Global Giants Vs Domestic Champion: Visa, Mastercard, and RuPay in India's Digital Payments Landscape

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Abstract

Visa and Mastercard have historically dominated India's payment card market, mirroring their global duopoly. However, RuPay – launched by the National Payments Corporation of India (NPCI) – has emerged as a strong domestic competitor, reshaping the competitive landscape through strategic policy support, lower transaction costs, and financial inclusion goals. This case study analyses the historical positioning, market strategies, and current status of these networks in India, concluding with potential future scenarios.

Keywords: *RuPay, Financial Inclusion, UPI, Visa, Mastercard, MRD.*

Introduction

The payments processing sector underpins global business by facilitating smooth electronic transactions across borders and institutions. Two companies, Visa Inc. and Mastercard Inc., have established themselves as near-monopolistic gatekeepers of this infrastructure, managing around 90% of all non-China card-based transactions (Nilson Report, 2024). With a collective market capitalisation over $850 billion (Westberg, 2024), these networks represent a formidable duopoly in an industry normally marked by fierce technological rivalry. Visa and Mastercard, established worldwide networks, commenced operations in India throughout the 1980s and 1990s, collaborating with prominent banks for the issue of credit and debit cards. Their business concept encompasses:

- Open-loop networks linking issuing banks, acquiring banks, merchants, and consumers.
- Revenue derived from transaction fees, assessment costs, and cross-border processing.

RuPay, initiated in 2012 by the National Payments Corporation of India (NPCI) under the Reserve Bank of India's goal for payment autonomy, is India's native card payment network aimed at diminishing reliance on foreign entities such as Visa and Mastercard.

The primary goals are improving financial inclusion by providing debit cards associated with Jan Dhan accounts, facilitating direct benefit transfers for subsidies and welfare programs, and reducing transaction costs for banks and merchants via local processing and minimum switching fees. As of 2023, RuPay has secured over 60% of India's debit card market by volume, propelled by robust government backing and its alignment with financial inclusion efforts. Despite its modest share in the credit card market (~3%), recent strategic initiatives, including the integration of RuPay credit cards with the UPI network, are designed to enhance its utilisation for contactless and online transactions. Additionally, RuPay is enhancing its worldwide acceptance by forming alliances with Discover in the United States and JCB in Japan to enable global transactions for Indian visitors.

Current Market Status

Metric	Visa	Mastercard	RuPay
Launch in India	Late 1980s	Early 1990s	2012
Network Model	Open-loop global	Open-loop global	Domestic, NPCI-owned
Debit Card Market Share (2023)	~20%	~15%	~60% (by volume)
Credit Card Market Share (2023)	~40%	~36%	~3%
Revenue Model	Transaction & assessment fees	Transaction & assessment fees	Lower domestic switching fees
Cross-border Acceptance	Global	Global	Limited; expanding via Discover partnerships

(Source: NPCI Annual Report, RBI Payment Systems Data 2023)

Key Strategic Differences

- Ownership: Visa and Mastercard are US-based public companies, whereas RuPay is owned by NPCI, an umbrella organisation of Indian banks.
- Processing Location: Visa and Mastercard process transactions internationally, complying with Indian data localisation norms since 2018, while RuPay ensures fully domestic processing within India.
- Interchange & MDR Fees: Visa and Mastercard have higher interchange and MDR fees due to global pricing structures, while RuPay offers lower fees enabled by domestic switching and government capping, benefiting small merchants.

- Government Policy Support: Visa and Mastercard operate with neutral government policy support, whereas RuPay benefits from strong policy backing under schemes like Jan Dhan Yojana and PMGKY to drive financial inclusion.
- Financial Inclusion: Visa and Mastercard have limited direct focus, with inclusion efforts primarily bank-led, while RuPay is a direct tool for financial inclusion, issuing zero-balance debit cards under Jan Dhan accounts.
- International Acceptance: Visa and Mastercard are accepted in over 200 countries, whereas RuPay has limited international acceptance, though it is expanding through partnerships with Discover and JCB to enable global payments for Indian users.

Recent Developments

In recent years, Visa and Mastercard have augmented their endeavours to solidify their standing in India's competitive payments sector. In 2021, Mastercard encountered limitations from the RBI regarding the issuance of new cards owing to non-compliance with data localisation regulations, which were subsequently lifted upon meeting the necessary regulatory criteria. Both networks are now vigorously pursuing India's burgeoning middle class by introducing co-branded credit cards in collaboration with fintech companies to enhance uptake. Simultaneously, RuPay has achieved considerable progress by distributing over 700 million debit cards by 2023, mostly propelled by governmental financial inclusion initiatives like Jan DhanYojana. Despite RuPay's limited market share in credit cards, its strategic integration with UPI credit has expanded its significance in India's digital payment landscape by facilitating contactless and online transactions through the widely-used UPI interface. Moreover, RuPay is concentrating on enhancing worldwide acceptance by forming alliances like Discover and JCB to enable global transactions for Indian tourists, therefore advancing its objective of being an all-encompassing payment network.

Competitive Advantages of Visa, Mastercard & RuPay

Visa & Mastercard	RuPay
Exhibit significant global brand recognition	Support from Government policy
Wide international acceptance	Reduced MDR, appealing for small merchants
Developed connections with high-end banking sectors	Cards with no annual fees for fundamental savings accounts
Services for advanced fraud management and data analytics	Domestic processing mitigates foreign exchange outflow

Challenges and Threats

Visa and Mastercard, while holding dominant positions in the Indian payments market, encounter substantial challenges and threats that may jeopardise their long-term growth. The primary concern is the rapid growth of RuPay, particularly in the debit card sector, which has consistently diminished their market share. Regulatory interventions that limit merchant discount rates (MDR) in favour of RuPay enhance its appeal for banks and merchants, primarily due to its cost-effectiveness. Furthermore, the profitability of Visa and Mastercard is significantly dependent on the premium credit card segment, a niche market in India, rendering their business model susceptible to economic downturns or changes in consumer spending behaviours. Conversely, RuPay, while maintaining a robust domestic presence, encounters various challenges. The acceptance of this payment method is primarily confined to India, thereby limiting its utility for customers requiring global payment solutions. Additionally, RuPay's presence in the premium credit card market is limited due to the absence of global loyalty programs and travel privileges, which are essential for affluent customers. In conclusion, as RuPay experiences rapid growth, it is essential for the platform to focus on technological innovation and security improvements to align with the benchmarks established by global entities such as Visa and Mastercard, thereby maintaining trust and competitiveness in the evolving digital payments landscape.

Prospective Development Scenarios for RuPay: Scenarios and Examples

1. RuPay integrates UPI to take the lead in credit cards, particularly for millennials who use UPI as their primary payment method. It also integrates with UPI credit transactions makes tap-and-pay and online purchases easy. For instance, the dominance of Visa and Mastercard in urban credit card markets will be directly challenged if large private banks introduce RuPay credit cards connected to UPI apps like PhonePe and Paytm.
2. Visa and Mastercard collaborate with fintech companies, by focusing on their premium market share by launching exclusive co-branded cards with fintechs like Slice, Uni, and Zolve that provide EMI, cashback, and global lounge access features. Whereas RuPay grows in its debit and entry-level credit card offerings but restricts its penetration in wealthy consumer segments.
3. Stricter data localisation laws and escalating geopolitical tensions may encourage banks to favour RuPay for strategic compliance. For instance, RuPay's share of salary account-linked credit and debit cards will rise sharply if the Indian government requires that government payments and public sector salaries be made using these cards.
4. RuPay can become accepted in important business and travel corridors by partnering with JCB (Japan) and Discover (US). For example, RuPay's international value proposition would be strengthened

and its reliance on Visa and Mastercard for international spending would be lessened if it were to be seamlessly accepted in the GCC countries (Saudi Arabia, the United Arab Emirates), where many Indians travel and work.

Conclusion

Looking ahead, RuPay is well-positioned to expand its market share by leveraging UPI credit integration, enabling seamless digital credit payments for India's rapidly digitising population. Its strong government backing, lower transaction costs, and alignment with financial inclusion policies will continue driving adoption, particularly among first-time card users and rural markets. However, to effectively challenge Visa and Mastercard in the premium credit segment, RuPay must enhance its international acceptance, premium card offerings, and loyalty programmes. Visa and Mastercard will retain dominance in global and affluent urban markets through innovation and fintech partnerships, but RuPay's growth trajectory indicates it could redefine India's payment landscape, potentially shifting the balance towards a more nationally sovereign and cost-effective card ecosystem in the coming years.

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