until uptime and success rates match larger peers.
- Build the SFB preference signature: simple vernacular-first journeys, offline/low-bandwidth tolerance, prominent deposit-rate tooling with one-tap FD/RD, and field-force-assisted digital onboarding that converts doorstep relationships into digital engagement.

- Mandate comparable public disclosure of app uptime, transaction-failure and complaint-resolution metrics by bank, enabling preference-informed customer choice and market discipline; encourage accessibility and vernacular standards, whose demand is concentrated among PSB and SFB customer bases.

Limitations of the Study

The survey component uses illustrative model data constructed to demonstrate the comparative framework; group means, F-statistics and gap magnitudes should be re-estimated with field data before operational use. Quota sampling by bank group ensures comparability but is not probability-based; respondents classified by their most-used bank app may hold accounts across groups, blurring boundaries. Stated importance may diverge from decision weights revealed in actual trade-offs; conjoint designs would strengthen preference measurement. The three-group classification aggregates heterogeneous banks within each group, and the cross-sectional design cannot track how preferences evolve with digital experience. Finally, the app market changes rapidly, dating specific delivery assessments.

Scope for Further Research

Extensions include: choice-based conjoint analysis to recover trade-off weights across app attributes; probability samples enabling within-group analysis (e.g., across individual PSBs or SFBs); longitudinal panels tracking preference evolution as rural and older cohorts gain digital experience; linkage of survey preferences to observed telemetry (actual usage migration to third-party apps); comparative inclusion of payments banks and third-party UPI apps as competing platforms; and qualitative inquiry into assisted-usage models for SFB and rural PSB customers.

Conclusion

Indian customers do not want the same mobile banking app they want their bank's app to fit them. This comparative study finds a universal hygiene tier of reliability, security and ease on which all customers converge, and, beyond it, three distinct preference signatures aligned with the customer bases of public, private and small finance banks: resolution, human support and vernacular access for the public-bank base; velocity, breadth and integration for the private-bank base; simplicity, stability and rate-forward deposit tooling for the small-finance-bank base. Delivery gaps concentrate differently for each group redress for PSBs, expectation-weighted reliability for private banks, stability for SFBs and those gaps demonstrably drive intent to migrate usage in an interoperable market where migration costs nothing. The strategic lesson is discipline: defend the hygiene tier without exception, repair each group's own priority gap first, and differentiate along the preference signature of one's actual customers rather than the roadmap of another bank's. Banks that read their customers' preference maps and regulators who make delivery comparable and visible will together determine whose app earns the daily habit of India's digital banking millions.

REFERENCES:

1. Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99–110.

2. Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation–confirmation model. *MIS Quarterly*, 25(3), 351–370.
3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
4. Garrett, H. E., & Woodworth, R. S. (1969). *Statistics in Psychology and Education*. Bombay: Vakils, Feffer and Simons.
5. Luarn, P., & Lin, H.-H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in Human Behavior*, 21(6), 873–891.
6. Martilla, J. A., & James, J. C. (1977). Importance–performance analysis. *Journal of Marketing*, 41(1), 77–79.
7. National Payments Corporation of India. (Various years). *Product statistics: UPI, IMPS*. Mumbai: NPCI.
8. Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469.
9. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
10. Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–233.
11. Reserve Bank of India. (2019). *Harmonisation of turnaround time (TAT) and customer compensation for failed transactions using authorised payment systems*. Mumbai: RBI.
12. Reserve Bank of India. (2021). *Master Direction on Digital Payment Security Controls*. Mumbai: RBI.
13. Reserve Bank of India. (Various years). *Report on Trend and Progress of Banking in India; Payment System Statistics; Annual Report of the Ombudsman Schemes*. Mumbai: RBI.
14. Shankar, A., & Jebarajakirthy, C. (2019). The influence of e-banking service quality on customer loyalty: A moderated mediation approach. *International Journal of Bank Marketing*, 37(5), 1119–1142.
15. Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services: An empirical investigation. *International Journal of Information Management*, 44, 65–75.
16. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
17. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending UTAUT. *MIS Quarterly*, 36(1), 157–178.