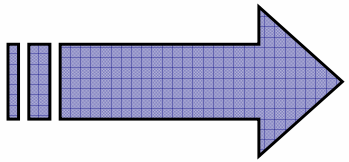
Inefficiency  Efficiency

3 Opportunities to Increase Your Printing Operations Efficiency

Xplor Webinar - June 24, 2010

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Agenda

- Session objectives
- Crawford Technologies Corporate intro
- Three opportunities to improve efficiency
- How did we get here?
- Barriers to efficiency
- How document re-engineering will help you tackle all 3 areas of inefficiency
- Summary & Q&A

Session Objectives

- In this session you will:
  - Understand 3 common operational inefficiencies facing transactional printing operations today
  - Understand how the use of a document re-engineering approach will help you:
    - Achieve new levels of efficiency quickly.
    - Minimize IT resource usage.
    - Improve your bottom line.

CrawfordTech Overview

- Founded in 1995 & headquartered in Toronto, CrawfordTech is a privately held, global software and services company
- 700 plus customers – approx. 50% are print service providers
- Listed in Canada's PROFIT Magazine as one of the fastest growing companies in Canada in June 2010

CrawfordTech Overview

- Core competency is in transactional customer communication solutions, including:
  - Alternate Format services
  - Automated Document Factory solutions
  - Document manipulation & re-engineering applications
  - Print stream conversions/transform applications
  - Transaction document archiving & retrieval solutions
  - Integration / Workflow solutions
- Partners include Océ, InfoPrint Solutions, Oracle, Kern, LRS, EMC, IBM and more

Inefficiency : Small Jobs

- Small jobs:
  - Letters
  - Notices
  - other low volume jobs

- Inefficient to run on production devices:
  - lots of set-ups required ➔ more staff, low productivity on high fixed cost assets
  - paper wastage via set-ups and banners
  - often hand-stuffed ➔ increased staffing, errors and low throughput

Inefficiency: Re-prints

- When production issues arise for a part of a job, that part of the job must be reproduced
  - Smudges, creases, etc.
  - Poor quality stock
  - Poor alignment after a roll change
  - Crashes on the inserter
- Customer re-print requests

Inefficiency: Re-prints

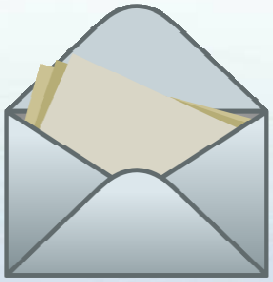
- Re-prints are notoriously inefficient
  - Many in-plant and print service providers have dedicated full time staff just for the management and production of re-prints, often due to the wide variety of different re-print processes
  - Often the original printing and inserting equipment must be used for the re-print – well below their production sweet spots
  - Re-prints are often manually inserted and therefore have low throughput, require additional staffing and are a source of integrity errors

Inefficiency:
Under Utilized Assets

Cut sheet

Continuous feed

Full color



Hand stuffed

Cut sheet configured

Low speed

Continuous feed configured

Inefficiency: Under Utilized Assets

- These high fixed-cost assets need to be used according to their productivity sweet spots
- When this is not done, you:
  - Have too many assets on the floor
  - Have excessive maintenance costs
  - Use one type of production technology when more efficient technology is available
  - Acquire new assets when proper utilization of existing assets could avoid such acquisitions

How Did We Get Here?

- Mergers, acquisitions
  - Different architectures
  - Different equipment
  - Wide variety of job types
  - Manual processes to handle the wide variety of job types
- Little or no control or influence over document formatting
- Strong company growth
  - Cut sheet was the right decision then . . .
- In-sourcing
  - How do I bring my direct mail into my statement shop?
- Outsourcing
  - How does the customer's architecture conform to the Print Service Provider's architecture

Barriers to Achieving Efficiency

- 90% of the applications that produce transactional documents were written back in the 80s and 90s and earlier
- A lengthy IT project, that goes back to the composition stage is required including changes to supporting applications
- Hardware, software upgrade and/or reconfiguration may be required

Lengthy time to market

Major CapEx

Significant IT involvement

How to Tackle Inefficiency in Your Organization

- Here is what we have seen as an effective approach:
  - Don't over analyze! The 80/20 rule applies here!
  - Brainstorm how to improve your jobs – talk to the operators – they know the stinky jobs and they have a great sense about how to improve them
  - Talk to the equipment service technicians – they know your equipment's productivity sweet spots

How to Tackle Inefficiency in Your Organization

- Consider:
  - Bar coding standards and placement including control file usage
  - Address content and placement
  - Base stock, envelopes, inserts, etc.
  - Human readable information
  - Equipment setups
  - Job lengths
  - Color

Document Re-engineering : Small Jobs

Concatenation and reformatting of small jobs. Move up the productivity ladder, including table top inserters.

- Example - wealth management organization:
  - 200K-400K trade confirmations were printed one at a time onto low speed PCL printers daily
  - They wished to outsource their printing, but the outsourcer did not want hundreds of thousands of one page jobs and they had an AFP based architecture
  - They used document re-engineering to join all the trade confirmation jobs into one big daily job, applied bar codes for automated insertion with integrity checking and converted to AFP for 2-up continuous feed printing
- Significantly reduced printing costs, insertion costs and improved integrity

Document Re-engineering: Automated Re-prints

Automatically extract required pages from the print file and **reformat** for appropriate destination devices. Move down the production device ladder.

- Example: Print Service Provider
  - Wide variety of job types – can't change the source applications
  - Developed a single re-print methodology using document re-engineering technology
  - Extract the required pages from the required jobs using file based inserter management software.
  - Re-print files are created, correctly reformatted for the appropriate print and insertion devices including merging in the original pre-printed stock
- Substantial reduction in integrity errors, a single, standard re-print process, minimized manual handling and greatly improved efficiency

Document Re-engineering : Under Utilized Assets

Reformat for the appropriate production device ***on the fly***.

- Printer-specific formatting is applied ➔ 2-up to 1-up
- Formatting maintains job integrity through properly generated bar codes, HRI, and etc. to defined standards
- Generation of control files for file-based insertion
- Jobs may be converted to a different PDL format while adding content such as pre-printed form images

Document Re-engineering : Under Utilized Assets

- Asset Utilization Example: Print Service Provider
  - A print job designed for the new very high speed full color inkjet printer didn't achieve the expected volumes. Low volumes meant low efficiency
  - The job was reformatted from continuous feed 2-up AFP format to 1-up, postscript format for the lower speed, cut sheet inkjet printer.
- Job setup times are now appropriate for the production cut sheet ink jet printer and the continuous feed inkjet printer is available for new income generating work

Document Re-engineering : Under Utilized Assets

- Asset Utilization Example: Insurance Company Merger
  - Two different transactional printing architectures
  - Utilized document reengineering to reformat the 1,500 existing mainframe print jobs to a single print architecture
- Migrated the 1,500 applications in 3 weeks with no JCL changes
- Retired half of their printer fleet
- Significantly reduced their operational and maintenance costs and streamlined and standardized their processes

Summary

- Document re-engineering does not require going back to the original systems, applications and data sources therefore significantly reduces project durations and the IT resources required.
- Jobs are enhanced at the print file level in your operational production workflow
- Ongoing enhancements due to equipment upgrades are within operational control and do not require significant IT involvement

Document Re-engineering is an Essential Tool to Help You Achieve New Levels of Operational Efficiency

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Questions?

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Thank You!