

1. About Fortytwo Labs

Fortytwo Labs specializes in the field of post-quantum-cryptography. We have developed a quantum-safe digital trust platform, with a vision to embed trust & security in every digital operation. The platform is based on **patented quantum-safe cryptographic algorithms** & helping various customers including Indian Defence, Banks, & Enterprises to achieve provable & trusted operations.

We have proven our mettle by winning several awards -

“Cybersecurity Product Company of the Year 2022”, By DSCI

“Best in cybersecurity Innovation 2023” MSME India Business

“Defense Champions Award 2023”, by SIDM

“NASSCOM Emerge 50 Award – League of 10” being the latest feather in our cap in Nov' 23.

2. Problem we solve

Since over 80% of cyber breaches happen due to weak or stolen passwords, MFA and/or password-less authentication can provide added layers of security necessary to protect users and their identities. Securing identity and access stands as a top priority in upholding enterprise security standards against existing and upcoming threats, such as the emergence of quantum computing.

3. About I-AM® Multifactor and Password Less Authentication

The technology is built on solid foundation of military grade (in literal sense) post-quantum-cryptography and has proven against the test of time, attacks, and regulatory requirements. The technology comes built in with strong tamperproof un-sharable cryptographic identity, cryptographic mutual authentication (better than 2-way-ssl), provable consent and various multifactor authentication mechanism. The mechanisms can be used in conjunction with fraud and risk management systems or enterprise may choose flexible authentication mode based on user's profile.

Below are the supported authentication types

- a) Push Notification
- b) Soft token (Offline token)
- c) SMS Token
- d) Email Token
- e) On Device Biometric
- f) QR Code
- g) Device implicit trust
- h) KBA

4. Advantages

This quantum-safe multifactor authentication solution, encompassing the above authentication types ensures robust security for applications. These solutions are deployed successfully in multiple banks.

Below are some of the advantages outlined:

- a) Enhanced security with Quantum Safe Cryptographic Authentication
- b) Password free digital identity
- c) Mobile based authentication
- d) Multiple options to choose from for Authentication types
- e) Embedded Cryptographic Handshake
- f) Reducing dependency only on passwords
- g) Offline Token support
- h) SMS/Email Token Support
- i) Simple user Onboarding
- j) Provision for Self-Servicing
- k) Flexible deployment options – Cloud/On-Prem/Hybrid
- l) No Code integration for AD/LDAP
- m) Quick deployment of the solution
- n) Helps achieve the various regulatory requirements.