

E-RUPI: New Digital Payment Platform

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ABSTRACT

e-RUPI is the central bank's digital currency (CBDC), a digital solution launched in India by the Prime Minister Narendra Modi to allow cashless payment solutions. The digital payment solution has been developed with the support of DFS (Department of Financial Services) and NHA (National Health Authority) and is powered by the National Payments Corporation of India (NPCI). This digital payment solution is said to be "leak-proof" and aims to reach out to millions of unbanked citizens in the long term. e-RUPI is an e-voucher where beneficiaries can complete transactions through a SMS or QR code. It will make users transfer funds through an SMS connected voucher directly to their bank accounts. Currently, some of the leading banks are associated with e-RUPI. It has been seen that the e-RUPI initiative of the government will be advantageous for the beneficiaries as they will be able to collect a direct benefit. It will be trustworthy and safe for both businesses and customers.

Keywords: Digital Currency, Voucher, Digital Payment System, e-RUPI.

I. INTRODUCTION

India has seen a massive shift in its digital payment ecosystem. The drastic change in different payment channels and streams has demanded for cashless payment options in the country. The government linked various services with initiatives such as IMPS, e-KYC, UPI, and the use of Aadhaar as an authentication mechanism to support the growth of Financial Technology. Financial Technology initiatives like Paytm, Google pay, etc. have overhauled India's digital payment market.

Customer friendly e-Wallets offer affordable digital transaction services via mobile phones to both the urban and the rural population. As we all know the rural population of India lacks of internet connectivity, and it still has a long way to go before transforming completely into a cashless economy. On 2nd August 2021, Prime Minister Narendra Modi launched e-RUPI, a contactless and cashless e-payment service, to bridge the digital gap among the unbanked population of India.

The effortless one-time payment mechanism gives users the benefit to redeem the voucher without a card, digital payments app, or internet banking access, at the merchants accepting UPI e-Prepaid Vouchers. The e-RUPI will only be shared with those with specific purposes or activity by organizations via SMS or QR code. This contactless e-RUPI is easy, safe, and secure as it keeps the data of the users completely confidential. The entire transaction process through a voucher is relatively faster and more reliable, as the required amount is already stored in the voucher.

Not only private organizations but ordinary people can also use the e-RUPI platform without necessarily having mobile phones. Users with simple phones can safely get the advantages of the e-RUPI system for government schemes. Even though the NPCI has made the e-RUPI system highly advanced and secure, the same benefits account for the limitations.

II. REVIEW OF LITERATURE

(Preeti Garg, 2017) examined Delhi's population on the cashless economy within the country. The study used a structured form and used the percentage method to analyze the data. From the collected data researcher found that the new era of a cashless economy has many advantages such as a substantial reduction in robbery, a down surge in black money, and an improvement in economy and development of the nation. On the other hand, there were many challenges also such as cybercrimes, lack of efficiency in online disbursements, lack of transparency, etc.

(Narayanan, 2020) emphasized the concept of digital currency, and how forms of money had changed every time from earlier times. The changes in digitalization have molded the concept of digital currency. The application of digital currency has a global impact, and the future for digital currency is very bright.

(Shah, 2017) deliberate to give an overview of digital currency. The study explained the processing, working of digital currency and factors impacting the application of digital currencies. Lack of efficiency, cyber fraud, lack of transparency and the attitude of people, etc. these

various risks related to digital currency are highlighted.

OBJECTIVES OF THE STUDY

1. To study the advanced digital payment system in the Indian economy e-RUPI.
2. To study the merits and demerits of the e-RUPI new digital payment platform.

RESEARCH METHODOLOGY

The data collected for this study has been taken from reliable sources and secondary data collection including past studies and articles. The study is a descriptive analysis of the new digital currency e-RUPI launched in India. The paper highlights the merits and demerits of the e-RUPI recently launched payment mechanism to ensure security and integrity in the phase of digital transformation.

DIGITAL CURRENCY E- RUPI

e-RUPI is a cashless, contactless, and one-timepayment mechanism launched on 2nd August 2021. It is a digital platform that will be used for making digital payments and to strengthen the Direct Benefit Transfer (DBT) scheme and digital transactions business to business (B2B) among Micro, Small, and Medium Enterprises (MSMEs). It is like the first step towards Central Bank Digital Currency (CBDC). National Payments Corporation of India (NPCI) in association with the Department of Financial Services (DFS), Ministry of Health and Family Welfare (MoHFW), National Health Authority (NHA), and partner banks, together associated in the development of the 'e-RUPI'. e-RUPI is basically a digital voucher that a beneficiary gets on his mobile phone throughan SMS or QR code. It is a pre-paid voucher, which

he/she can go ahead and redeem at any center that accepts it.

The users of this one-time payment mechanism will be able to redeem the voucher without a card, digital payments app or internet banking access at the merchants accepting e-RUPI. e-RUPI would be shared with the beneficiaries for a specific purpose or activity by organizations or the Government via SMS or QR code.

This contactless e-RUPI is easy, safe, and secure as it keeps the details of the beneficiaries completely confidential. The entire transaction process through this voucher is relatively faster and at the same time reliable, as the required amount is already stored in the voucher. (NPCI, 2021).

FEATURES OF E-RUPI

1. e-RUPI is a one-time payment mechanism.
2. Users can redeem the voucher without a card, digital payments App, or internet banking to receive or send money.
3. e-RUPI can be used for specific purposes only for that work via SMS or Quick Response (QR) Code.
4. The e-RUPI makes contactless and hassle-free payments anywhere in India instantly.
5. The digital voucher would be sent through mobile only to the recipient who should receive it.

VOUCHER ISSUANCE AND REDEMPTION PROCEDURE

The e-RUPI application is available on the Google play store or Apple App Store. It can be easily downloaded from there. The process for issuance and redemption of vouchers is given below for an easy understanding for the reader.(Verma, 2021)

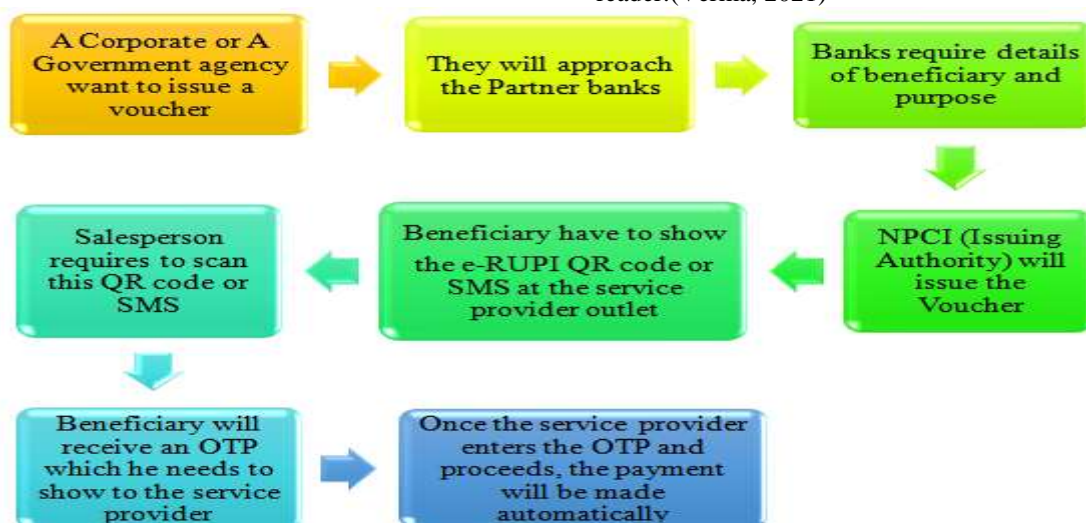


Figure: 1 Voucher Issuance and Redemption Procedure

Benefits of e-RUPI:

The e-RUPI voucher is directly delivered to the beneficiary's mobile phones, it eliminates the need for a digital payment app, card, or internet banking service. Following are some points that highlight the benefits of e-RUPI to corporates, consumers, etc.

- Corporate companies can think about enabling the well-being of their employees.
- Transactions are end-to-end digitalized and don't require any physical issuance hence leading to cost reduction.
- The issuer can easily track the redemption of the voucher.
- Quick, contactless and safe voucher distribution.
- Contactless payment and collection beneficiary should not carry a printout of the voucher even handling of cash or cards are not required.
- An easy redemption two-step process.
- Quick redemption process the voucher can be redeemed in a few steps and with a less period of time due to the pre-blocked amount.
- Safe and Secure because the voucher is authorized via a verification code beneficiary doesn't need to share personal details while redemption hence privacy is maintained.
- No digital or bank presence is required consumers redeeming the voucher need not have a digital payment app or a bank account.

MERITS OF E-RUPI

1. Government Schemes and Subsidies

The government of India launches various schemes for Indian citizens. Also gives subsidies for the welfare of the farmers, women, and children. the e-RUPI system is not only helpful for women and children but also for farmers. This platform is a safe and secure way to receive a number of schemes and subsidies.

2. Advantages of e-RUPI in the Private Sector

Employees can get benefits from e-RUPI as they can get their medical and corporate social services. The distribution of services will be safe, contactless, and fast as compared to a normal timeline. The issuer can track the voucher redemption process whenever the employees use it.

3. e-RUPI system is Exclusive

The e-RUPI voucher system is exclusive because it will work for specific purposes only. For instance, if you receive an e-RUPI voucher for medical bills, you can use it to pay medical bills only and not for shopping. QR Code for the voucher will be issued by NPCI and it will work only once. This system, therefore, enhances the safe use of funds and subsidies.

4. Easy Monitoring

With the e-RUPI system, private and public organizations can track how employees use their funds and services. As easy monitoring is possible no other ordinary people or government employees misuse the government funds because they will get restricted from using such funds.

5. No need to Register

One of the greatest advantages of the e-RUPI system is that you don't need for registration or a KYC process to get the facilities. To redeem the e-voucher, you just need to take it to the concerned service provider. The provider then matches it with their QR codes, and if it gets matched or valid then, you will get the service.

DEMERITS OF E-RUPI

1. Limited Number of Banks

At present, the system is associated with 11 Banks only, which means that other regional banks would have to wait until the platform succeeds nationwide. So for this many users may face the same issue while using this payment system.

2. Many users still don't have mobile phones

Many government schemes are meant for economically weaker sections of the economy. Most of them don't have knowledge of using mobile phones. This means those who are illiterate or unaware of using mobile phones won't be able to redeem the e-voucher as it requires pairing it with the QR code at the merchant's or service provider's end.

3. Voucher Expiry of e-RUPI

e-RUPI is a voucher-based prepaid service, if a user doesn't redeem it within a stipulated period, the voucher will get expired. The beneficiary would have to face problems of e-RUPI as they don't know how to receive it again. The voucher won't be misused by the service provider but is also believed to be useless for the beneficiaries if they don't redeem the voucher in time.

4. Misuse of e-RUPI

As the users don't need to link their bank account or register anywhere to redeem the voucher, the system works entirely through mobile phones. The government still don't have provisions to check consumer with a registered mobile number is exists or not. In this case, anyone in possession of a consumer's mobile can go to the service providers to redeem the voucher.

5. Technical Limitations

The e-RUPI system needs to be constantly connected to the system. Technological issues are unpredictable and may arise at any time. There may cause various cyber-attacks as still many people are not aware of it. The government and the issuers of e-RUPI vouchers need to make sure there are no technical causes of the e-RUPI platform before working with the payment system process.

III. CONCLUSION

1. It is an innovative initiative from the government towards user privacy and providing services to deserving consumers only. But, the pros and cons of the e-RUPI platform clearly pinpoint the areas where rectification is required. Given that the system is in its infancy, e-RUPI is expected to bring more security features in the future.
2. The e-RUPI has significant merits such as security and reliability for the users and the issuing companies, no need to carry cash or cards, easy redemption, no need for issuance of physical vouchers, the safety of personal data, no internet connection required, use of the smartphone is no bar, feature phone can be used, real-time transactions, direct benefit to individuals and no need of bank account.
3. Sometimes it suffers from shortcomings such as the beneficiary of the voucher to some other person and helps him in executing the transaction by sharing the SMS or QR code, in consideration of immediate monetary benefit.
4. United States of America, South Korea, and several other countries have used similar voucher-based initiatives for welfare services. Apart from fast-tracking digital payments, e-RUPI will also accelerate direct benefit disbursements at the last mile and help bring the unbanked and under-banked into the financial inclusion fold.

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