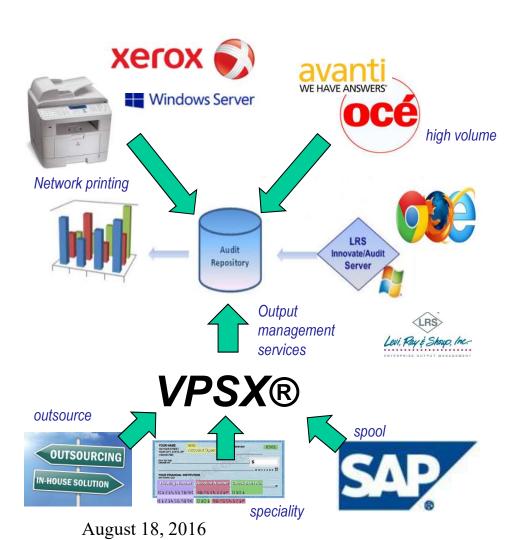
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Output Management Metrics & Accessibility

IT Management Briefing

Information & Technology Division
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Briefing

This Session Will Discuss...

- A little about the City Output Management team
- A look at two 2016+ major initiatives: Metrics & Accessibility
 Metrics
 - What has gone before [Print studies over the years...]
 - Why output metrics are important
 - A look at possible tracking solution for output costs, cost saving alternatives, and going forward
 - Accessibility
 - AODA and the need for accessible documents
 - Indexing, Metadata, Classification, getting ready for eDRMS and OpenText
 - Toolsets, integrations, VPSX front-end support, some recommendations

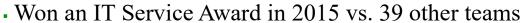






Actually a complete misnomer...

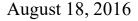
- Small team, part of TIS Enterprise System Products
- Mandate for high end, specialty document processing and composition [if it's weird, they do it in essence...]



- Recently upgraded to the VPSX Output Management System
- Just ran their 5th DRP Exercise at Tiffield [using automated hot sparing]
- More electronic documents, composition, portalization, than print
- Now handling Provincial File Transfer as well
- key clients: SAP, Pensions, PTMS, Court Services et al
 - continually innovating new solutions
 - high volume integration
 - print to archive ViewDirect [leading to OpenText]
 - print to e-mail [potential migration to *Accellion*...]
 - secure City document initiative [PDF417 + PKI]







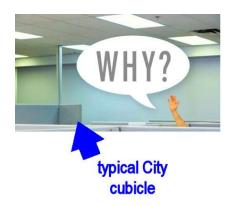


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2016 Metrics Project: The Why

• Green Team at City Hall asked IT Division two "simple questions" in 2015:







- can the City track all its current print volume?
- given the above, can we **do something** about it? [reduce costs, volume, impact on environment, etc.]
- Sent to Output Management team for answer
- Answer is not a simple one, alas
- Team did a *Lunch n' Learn* Briefing for them

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What has gone before

At least five studies in ten years...

- Starting in 2005, the City has commissioned *multiple* print studies...
 - Clerks Division External Mail Study
 - Two internal studies via IT Division
 - Two external studies, *Print Operations Group* as consultant
- Studies interviewed multiple City Divisional clients in detail
- Looked at print behaviours and usage across the board
- All studies recommended the same thing as *first* principle:
 - The City must track our metrics of all print behaviours
 - Without adequate metrics there was no point in setting policy
- Interestingly, by letting people know we are tracking metrics this has a positive effect on behaviour without setting policy
- We have never fully implemented these recommendations [outside of network printing metrics & high volume "islands"]





Intelligent Mail Production RFP no. 9145-04-7421





Metrics are Important

- Knowledge is power
- We need to understand some of the behaviours with print
 - what is regular business printing
 - what is application printing i.e. OutLook, SAP, etc.
 - what is specialty printing i.e. Permits, Notice of Trial, cheques
- Given the above, are we printing too much? or expensive choices?
 - are we making good use of high volume, print to archive, print to e-mail and other alternative methods?
- Do we have the means to set policy? nagware, alternatives in place, etc.
- Can we effectively measure policy changes if we make them?
- What is the City printing to outside service providers, what are our costs here?
 - Can we better leverage in-sourcing vs. out-sourcing?
- We need to let City staff know that printing *always* costs the City *something*

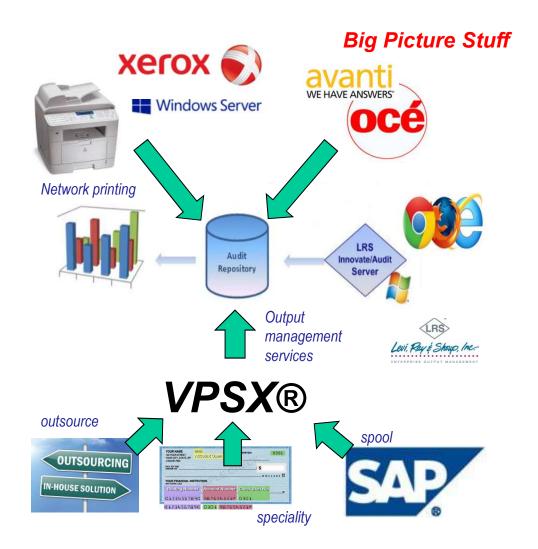


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Step 1: A Dashboard Solution

- LRS Innovate has web-based reporting solution
- Takes input from MS-Print
 Server/Xerox and VPSX Output
 Management system out of box
- Can import from Avanti High Volume without too much trouble
- Available to all City users
- Can use *Directory Services* to add ODDSUB information
- Can monitor other output solutions i.e. archive, e-mail, outsource
- Solution is vendor agnostic, hooks to any output device







Step 2: Policy Control on Network Printing

- Software monitors all print jobs from workstations to local printers
- We have 3,000 local printers or so to monitor
- Does a pop-up of real print cost for each print
- Velvet Glove in Iron Fist approach, we don't apply policy only monitor it
 - Print Operation Group analysis: 10-30% improvement in behaviour just by reporting on it
 - only apply policies after a year, after we really understand the issues
 - look at some behaviour changes i.e. duplex usage, printing e-mails multi-up etc.
- There are a number of vendors and tools in this space, will have to go out to RFP
- Affectionately known as "nagware"

Controlling local printing





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Low Cost Alternatives: Print to e-mail

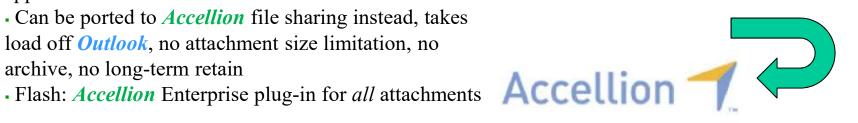
Key business enabler

- Handles PDF formatted documents
- Pre-verifies City e-mail address via *Directory Services* [major error reduction]
- Compresses files to *pkzip* attachments
- Includes multiple recipient support
- Handles mailing lists, staff and non-staff entries
- We handle thousands of SAP e-mail transactions weekly
- Massive cost saving to City in pages not printed
- Clearly a huge boost to business efficiency i.e. delivering *Purchase Orders*
- Will be generally available via **VPSX** to *all* City applications
- Can be ported to *Accellion* file sharing instead, takes load off *Outlook*, no attachment size limitation, no archive, no long-term retain









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Low Cost Alternatives: Print to Archive

- Handles *Court Services* docket and ICON report traffic with fully automated document gateways
- Also used by SAP for invoice imaging, SAP reports
- *ViewDirect* saves thousands of printed pages per week
- *ViewDirect* has standard web portal interface
- VPSX gateways move documents to *ViewDirect* archiving via SFTP handshaking
 - We can provide indexing assistance
 - We can provide PDF formatting as necessary
- eDRMS initiative will eventually replace with a better solution [guessing 3 years?]

Critical service for Courts Services and SAP



ViewDirect





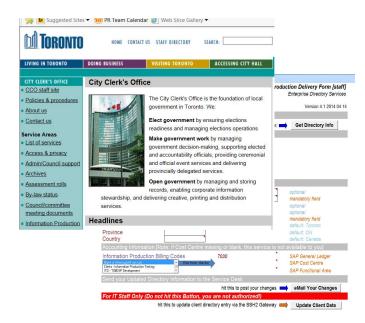


Low Cost Alternatives: high volume print

- Clerks IPDS has Oce Digital Presses in each Civic Centre, 3 in CH, 2 in MH
- Have unbundled operator costs per page, now very cheap solution [paper and toner]
- Have standard drivers for Windows
- We also support VPSX engine for specialized City transactional work i.e. SAP, PTMS
 - New engine supports JDF
 - We can provide PDF formatting
 - We support billing and bannering via *Directory Services*
 - we provide a simple e-form for setting this up
 - directly connects to Avanti system,
 client just prints their job

Through every Civic Centre









Recommendations on Going Forward: For City Management

- We need better *composition* tools for electronic documents
- Need to acquire *metrics* dashboard print reporting and costing tool [RFP 2017 but 2016 a decent possibility, have some money]
 - Output Management team will be champion/steward
- Need to acquire *policy control* local print and cost monitoring software [RFP 2017 at the earliest]
 - Desktop team will be the champion/steward
- Other print solutions should be looked at in light of coming consolidated services with ABCs, i.e. what is best of breed:
 - VPSX output management system approach
 - can send print jobs to other gateways, portals and services
 - High Volume digital press interface + IPDS solutions
 - standard PDF, JDF and Directory Services approach
- Recommend ramping up *Accellion* solution for print to e-mail, see what we can do for workstation prints vs. application work
- Print to archive needs review in light of *eDRMS* strategy, and need to replace *ViewDirect* eventually [three years away at the earliest, if contracts signed today]



Recommendations





2016 Accessibility Project

- The Ontario Access to Disabilities Act [AODA] is coming
 - pressure on all governments to be compliant soon
- Currently we either do *manual* accommodations *or* our applications simply *aren't* compliant
- All City applications and documents have to be accessible
 - easily convertible to other formats for accessibility readers
 - including the necessary *metatag* and content label information
 - documents need better logical layout and structure
- Tools are available to make standard PDF into PDF/UA
 - we are adding PDFlib 9.0 support to our basic transforms
 - metatag support into PDF templates, add to xml2pdf transform
 - should add *Crawford Technology* tools for automated mark-up
 - can be added as a service layer between *VPSX* and *OpenText*
 - thousands of City document types can be configured if we wish

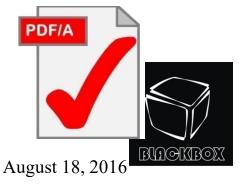




Using OMS systems to feed eDRMS

Looking ahead...

- OMS interfaces can:
 - Convert City documents into PDF/A documents
 - insert meta-data and indexing, Dublin Core, etc. as user data
 - Evocable from any City application, platform, language, interface
 - simple configuration, minimal customization
- Our team's demonstrated core competency is making document interface engines as general infrastructure
- The OMS middleware layer provides:
 - easy integration methods so any City application can plug in from the top
 - filter-based architecture so eDRMS transforms can plug in from the bottom
- Our PDFlib-based technologies *can* make PDF/A with meta-data and indexing





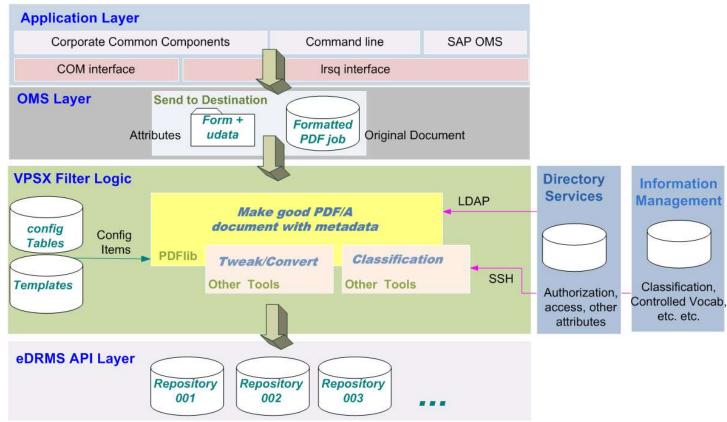






OMS to eDRMS Service

Architecture Diagram we gave CIMS eDRMS team...



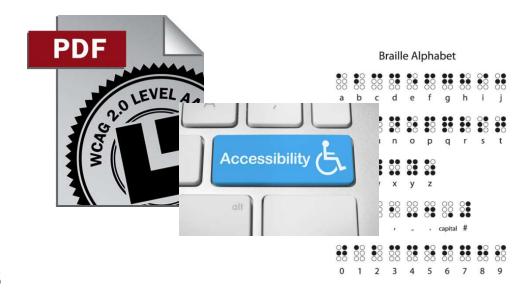
OMS to eDRMS integration model





New Document Service: Tagging & Metadata

- OMS middleware classification tools can make structured PDF documents
 - from this we can make PDF/UA [in addition to PDF/A]
- PDF/UA can be used to drive other accessibility and accommodation client requirements fairly easily
- Recommend archiving PDF/UA documents with PDF/A documents
- Tagged documents are also easily archivable and searchable in eDRMS







Some Recommendations to IT Management

- Use necessity of City Applications being AODA compliant to drive change
 - add necessary tagging tools to TIS infrastructure
- Although ostensibly for Accessibility Compliance tagged documents are *also* now completely archivable and searchable within an eDRMS system
 - if you do one, it pays for the other for *free*
- Accessibility becomes the "Big Stick" like Y2K to make eDRMS systems like OpenText a complete success
- The City has had multiple eDRMS project failures based on intake integration





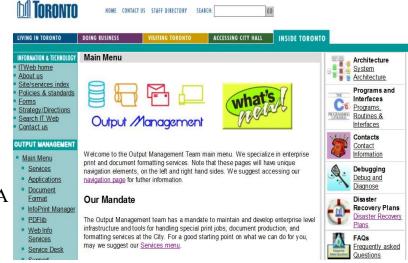






Finding Out More About Output Management

- Call team 416 397 1995 or e-mail epteam@toronto.ca
- Send Information Request through Service Desk
- Access their internal website
 - Continual work in progress, happy to work with anyone on new solutions to print and documents
 - Working on more document composition material
 - Their PDF solutions presented to EA and CIMS Forms Management teams
 - Converting Court Services, SAP, PTMS, PPFA solutions via our new PDF engines
 - http://insideto-dev.city.toronto.on.ca/eprint [their general site]
 - Flash: New site will be on new accessible City Standard, just started evaluations!







The incredible value of e-mail attachments...

Thanks!



"Do you have any other collateral... besides this e-mail from a Nigerian prince?"

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CORPORATION

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