E-RUPI: An Innovation to Accelerate Financial Facilities in India

Saee Sumant
Assistant Professor, School of Economics and Commerce, MIT World Peace University, Kothrud, Pune
411038

Abstract:
E-Rupi is basically a prepaid voucher issued by the Indian Government. e-RUPI is basically a digital voucher which a beneficiary gets on his phone in the form of an SMS or QR code. It is a pre-paid voucher, which he/she can go and redeem it at any centre that accepts it. The users of this seamless 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. This paper studies the available literature. Through this study, we have tried to focus on the mechanism of the new concept of E-Rupi, the benefits, challenges faced by the government in implementation.

Keywords: E-Rupi, National Payments Corporation of India (NPCI), Digital voucher, Digital currency.

Introduction:
E-Rupi is basically a prepaid voucher issued by the Indian Government. India being a developing country is progressing towards growth every year. Central Government is working in different modes under the themes of Culture, Agriculture, Women, Natural Resources, and Youth power, Democracy, Knowledge and Digitalization to make India a Developed Nation. In the year 2021 it has taken a further step towards digitalization in the form of E-Rupi.

The phase of COVID-19 is forcing the people to rethink their business operations, the latest government initiatives in this field are playing a noteworthy role. The era of the digital revolution has been embarking their presence in every field. The use of technology has become an important part of the lives of people. As we grow we need more help of digitalization for many business operations, services etc. With the help of these technological advancements government tries to achieve their objectives. In a country as populous as an India, chances of corruption are very high and hence government came up with an initiative (E-Rupi) which will possibly reduce the corruption to greater extent.

National Payments Corporation of India (NPCI) is an umbrella of organizations for operating retail payments and settlement systems in India. It is an initiative by RBI & Indian Banks Association (IBA). NPCI was established by RBI for operating retail payments and settlement systems in India. It was founded in the year 2008. It has created various innovations in the area of Fintech and brought in various products which enable people to pay for various things through various platforms. First it introduced NFS (National Financial Switch) the largest network of shared ATMs. Then IMPS, CTS, RuPay, UPI, FastTag, BHIM and the list goes on. And the latest one in the list is E-Rupi. E-Rupi has been launched by Indian
Government on 02\textsuperscript{nd} August, 2021 to allow cashless payment solution for COVID-19 for Vaccination. Initially it was meant only for vaccination but later it is going to be used for fertilizer subsidy, Nutritional Assistance provided through Child & Mother Welfare Scheme. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana and Schemes for Diagnostics and Drugs.

In the present literature, it has been noticed that there is a relationship between e-governance and corruption (Andersen, 2009; Mistry & Jalal, 2012; Kim 2014; Aladwani, 2016), and the use of digital governance have significantly reduced the corruption practices in India. Garg & Panchal (2017) found out that the cashless economy has many merits such as substantial reduction in robbery, down surge in black money, and improvement of economic growth and development of the nation. With the help of E-Rupi Government is trying to reduce the corruption cases and directly reach to the beneficiaries of various government schemes. The very objective of introduction of E-Rupi itself is that, the prepaid voucher should be used by the beneficiary and for the specific purpose for which it has been issued. This helps the government to monitor that funds that have been earmarked for a certain purpose, have been used for that specific purpose only. The ultimate aim of the government is to make India, a digital economy with the least instances of corruption. The e- RUPI is an individual and objective-specific digital voucher.

This article aims at understanding what E-Rupi is all about and how it operates in the Indian Economy as a part of Fintech product. It also aims at understanding whether E-Rupi voucher is beneficial in reality and does it serves the objective with which Central Government has introduced it. Further this article focuses on how E-Rupi has performed till date and its future impact on Indian Economy.

**Understanding E-Rupi:**

E-Rupi is a cashless and contactless instrument for Digital Payments that plays a significant role in making Direct Benefit Transfer (DBT) more effective. Mainly E-Rupi functions like “Sodexo coupons”, it is only used for making those specific payments for the purpose for which it has been generated. E.g. COVID vaccination payment. With the use of E-Rupi the beneficiary (Vaccination centre) can receive money from citizens without any additional documentation & verification process.

Basic aim of E-Rupi is that, people with no access to an internet or banking facilities will also be benefited, as E Rupi doesn’ t require android or iOS as a QR code or sms based e voucher .Hence normal mobile phone without having special features can also be used for making payments through E Rupi.

**Mechanism: How E-Rupi operates?**

One must know that E-Rupi vouchers are like prepaid gift vouchers. These vouchers are person and purpose specific, like in case of fertilizer subsidies only government will first identify the proposed users and then the voucher will be issued in the name of that person only. So that government can check that whether the voucher has been used for a specific purpose only or not. It satisfies one of the basic objective of the government of avoiding corruption or bringing it down to a certain level.

**Flow of actions in case of E-Rupi, Voucher:**

Transaction flow of E Rupi works as follows.

Government department or any Body Corporate communicates information such as name, mobile number,
amount, the purpose of the voucher, expiry date etc. to issuing bank for issuing the prepaid E Rupi vouchers. Then issuing bank or payer PSP (Payment Service Provider) requests to NPCI to create E-Rupi voucher. NPCI then sends a confirmation to Bank/PSP for successful generation of voucher. Then the Body Corporate or Government department sends a QR Code or Sms string to the receiver of the E-Rupi voucher. Beneficiary then contacts the merchant through E-Rupi redemption and merchant validates E-Rupi vouchers, verify the beneficiary and then start the redemption process. Then at last, merchant will give a service to recipient upon successful redemption of voucher.

**Mechanism of E-Rupi presented through a diagram:**

**List of Banks which are already associated with NPCI for E-Rupi transactions is as follows:**
- Axis Bank
- Canara Bank
- Punjab National Bank
- Bank of Baroda
- HDFC Bank
- Indian Bank
- ICICI Bank
- Kotak Mahindra Bank
- Union Bank of India
- IndusInd Bank
- State Bank of India

**Benefits of Using E-Rupi Voucher:**
E-Rupi voucher can operate on basic mobile phone without android and iOS, even without an internet facility. The payments will be settled fast, as there is no intermediary involved. As we say it is digital rupee so no printing of physical cash will be required so government will not have to print currency notes so printing cost will also be saved. E-Rupi is a person specific and purpose specific voucher so it cannot be replicated. As Banks are issuing the voucher so RBI will be able to track movement of tokens already issued. As E-Rupi does not require android phone, iOS, internet banking person not having a Bank A/c
can also make a use of this scheme of government. It helps the government to reach remote areas where these facilities are not available. E-rupi voucher will directly be transferred to beneficiary’s account without intervention of banks and exchange of physical currency. The survey which is already conducted shows that 32 per cent of Indian consumers do not use or have access to mobile banking. Users without smart phone can also use E-Rupi voucher as it’s a offline transaction. As of now over 1600 hospitals and around 11 banks have started using E-Rupi vouchers. This has helped the government to ensure a contactless and cashless transactions during Covid situation as it was necessary to maintain the spread of the virus to certain extent only. And in turn it has also helped the Indian Government to ensure India’s socio and economic well-being.

**Challenges faced by E-Rupi:**

E-Rupi as it is a digital currency, it can be easily hacked by the fraudsters. It may also get corrupted/damaged due to malware or bug or technical error in the system as it is system generated voucher. E Rupi voucher generation system is backed by technical support, if the RBI server stops functioning then the entire flow of voucher generation will come to a standstill. Government is yet to issue guidelines on the regulation or legal issues that will be generated by misuse of the voucher. As the system does not require a bank a/c or KYC, so if the mobile phone of a person is stolen then any person with the possession of that stolen phone can redeem the e vouchers. One more drawback of E rupi is, since it’s a prepaid voucher it will have a specific timeline to redeem it. If a beneficiary forgets to redeem it within specific time, then the purpose of that voucher will not be satisfied & it will get time barred.. E-Rupi is associated with only 11 National Banks of India. Regional banks are yet to get adapted to the platform of E Rupi successfully. A larger section of Indian population is economically backward, with no access to mobile phones. Since the service can only be availed through mobile phones without having access to internet, bank accounts it will be difficult for government to check whether the user really exists or not or it can be misused by the scammers or it can be hacked by the scammers also. As E rupi voucher have specific time lines for redemption if banking servers are facing connectivity issues during redemption of E Rupi then it becomes a challenge.

**Findings**

**E Rupi Vs. UPI**

E-Rupi Voucher is different from UPI transactions. Main difference between UPI and E-Rupi transactions is, UPI transactions are backed by actual currency but E-Rupi is a digital tender which isn’t backed by physical currency. In UPI transactions actual money moves from one person to another whereas in E rupi government money or funds are utilized towards specific purposes. So basically in E-Rupi transactions, digital currency will be deposited in one person’s wallet and when vouchers are redeemed money moves from person’s wallet to merchants without banks intervention.

**Conclusion**

In countries like India where many people are still fighting for literacy, electricity issues and technological adoption, E rupi is proving to be boon. With its introduction government is achieving its target of financial inclusion, as users do not have to have bank account or fancy mobile phones to redeem E Rupi vouchers. But since it is just introduced, E rupi is into infant stage of its life cycle and India has long way to go for getting expected success in its implementation.
References