



CASE STUDY

Paperless Transformation of Tata Steel using emSigner

Overview

Vendor onboarding was a very cumbersome process for Tata Steel. It was predominantly reliant on paper-based processes which slowed down its operational efficiencies. The Procurement Department of **Tata Steel** had to create multiple custom proposals per partner.

This process was manual, where proposals were made using Microsoft Office. Proposals were then printed, manually signed, and mailed across to vendors by courier. Similarly, vendor documents such as income statements, documents relating to information security, tax compliance were manually received and verified at **Tata Steel** headquarters from other locations. The entire process used to take 20–25 days for onboarding a vendor.

Vendor payments were also delayed due to manual

receipt of invoices followed by physical approvals from location managers that placed orders with vendors.

eMudhra outlined the following key areas where emSigner combined with digital signature capabilities to reduce the vendor onboarding and payment process from several days to a few hours:

- Multiple proposals were signed at once using bulk signing feature and were mailed digitally
- Vendors would be able to send digitally signed documents for onboarding and payment requests which would be automatically verified. These would be automatically checked for legal validity and checked for its accuracy directly by the Corporate Office

Business Matters

Tata Steel, an Indian Multinational steel-making company with annual crude steel deliveries of 27.5 million tons (in FY17), goes completely paperless by using emSigner's

Digital Signature and Workflow capabilities for streamlining vendor onboarding and automating the vendor payment process

Business Needs

Vendors play an important role in the overall steel industry ecosystem owing to the complex nature of raw material procurement. Thus, maintaining a healthy relationship with vendors becomes imperative. This was achieved by reducing vendor onboarding time as well as automating vendor payments.

Digital Signature Technology

The Digital Signature Technology works on the Public Key Infrastructure framework which uses a Cryptographic Key Pair – Private and Public Key for secure access and transmission of information.

Digital Signatures are generated by the issuer for the client in a secure device.

Approach

Deploy an integrated solution to digitally sign and encrypt documents that are legally binding and guarantee the authenticity, integrity, and confidentiality of data. The department should be able to use emSigner for multi-party physical signatures and real-time signing of documents related to invoice processing, regulatory compliance and audit sign-off, expense reporting, and inventory sign-off.

In a phased manner, **Tata Steel** would integrate all its internal as well as external applications with emSigner to facilitate the signing of invoices, proposals, contracts, and other documents.

- Departments/Location Managers would be able to approve requests digitally and track their real-time status. This led to conformity and timely reportin
- emSigner was integrated with **Tata Steel's** existing systems such as ERP, CRM, SCM using web services APIs

eMudhra Solution

eMudhra implemented emSigner – Secure Paperless Office solution to enable Digital Signature-based approvals for the following workflows:

- External flows for Vendor Onboarding and Vendor Payments
- Internal flows between Departments and Finance
- The bulk signing of documents for sending proposals to the vendors

The paperless office solution uses following broad modules:

- emSigner was integrated with the ERP application over Webservices API for digital signing of documents
- Deployment was done on-premise which allowed **Tata Steel** greater degree of control and customization and allowed the company to retain data on-premise for confidentiality purposes
- For individual signing, individual digital signature certificates were issued to Authorized Signatories
- For Bulk Signing, Class 3 Document Signer Certificate was used which gives a higher risk assurance to relying parties for a critical use case such as Invoice Signing
- From a security and risk standpoint, a Hardware Security Module was used to store the Class 3 Document Signer certificate

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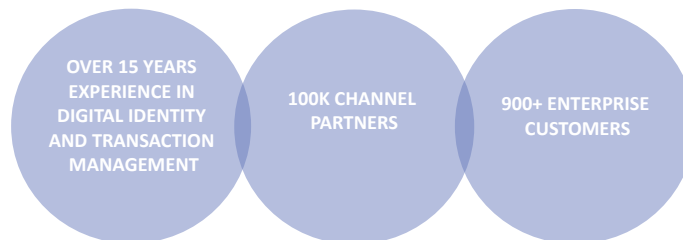
- **emSigner**
On-premise Digital Signature enabled workflow management solution used for defining paperless workflows
- **Hardware Security Module**
Protect the cryptographic infrastructure of some of the most security-conscious organizations in the world by securely managing, processing, and storing cryptographic keys inside a hardened, tamper-resistant device
- **Class 3 Document Signer Certificate**
To sign critical documents such as invoices
- **SecurePass**
emMudhra authentication server which was used to automatically validate the signed documents that was received by the organization

Benefits

Tata Steel reaped significant benefits by implementing digital signature-based workflow signing.

These include:

- Reduction in vendor onboarding from 25 days to a few hours
- Automation of Accounts Payable
- Legal non-repudiation, eliminating fraud
- Signing and approving of documents anywhere, anytime
- Faster turnaround time, increased employees' efficiency, productivity, and transparency
- Meeting compliance & regulatory requirements
- Complete paperless workflow resulting in huge savings



About emudhra

eMudhra is a leading provider of digital trust solutions, specializing in Public Key Infrastructure (PKI), Post Quantum Cryptography (PQC), and Fully Homomorphic Encryption (FHE) technologies. With a robust portfolio that includes digital signature solutions, identity management, and secure transaction solutions, eMudhra empowers organizations across various sectors, including defense, finance, healthcare, and government, to enhance their digital security. Committed to innovation and excellence, eMudhra continuously invests in research and development to stay ahead of technological advancements, ensuring their solutions meet the highest standards of security and compliance. By integrating cutting-edge cryptographic technologies like PQC and FHE, eMudhra ensures that its clients are equipped to face future cyber threats with confidence. With a global presence and a strong customer base, eMudhra is dedicated to fostering a secure and digitally empowered world.