POLICY PROPOSAL

Introducing a QR-Code-Based Security and Verification System for Bank Cheques in India

Submitted for kind consideration of the Hon'ble Prime Minister of India

Government of India, New Delhi

Subject: Proposal for introducing a QR-code-based security and verification system for bank cheques in India to prevent cheque fraud and financial crimes

Respected Sir,

I respectfully submit this proposal for your kind consideration regarding the introduction of an advanced **QR-Code-Based Security and Verification System for bank cheques in India**. Cheques continue to be used by individuals, businesses and institutions, while cheque theft, forgery, alteration of amounts, misuse of stolen cheque leaves and fraudulent signatures can create significant financial risks. In view of India's rapid progress in digital banking and payments, a secure QR-based verification layer could strengthen the existing cheque-payment mechanism.

1. QR Code on Every Cheque Leaf

Every cheque leaf issued by a bank could contain a unique QR code digitally linked to that particular cheque. The code could carry, in encrypted or tokenised form, only the information required for verification: unique cheque identification, cheque number, issuing-bank identification, an account-holder verification token, intended payee, cheque amount, issue date, validity/status and a digitally signed security token. Sensitive information should not be openly stored in the QR code.

2. Verification Without Revealing the Full Account Balance

The system should protect the account holder's financial privacy. When a QR code is scanned, it should not reveal the customer's total bank balance or transaction history. For example, for a ■1,00,000 cheque, the verifier should only receive confirmation that the required funds are available or appropriately reserved for that cheque. The response could simply state: **Cheque Valid – Payee Verified – Amount: ■1,00,000 – Funds Available/Reserved – Eligible for Payment.**

3. Verification of the Actual Payee

The cheque could be digitally linked to its intended payee. The bank's system could verify whether the person or entity presenting the cheque corresponds with the authorised payee information. For higher-value transactions, additional authentication such as OTP, account verification, biometric authentication or another secure method could be required, subject to applicable law and RBI rules.

4. Prevention of Cheque Alteration and Forgery

The digitally registered amount and payee information could be compared with the physical cheque. If a cheque originally issued for ■50,000 is altered to ■5,00,000, the digital record would still show the authorised amount and could flag the mismatch. Similar checks could apply to payee names and other material alterations.

5. Protection Against Lost or Stolen Cheques

When a cheque is reported lost or stolen, its digital status could immediately be changed to **BLOCKED / CANCELLED / STOLEN / INVALID**. A later QR verification would then alert the bank

that the cheque is not eligible for payment.

6. One-Time and Digitally Signed Verification

Each cheque could use a unique digitally signed token. Once the cheque is successfully processed, the relevant token could become invalid. This would help prevent copying or reusing a QR code. The architecture could use encryption, tokenisation, digital signatures, Public Key Infrastructure (PKI), real-time bank verification, fraud-detection systems and multi-factor authentication.

7. Strong Customer Privacy by Design

The QR code should never expose the complete account balance, transaction history, passwords, PINs or unnecessary personal information. Only the minimum information required to verify that particular cheque should be returned. Sensitive information should remain inside the bank's secure infrastructure.

8. Possible Benefits to India

The proposed system could help reduce cheque fraud; detect forged and altered cheques; prevent misuse of stolen cheque leaves; improve payee verification; reduce financial crimes; strengthen banking security; protect customers from fraudulent transactions; improve confidence in cheque-based payments; create stronger digital evidence for investigations; and assist lawful investigations into fraudulent transactions.

9. Proposed National Standard and Pilot Project

The Government of India may examine the feasibility of a common national standard in consultation with the Reserve Bank of India, public-sector and private-sector banks, NPCI, cybersecurity experts and other relevant institutions. A pilot could initially cover high-value cheques and later be expanded after evaluating security, privacy, operational feasibility and cost.

10. QR Code as a Verification Layer, Not a Payment Credential

The QR code should function primarily as a secure verification and authentication layer rather than as a standalone payment credential. Existing cheque-clearing and banking controls can continue to operate, with the QR system providing an additional digital integrity check.

11. Request to the Government of India

Hon'ble Prime Minister, India has demonstrated remarkable progress in digital payments and financial technology. Applying similar technological innovation to the traditional cheque system could create an additional layer of protection for bank customers. I therefore humbly request the Government of India to kindly refer this proposal to the appropriate authorities, particularly the Reserve Bank of India and relevant banking and cybersecurity institutions, for technical, legal, privacy and regulatory evaluation. If found feasible and economically viable, a pilot implementation of a **QR-Code-Based Secure Cheque Verification System** may be considered.

Conclusion

I submit this idea with the sincere intention of contributing, however modestly, to the continued development and security of India's banking system. A carefully designed QR-based verification mechanism, built around encryption, tokenisation, privacy and one-time digital authentication, could provide an additional barrier against cheque-related fraud while preserving the confidentiality of customers' banking information.

Yours faithfully,
Saneesh.A.K
'Gorisankaram', Thazhevayal, Punnol, Thalassery, Kerala 670102 Phone: 9446633397