

e-RUPI: Revolutionising prepaid payments

August 2021



e-RUPI in a nutshell



QR/SMS string based prepaid e-voucher

Person- and purpose-specific digital payment solution

No cash out or transfers allowed, redeemed only at designated merchants

Sponsored by Government/ corporates/businesses

Rides on the UPI technology platform

Launched for COVID-19 vaccination benefits and potential roll-out of assistance under women and child development welfare schemes, TB eradication programmes, drugsvv and diagnostics under schemes like Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, fertiliser subsidies, etc.

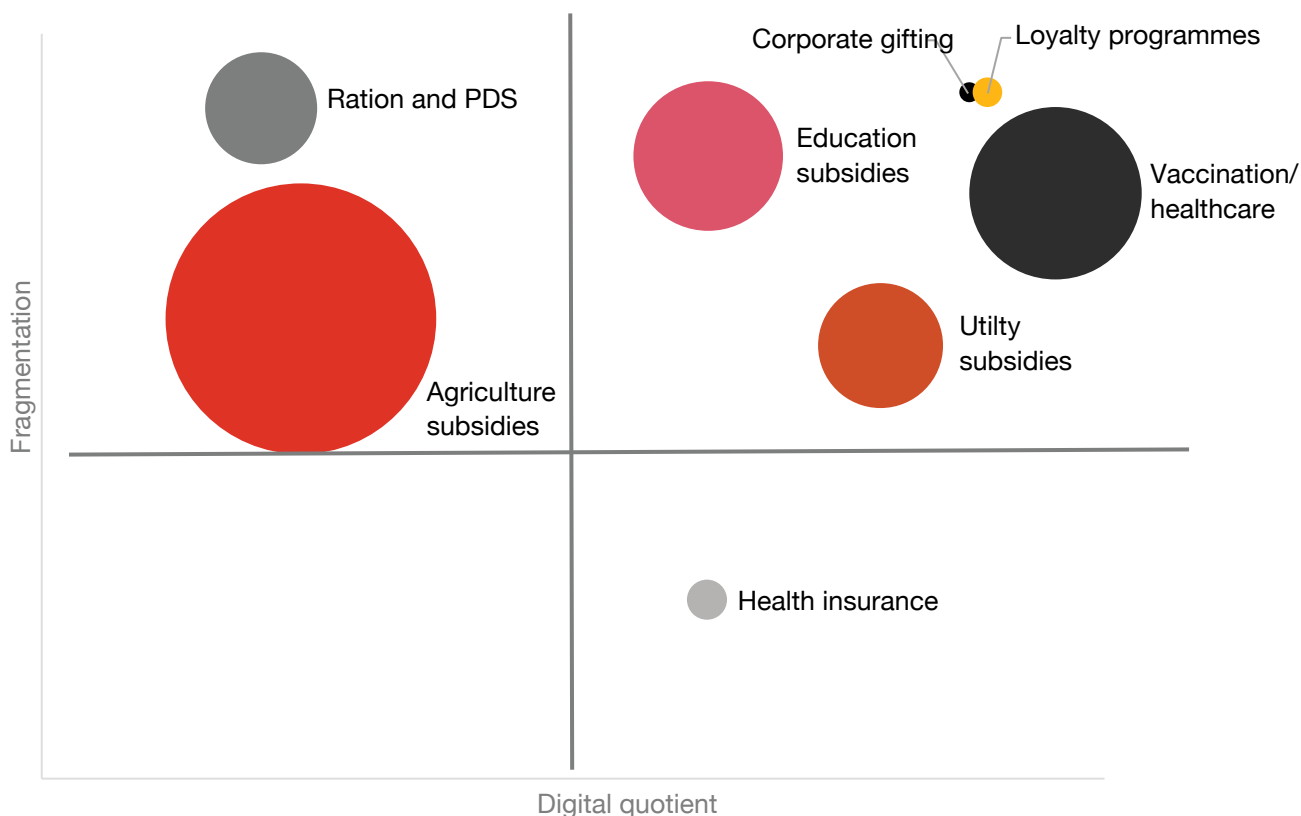


Potential use-case comparison for e-RUPI

The following parameters can be used for analysing the effectiveness of a use case:

- Market size – indicated by the size of the bubble
- Level of fragmentation – indicated on the fragmentation axis (bottom to top)
- Extent of digitisation – indicated by the digital quotient (left to right)

Use-case comparison



Source: PwC analysis

Prime Minister Narendra Modi launched e-RUPI – a person- and purpose-specific digital payment solution – on 2 August 2021. It is a prepaid instrument developed on the National Payments Corporation of India's (NPCI) Unified Payments Interface (UPI) platform which facilitates the delivery of a QR or SMS string based e-voucher to beneficiaries. The voucher can be redeemed using both smartphones and feature phones. It is available only for one-time usage and does not require any plastic card, internet banking or mobile applications.

e-RUPI vouchers are currently being rolled out for extending COVID-19 vaccination benefits to citizens. The Government also plans to use the vouchers for women and child development welfare schemes, TB eradication programmes, drugs and diagnostics schemes under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, fertiliser subsidies etc., in a phased manner. The voucher can also be used by private organisations to provide benefits to their employees and undertake corporate social responsibility (CSR) activities. It is a non-transferrable payment instrument and can only be redeemed at defined merchant category outlets in the form of person-to-merchant (P2M) transactions. It cannot be cashed out or used for person-to-person (P2P) transactions.

The key value proposition for e-RUPI lies in its ability to run on the existing UPI framework, thereby eliminating the need to onboard merchants for a specific use case. It is a completely digital payment solution that can be accessed through mobile phones, which distinguishes it from plastic cards.

The e-RUPI ecosystem

The success of e-RUPI will depend on the adoption of the offering by the following ecosystem participants:



Sponsors: Government/ corporates/businesses that are extending certain benefits to citizens/employees/users under defined schemes.



Issuing entity: An entity which is authorised by the Reserve Bank of India (RBI) to issue prepaid payment instruments (PPIs) and is live on the UPI platform can issue an e-RUPI voucher. The sponsor must have a current account and provide the funding amount for issuing the e-RUPI vouchers.



End customer: The end customer is provided with an e-RUPI voucher for availing services at designated outlets, hospitals, etc.



Acquiring entity: An acquiring entity acquires the merchant and settles the funds received from the mandate QR/string transaction. Such an entity is also on board with the NPCI on the UPI platform.



Merchant: The merchant scans/ reads the mandate QR/string and sends information to the acquiring entity for validating and facilitating transactions with UPI (NPCI) and the issuing entity for redemption.



e-RUPI use cases

While COVID-19 vaccination is a use case which has been prioritised for the launch of e-RUPI, the following use cases can be targeted to increase its adoption.

- While ration, Public Distribution System (PDS) and agriculture subsidies offer a large market for e-RUPI, the extent of digitisation of provider ecosystems like Government departments, value chain players and customers will also play a significant role in the adoption of this offering.
- The low fragmentation of health insurance, and digitisation initiatives under the Ayushman Bharat scheme offer a great use case for large-scale implementation of e-RUPI.
- Education, utilities and vaccination use cases can be successful if the stakeholder ecosystem can be effectively leveraged to overcome the extent of fragmentation.
- Corporate and loyalty use cases, though small in size, have digitised infrastructure which can serve as quick wins for the early adoption of e-RUPI.

While e-RUPI currently focuses on sponsors (Government/corporates) who have a current account with issuing entities, there is an additional opportunity to extend the services to retail customers in the future through banking channels and service additional use cases as mentioned below:

- Gift vouchers are popular prepaid instruments and can be leveraged on this platform, thus removing dependencies on the issuance and carrying of physical cards.
- Fuel top-up vouchers are daily requirements for fleet segments and also offered by corporates to their employees, and e-RUPI vouchers can be used for the same.

Potential business and technical challenges

While the purpose of the e-RUPI platform is to strengthen prepaid payment solutions, there are a few potential challenges which should be considered during the implementation.

- There is no option for multiple redemptions by the end customer and the voucher is exhausted in a single transaction.
- Customer education is critical since authentication is done by the acquiring entity, whom the customer is not registered with, and can be misused for fraudulent exercises.
- The issuing entity needs to maintain an effective back-end system that maps the voucher details correctly with the end customer and perform deduplication checks before authenticating the transaction.
- The acquiring entity needs to enable alternative modes of customer authentication and correctly translate financial transactions upon receiving end-customer details.

Critical success factors

A plethora of prepaid payment options already exists and e-RUPI will need to create a large-scale operationalisation plan to gain an edge over them. The most critical elements of the operationalisation plan would include stakeholder activation across issuing and acquiring institutions like banks, prepaid players, third-party application providers (TPAPs), merchants and corporates. The ability to leverage the existing UPI infrastructure with minimal incremental changes and higher success rates would be critical to ensuring that the large UPI participants adopt e-RUPI.



Conclusion

e-RUPI aims to address the gaps in current prepaid instruments by becoming the foremost digital and mobile-based solution for the banked and unbanked population across the country. The features of the product offering give it an edge over existing prepaid solutions. However, selecting the right use cases and quick wins will set the stage for large-scale adoption in the future.



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