

CASE STUDY



PARTICIPATING ENTITIES



BUSINESS CHALLENGE

Income Tax Department of India sought to have a digitally signed, non-repudiable and easily verifiable security layer on the PAN Card, as they have encountered a growing menace of duplicate PAN cards and forgery.

PEPPER & INK TECHNOLOGIES SOLUTION

PITL proposed a mobility based solution which included a digitally signed enhanced Secure QR code printed on the PAN Card, and a mobile Application that on scanning the code decrypts and retrieves the data from the code, including photograph and signature, and displays it on the phone. The data is retrieved offline, with no reliance on cellular network or cellular data.

The PAN holders data is compressed and encrypted at time of data entry and code is generated in central database. The verifying Application is developed by PITL and hosted on Google Playstore for free download.

While the primary necessity is to add a security measure for ITD, with this new enhanced Secure QR code, the PAN Card holders credentials, including photograph and signature, can easily be verified by any entity he wishes to transact with. All the merchant has to do is go on to Google Playstore and download the Application and scan the code on the PAN Card. If the data seen on the card, and on the Phone is same, then it instantly proves to be a genuine PAN Card, and alternately if there is a mismatch, then it is rest assured that the data on the card has been forged.

BENEFITS

Digital security never compromised Total confidence about genuine data, and card authenticity.

Forgery Resistance The Secure QR Code data recording process is physically irreversible. Additional safeguards are created by the digital signature and PKI architecture. In combination, these features eliminate any realistic forgery attempts.

Data Protection HSM's excel at securing cryptographic keys and provisioning encryption, decryption, authentication, and digital signing services for a wide range of applications. We have deployed a total of 8 dedicated THALES HSM's specifically for the task of crypto key processing, securely managing, and storing cryptographic keys inside a hardened, tamper-resistant device in the Data Center & Disaster Recovery environment.

Interoperability Unifying the issuer and verifier instantly through a mobile platform.

Low Cost Solution The combination of advanced technology, durability of construction, data capacity, and application flexibility deliver maximum return on investment.

Speed of Use In just a few seconds, all card information can be read. This includes variable data and up to 2 color photographs.

Robust High Volumes With 6.5 million codes being issued each month, the scale of operations does not intimidate the architecture. All aspects of software, hardware and security integration are thoroughly primed to deliver such high volumes.

CASE STUDY



SCAN SECURE QR CODE THROUGH CUSTOM DEVELOPED APPLICATION TO RETRIEVE DATA OFFLINE



DATA REPRESENTED ON DEVICE SCREEN

