



DIGITAL INDIA VISION

Use of Digital Signatures to create a completely paperless environment

TABLE OF CONTENTS

- Digital India Vision
- Adoption of Digital Signatures
- Digital Revolution – Going Green and Paperless
- Paper to Paperless – Cost of Use of Paper
- Document Signing System
- Value Proposition of a Document Signing System
- Enablers/Measures already put in place by CCA
- Paper Usage in the Financial Services Industry
- Paper Usage in a General Corporate
- Conclusion

“There is nothing so useless as doing efficiently
that which should not be done at all”

- Peter Drucker, Management Guru

Why print, sign and scan when you can digitally sign?

The Digital India Vision emphasizes the use of technology to enable connectivity to every Indian citizen for

- Education
- Healthcare
- Financial Inclusion
- Other areas of governance

The government plans to issue AADHAR to every Indian Citizen by 2015 end.

While AADHAR captures the digital identity of the person, Digital Signatures facilitate secure digital transmission of data and information along with the identity of the person. Thus it ensures secure digital transactions

Indian Information Technology Act was passed in 2000 which gave the legal sanctity for Digital Signatures based on PKI technology in India

While in the initial years the momentum was slow, with a big push from the Government sector the adoption of Digital Signatures has increased significantly in the recent past

Government Sector:

- Ministry of Corporate Affairs was the first to adopt digital signatures in a major way, for entire Company Law Administration
- Income Tax Department has also mandated use of digital signatures for certain types of assesses.
- RBI has mandated digital signatures as one of the authentication mechanisms for online banking.
- E-Tendering has been completely digitized.
- Several State Governments are implementing digital signatures in local tax administration. (Eg, VAT)



Private Sector:

- In view of the adoption by the Government for various applications private sector uses digital signatures for their interaction with Government.
- They have also started using digital signatures for issuance of TDS certificates, Form-16s, employment offer letters, certain statements etc. Hence most of the authorized signatories in organizations have digital signatures at present.
- While private sector has started using Digital Signatures for mostly government related transactions, **the adoption is still low and full potential of Digital Signatures is not yet realized**



Usage of Digital Signature has the potential to completely eliminate paper and go digital and paperless

Information Technology Act gives the legal sanctity for use of Digital Signature in all documents (except five types) thus paving way for usage of digitally signed documents in all transactions

While most of the organizations have digitized their data and data flow, still the associated paper flow happens physically.

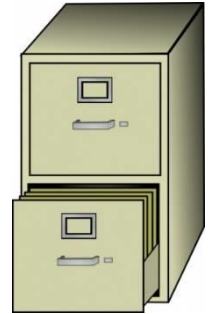
For example,

- In a Bank, while customer data is kept electronically, all customer applications are signed physically and stored in physical files.
- In an Insurance company, while all the policy details are kept electronically, all policy application forms and associated documents are signed physically and stored in physical files.
- In a hospital, while the patient information is stored electronically, the discharge summary, claim forms are signed and stored physically.

There are countless such examples..

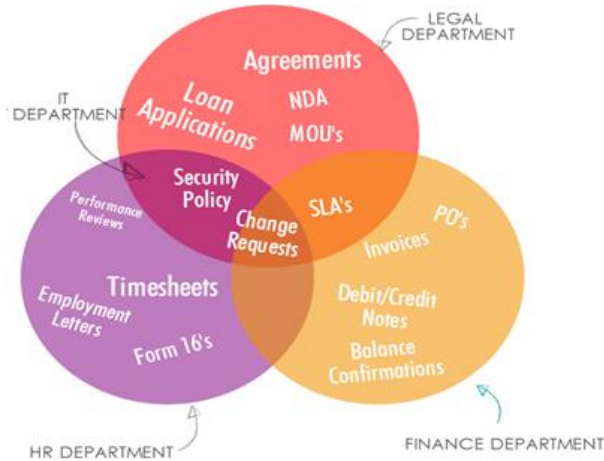
In all these cases, documents are created physically, signed physically, scanned and then stored electronically and physically which is against Peter Drucker's principle

There is a huge opportunity here to completely digitize all interaction between organizations (private and government) and its customers, suppliers, employees and other stakeholders using Digital Signature

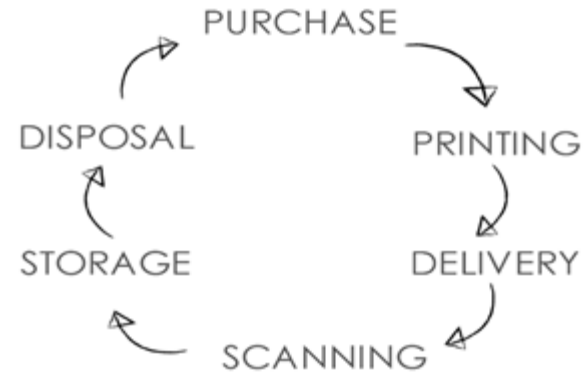


Paper to Paperless – Cost and Use of Paper

TYPES OF DOCUMENTS



PAPER LIFECYCLE



A lot of paper gets generated at the time of signature even though most of the core business functions are automated

As the paper traverses through the organization and outside, cost increases manifold per above lifecycle. Further it poses lot of difficulty in tracing.

This also results in compliance failures and frauds as paper based signatures cannot be mapped to authorization matrix.

Document Signing System



DATA-FLOW SYSTEMS

While these systems handle the entire data flow within and outside the organization, corresponding documents currently get signed and move physically

Document Signing System

DOCUMENT-SIGNING SYSTEM

This can replace complete document movement associated with the data which are currently handled in physical files.

- The above solution can offer a last mile solution towards truly eliminating paper by 100%.
- The above system can have time stamping, encryption, validation, etc to ensure complete authenticity and security of the digital transactions

- Going Green
- Reduce Cost and Time
- Ability to do transactions from anywhere
- Ensure Authenticity
- Ensure Data Integrity
- Ensure Traceability

Such a system can lead to huge cost benefits while at the same time ensuring compliance and governance



Enablers/Measures already put in place by CCA

Information Technology Act enables signing of any document using Digital Signatures, excluding the below:

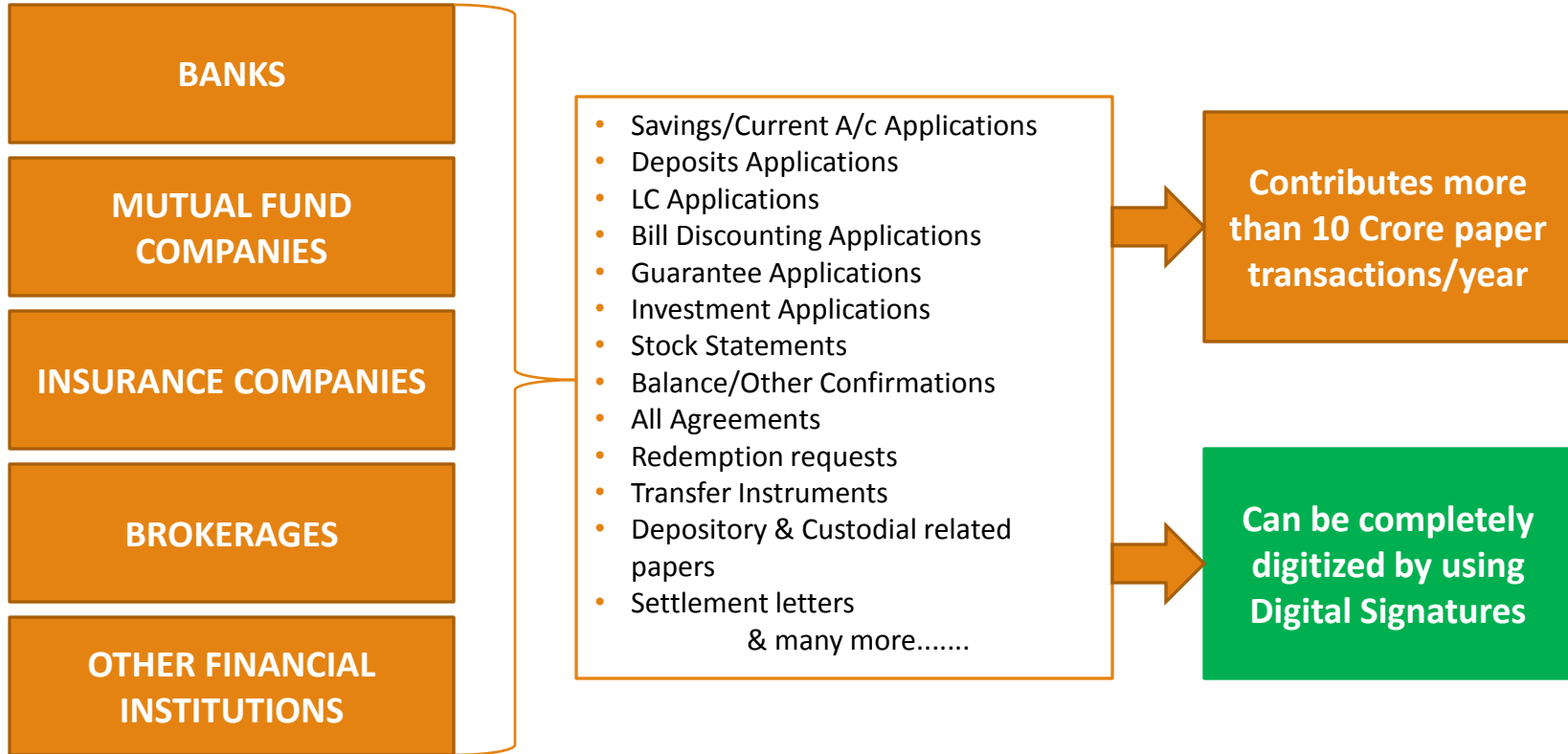
- Documents relating to transfer of immovable property
- Power of Attorney
- Negotiable Instruments (other than Cheque)
- Wills
- Documents pertaining to Trusts

CCA Office, Ministry of IT has put in place operating framework for usage of digital signatures including the following -

- Usage of Class 1, Class2 and Class 3 Digital signatures based on risk levels of various transactions
- Usage of eSign which is an online digital signature which can be used for signing of any document
- Usage of Document Signer Certificates to authenticate volumes of data automatically generated through computer systems
- Enablement of AADHAR integration which can result in quicker issuance of DSCs based on e-KYC.
- Introduction of Online Certificate Status Protocol (OCSP) to validate digital signatures on a real time basis, as a mandatory service to be provided by Certifying Authorities
- Introduction of Time stamping Service with detailed guidelines.

Thus CCA Office, Ministry of IT has taken a number of measures towards digitization goal

Paper usage in the Financial Services Industry in the current scenario



Paper usage in a General Corporate in the current scenario

CORPORATES



HUMAN RESOURCES

- Job Applications
- Interview Letter
- Appointment letter
- Acceptance letter
- Payslips & Form-16
- Provident funds
- All other letters – bonus etc

FINANCE

- Purchase Order – To supplier and from customer
- Invoices - To customer and from supplier
- All vouchers and accounts related documents
- Tax Filings
- All other letters

LEGAL

- Agreements
- MOUs
- Legal filings
- Other letters

Contributes more than 20 Crore paper transactions/year

Can be completely digitized by using Digital Signatures

- As may be seen from the previous slides, there is a huge opportunity for every organization – be it a bank, Mutual Funds, Insurance Company, Hospitals or any other organization
- This can be achieved using the current legal framework and Digital Signature Infrastructure available in the country
- The cost of implementing and running such document signer applications is also reasonable compared to the benefits that can be derived
- Thus, while Document Signing Applications can lead to high ROI & low payback period, it will also lead to other benefits as under –
 - ✓ Going Green
 - ✓ Ability to do transactions from anywhere
 - ✓ Ensure Authenticity
 - ✓ Ensure Data Integrity
 - ✓ Ensure Traceability



THANK YOU

For any queries or clarifications, please write to
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