White Paper

Digital Age

Digitization – For a Paperless Environment

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Abstract

In today's world, leading organizations are striving towards a paperless environment as it saves paper, is an eco-friendlier alternative and cuts down cost dramatically. Digital Mailroom solution is the answer for organizations to achieve this - by making optimal utilization of technology, facilitates speedy processing in an environment free of hassle or errors, improves end-customer satisfaction and enables cost savings for the organization.

Introduction

Organizations thrive on communication from customers, employees, stakeholders, vendors and many others. This leads to inflow of paper documents via letters or fax. When the business correspondence increases there tends to be higher volumes which would get unmanageable over a period of time.

Organizations tend to move towards paperless office due to various factors like

- Unmanageable high paper volumes,
- Time consuming process for identification, sorting and delivering to the end user,
- More storage space – as paper tends to take more space leading to storage costs, possibility of documents getting damaged due to climatic changes and pests
- Misplacement of documents – higher volumes can lead to mismanagement of paper
- Storage cost of documents for future reference – Increase costs by taking a photocopy of the document for future reference, which further takes more space
- Outward documents also would need storage space for maintaining the photocopy for future reference which increases, postage and delivery costs

Benefits of converting Paper to Electronic form:
- Automation to ensure high degree of traceability and accuracy
- Streamlined and IT-enabled processes ensure a high degree of reliability, reconciliation and high productivity enabling to tackle large volumes, without having to rely on high levels of manpower
- Systematic handling of documents
- Improves the processing speed
- Enables fast retrieval by multiple users in multiple locations
- For outward documents, switching over to email based delivery of letters, intimations, notices except in few critical mails for large number of returned undelivered
- Paper-less office to paper-less delivery by phasing out paper based notices, intimations, letters and replacing by email, SMS, website driven delivery to customers

Digitization

Mail room:

To have a better and a systematic control over paper, the inward documents need to be given an Identity. This is to ensure that the documents can be traced at any point of time. The Mail room would need to be a secured area for tracking all the inward and outward documents. All documents need a scanned image, as post processing all Physical documents could be shifted to the warehouse for storage. But there would be a requirement for interim storage of the documents i.e. the work in progress, during processing. All the scanned documents need to be directed to the respective queues for further processing, by the users. Post processing and once the decision is taken upon each document, outward documents are to be generated, printed and sent to the end user by email, SMS or in critical cases by post.

For grouping the various categories of Inward and Outward documents, the category of communication is identified for each document type. Each inward document would need to be allocated an inward communication code and each outward document to be allocated an outward communication code. All types of identified documents would need to be in a structured format inclusive of electronic form or physical document which would enable systematic tracking of the documents in the Portal or the automated interface. High speed scanners are used to create the image of the physical document. The scanners are set for managing the various sizes of the papers.

Processing:

Each document category image would follow a specific queue to be processed further in the downstream applications by the specified users, to avoid any confusion or misuse.
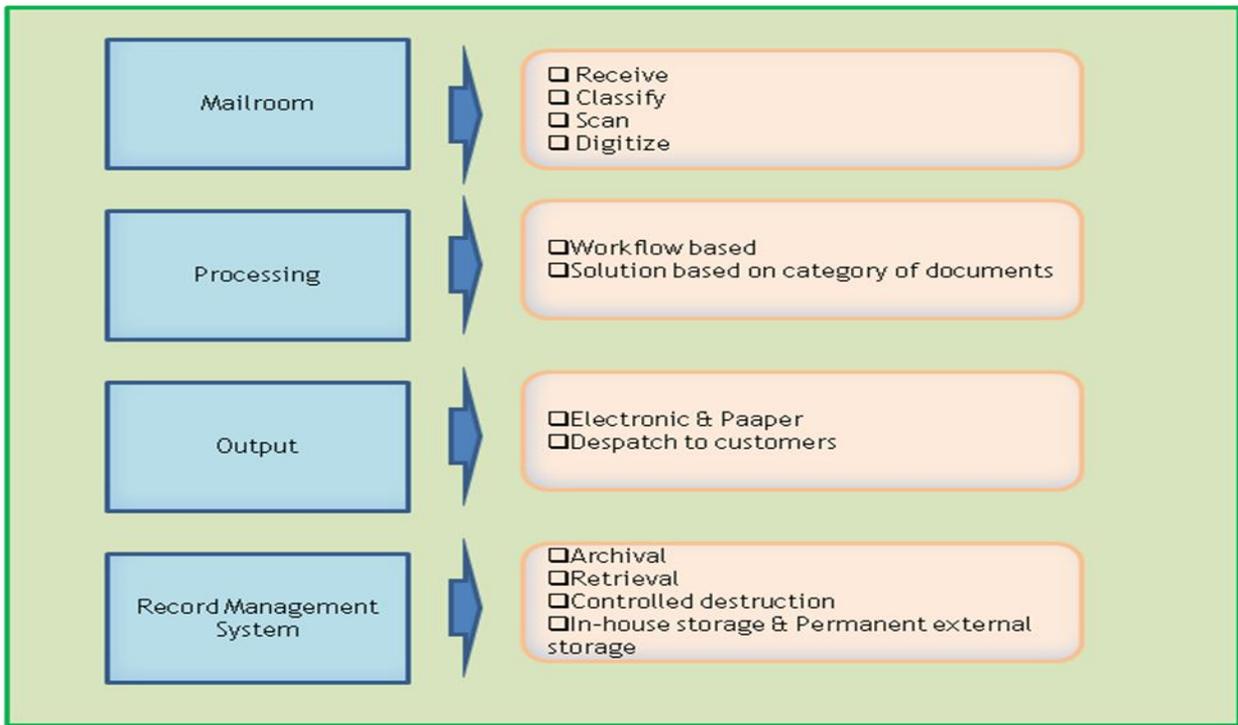
Figure 1: End to End Solution

Output/Dispatch process:

The outward communication is by email or SMS or phone or Post, wherever applicable. The physical documents are printed in Bulk by using the high speed printers in the specified formats and with mail packaging system.

Record Management System:

Post processing of the document category, the physical documents are sent for storage at the storage centre. Any mail which is returned undelivered is read into the system with the help of the document identity and sent for archival for future reference. Any document which does not have a future value, are shredded as the scanned copies can be used for reference. The cartoning solution enables in movement of the documents to the storage centre from the processing centre. As each document has an identity, it would be convenient for retrieval of the document, when required.
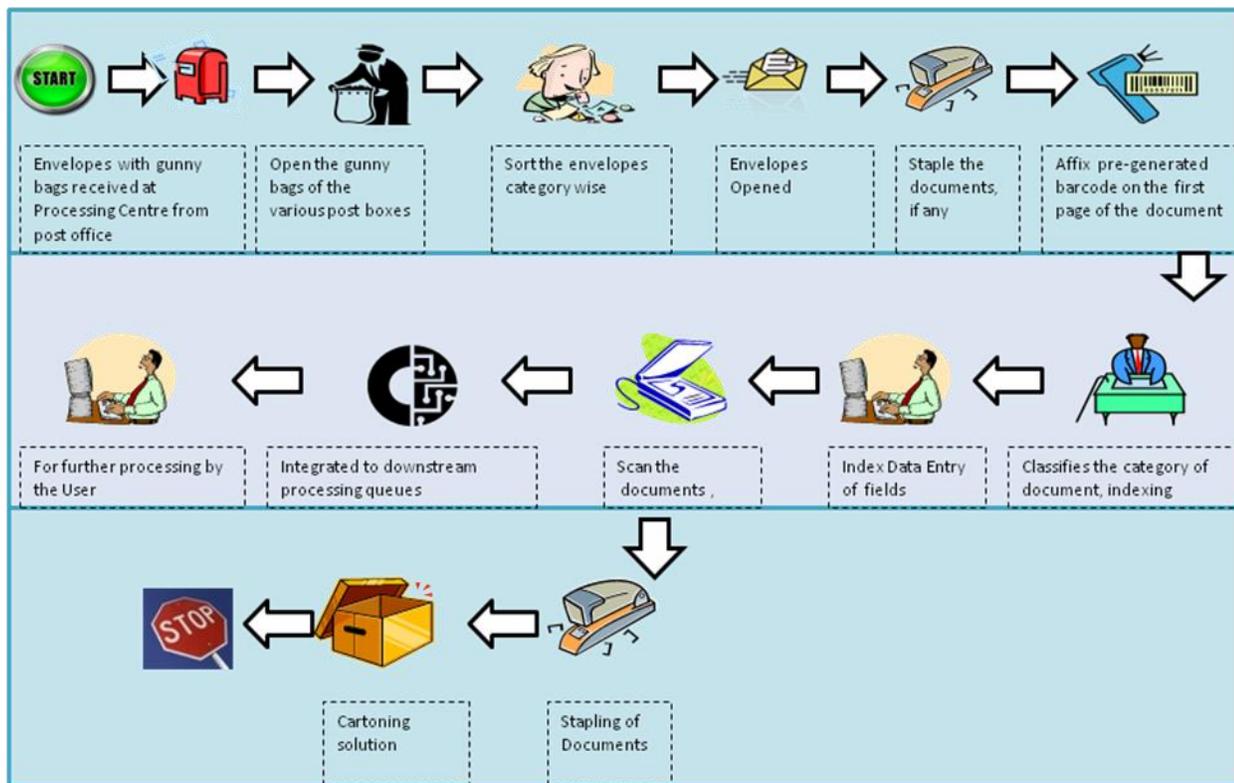
Figure 2: Converting Paper to Electronic

Flow of process steps:

1. Envelopes with gunny bags received at Processing Centre from post office
2. Open the gunny bags of the various post boxes
3. Sort the envelopes category wise
4. Envelopes Opened
5. Staple the documents, if any
6. Affix pre-generated barcode on the first page of the document
7. Classifies the category of document, indexing
8. Index Data Entry of fields
9. Scan the documents,
10. Integrated to downstream processing queues
11. For further processing by the User
12. Stapling of Documents
13. Cartoning solution
14. STOP

Change in Process

For the process being followed which is manpower intensiveness and time consuming, the new improved process has high degree of traceability, accuracy and amenability to automation.
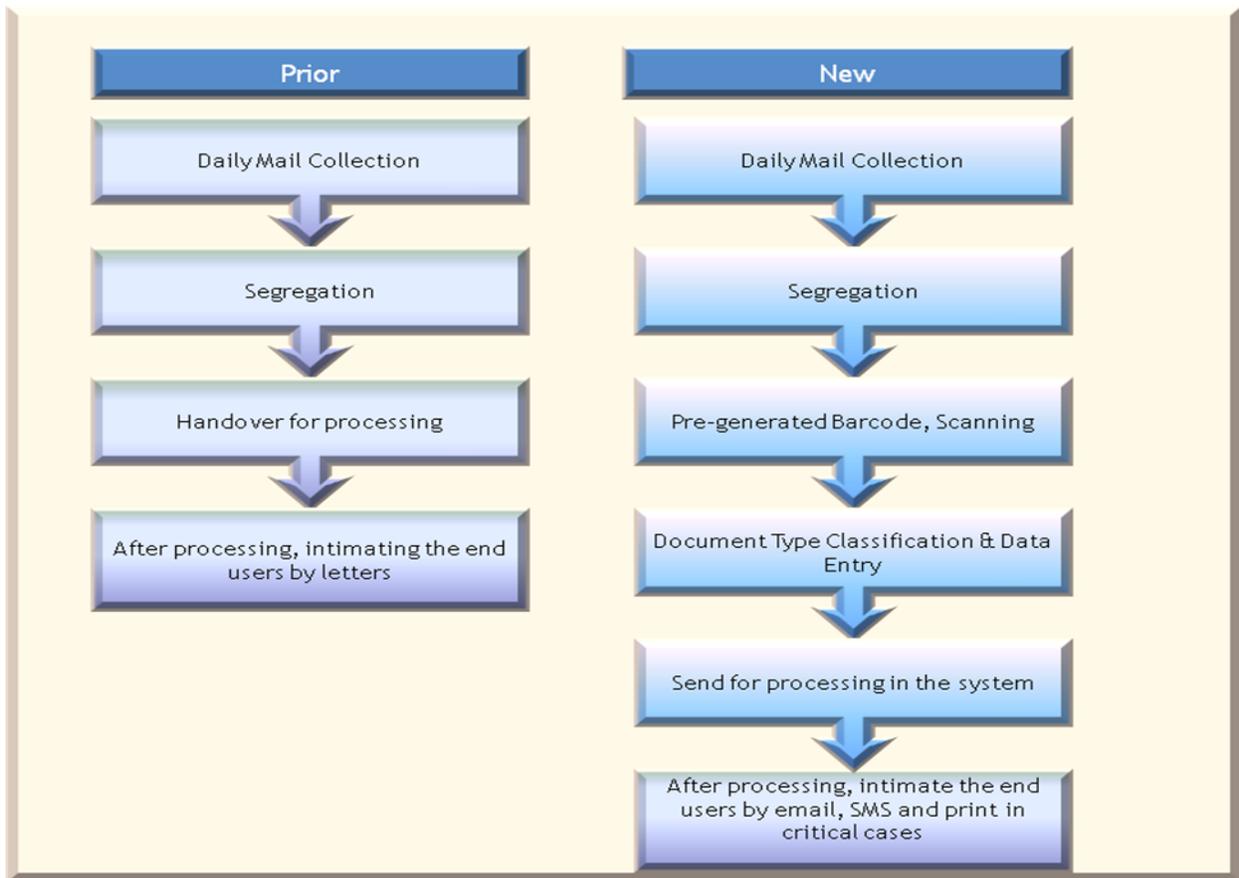
Figure 3: Process Change

Issues and Solutions

The solution created gives an identity to the document with a pre-generated barcode which is available throughout the life cycle of the document. The scanned image helps in traceability of the document and for future reference. There is no risk of losing the document as it moves through various stages of processing in queue system. The document image follows a specific queue with a specified user access for processing. Post processing, the physical documents are sent for archival.
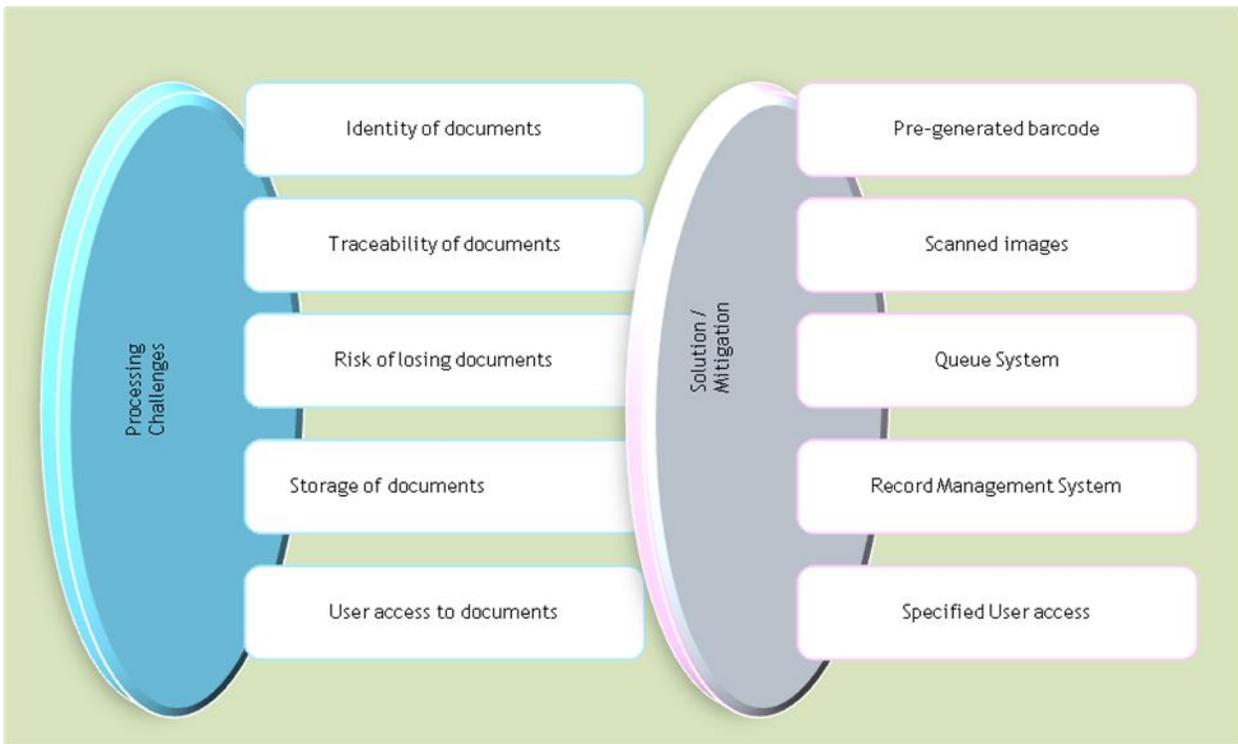
Figure 4: Challenges/Issues faced by the Organization and Solution /Mitigation
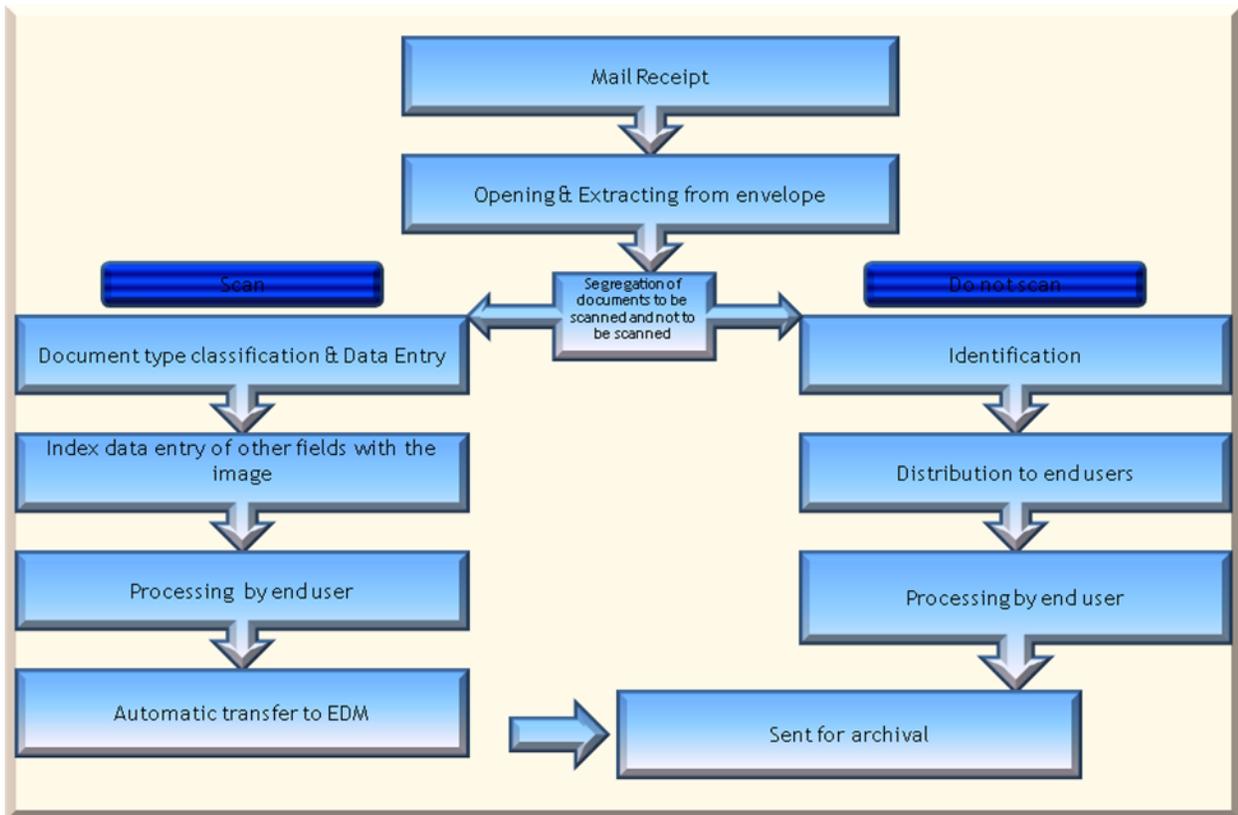
Lifecycle of the Document

After segregation of the documents and post decision of scan or not to scan, each document follows a process flow till the point of archival. The lifecycle of the document would follow a separate path based on whether to scan or not to scan the document.

Exclusions: For documents which are considered as confidential, the life cycle of the document would follow the path where the document does not need to be scanned.
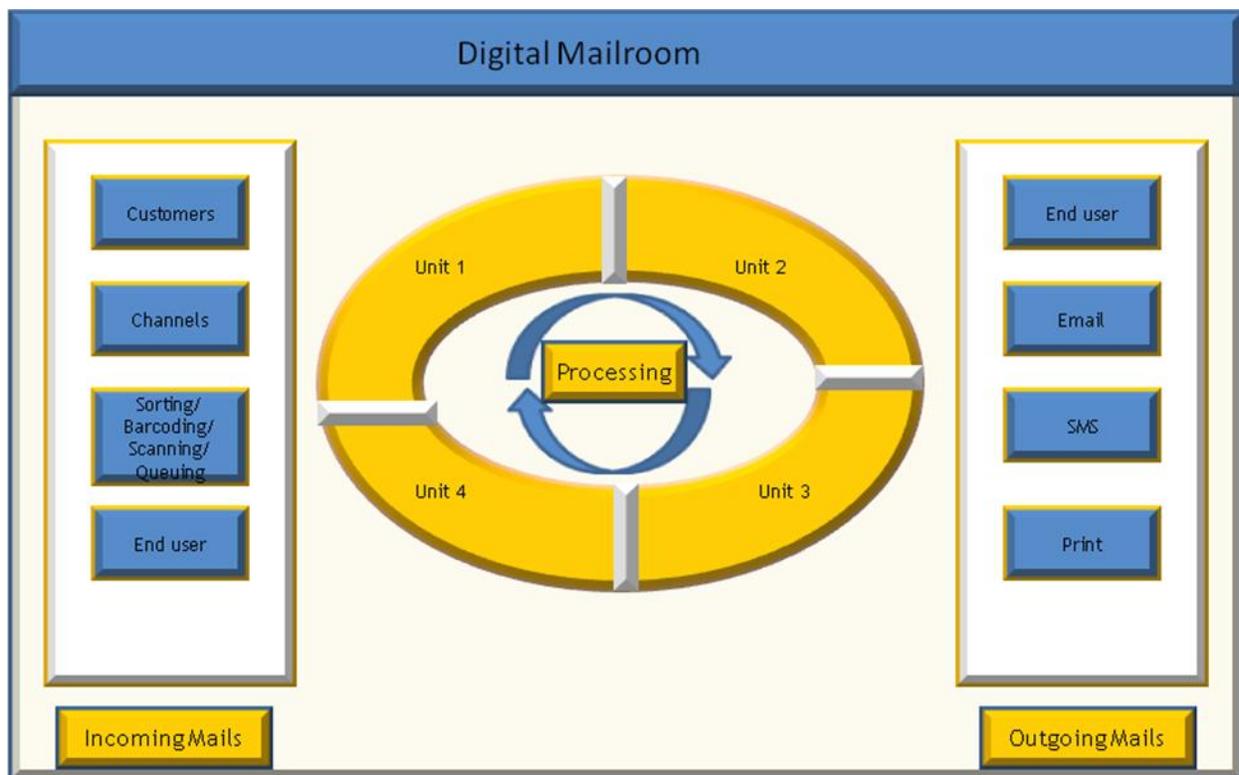
Creation of Digital Mailroom

Figure 6: Digital Mail Room

Digital Mailroom enables traceability of the documents and better customer delivery:

- Identifying the document with pre-generated barcode, Classification of document category, indexing and indexing data entered with document image and integration to downstream applications
- Use of barcodes to ensure separation and collation of different documents pertaining to same customer
- Use of composition engine to generate PDF documents that can also be sent as email in place of printing on paper thereby 'Going Green'.
- Use of high speed printers and dynamic file composition based on templates to generate clean, dual sided printouts in PDF format to achieve higher throughput
- Use of In-line mailing machine to stuff and seal envelopes with documents automatically at high speed with high accuracy to achieve ready to dispatch envelopes for higher throughput

- Any returned undelivered mails are read into the system with help of the document identity and sent for archival for future reference
- Any document which do not have a future value, are shredded in a controlled environment, as the scanned copies are available for reference

Key for a successful solution

- Every document is accounted for
- Categorization of each document
- Exceptions are managed end to end

Conclusion

A value enhancement in process with integration of downstream applications leading to enhanced services to the client organizations – a transformation towards a paperless office.

About the Authors

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