



Imaging & Document Management

Records Management Services
State of Michigan



The Paperless World



Overview

- Records Analyst Services
- Records Center Operations
- Imaging Services



Imaging & Document Management

- What we mean by electronic records
- What we mean by imaging systems
- What is involved in setting up an electronic document management solution
- What are the State of Michigan solutions



Electronic Records



What are electronic records?

- An electronic record, also known as a digital record, is a record that is created and/or stored on personal computers, network drives and PDAs.
 - Scanned paper documents
 - Born electronic
 - Email
 - Shared drive content
 - Electronically submitted information



Common Misconceptions

- Scanning is free
- Storing images is cheaper than paper
- Scan everything and keep it forever



Are electronic records legal?

- Same laws apply to paper, images and data
 - FOIA
 - E-Discovery
- Retention schedules still apply
 - Records need to be identified, regardless of format



State of Michigan Standards

- Record Reproduction Act of 2005
 - MCL 24.401 – 24.406
 - Regulates the reproduction of public records by Michigan government agencies
- State of Michigan Standards
 - Regardless of the format, records must be authentic, reliable, have integrity, and be usable and accessible
 - Standards and best practice documents available at www.michigan.gov/recordsmanagement



Digital Imaging Standard

- Format
 - Any lossless compression
 - Prefer TIFF (Tagged Image File Format)
 - PDF (Portable Document Format) concerns
- Sample for quality
- Resolution
 - 200-300 DPI
- Written Procedures
- Media



Media



Media





What Is an Imaging System?



The Digital Age

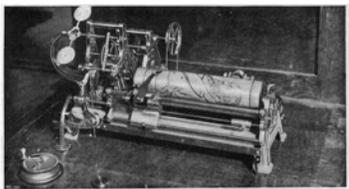


Source: Almost Famous (2000)



Digital Imaging

- Digital imaging is not new
- Foundations in fax technology
- First fax patent in 1843
- Fax (and digital imaging) became commonplace in the early to mid-1970s




Early vs. Current Imaging

Early Imaging Systems	Current Imaging Systems
<ul style="list-style-type: none"> • Scanners unreliable and created poor images • Not enough computing power • Limited storage solutions • Limited network speeds • Weak security • Underpowered, unreliable, unforgiving and uncontrolled • Failure rate exceeded 50% 	<ul style="list-style-type: none"> • More reliable scanners produce accurate representations of the original • More powerful computers • More efficient network speeds • Improved security • Capture standards • Legally accepted as a storage, retrieval and distribution technology



State Standard Imaging Systems

- IRMA
- TRIM
- FileNet

See [DTMB Service Catalog](#) for more information



Pre-Implementation Considerations

Preparation	• Often under estimated
Scanning	• Selecting hardware/software to meet application needs
Indexing	• Index attributes and how that information will be gathered
Quality Control	• Verify and correct
Quality Assurance	• Test and measure the results
Storage	• Where/how/when
Disposition	• Getting the image out



Preparation

- Objective is to make documents scanner-ready without human interaction
 - Remove staples, paper clips, etc.
 - Copy or repair of torn documents
 - Non-standard size documents
 - Condition of documents
 - Order arrangement
 - Use of barcodes or dividers



Scanning Components

- Scanner
- Additional hardware (computers, monitors, etc.)
- Capture software



Equipment Selection

- Price
- Daily duty cycle
- Paper size
- Feeder capacity



Equipment Selection

- Different equipment meets different needs
- Hand-held scanners (below) for field staff
- Flat-bed scanners (right) for delicate or under-sized documents
- Large documents, such as maps, require special equipment



Equipment Available on ITRAC

ITRAC Fujitsu Scanner Options	Model	Price	Max Daily Duty Cycle	Max Paper Size	Feeder Capacity	Max Speed	Recommended Applications
	Fujitsu 6-6110	\$859.00	2000	8.5 X 14	50	20ppm	Single user, Decentralized
	Fujitsu 6-6240	\$2,088.00	4000	8.5 X 14	50	40ppm	Multi user "Scan Station", Centralized/Decentralized, Hardbed for Special Needs
	Fujitsu 6-6140	\$2,488.00	4000	8.5 X 14	50	40ppm	Multi user "Scan Station", Centralized/Decentralized
	Fujitsu 6-4800	\$15,645.00	30000	12 X 17	500	130ppm	Multi user "Scan Station", Centralized/High Volume



Changing Technology

- Ever-changing technology continues to bring new ways to make digital copies of records
- Use of new technology should be an agency business decision
- Individuals should not decide to start using new technology on their own
- Mobile devices carry confidentiality concerns



Scanning Procedures

- Format – recommended TIFF or TIFF-wrapped PDF
- Resolution – recommended 200-300 DPI
- Black and white for standard business documents
- Develop policy for special documents that require color
- Dimensional aspects of original documents
- Single-side or duplex
- Optical Character Recognition (OCR)



Scanning Model Options

- Centralized
 - Central logistic location
 - Post-process
 - At the mailroom
 - Advantages
 - Highly controlled
 - Consistent quality
 - Disadvantages
 - Capturing too much
 - Routing/transporting paper



Scanning Model Options

- Decentralized
 - Multiple scan centers
 - Advantages
 - Somewhat controlled
 - Consistent quality
 - Eliminates transportation
 - Disadvantages
 - Expenses
 - Changes over time



Scanning Model Options

- Task-Oriented
 - At the desktop
 - Advantages
 - Immediate capture
 - Enable workflow
 - Avoid filing/routing
 - Disadvantages
 - Little control
 - Inconsistent quality
 - Expenses



Scanning Process Options

- Pre-Process
 - Scan documents when they arrive at agency
 - Advantages
 - Able to leverage system for entire process
 - Disadvantages
 - Does not work well with view-only systems
 - Scanning process may delay information availability
 - Additional change management for process staff



Scanning Process Options

- Post-Process
 - Scan documents when agency processes complete
 - Advantages
 - Less change management
 - Disadvantages
 - Not able to fully leverage system
 - Managing two systems, paper and electronic
 - Greater potential for misplaced documents



Quality Considerations

- Quality Control**
 - Completed at the scanner
- Quality Assurance**
 - Completed after conversion, usually by the end user



Indexing Considerations

- Values
- Data Entry
- Pre-Existing Data
- OCR
- ICR
- Barcodes




Disposition

- How long to keep paper after scanned?
 - 30-90 days for quality checks
- How will paper be disposed of?
 
- How long to keep scanned images?
 
 - Retention schedules
 - Triggers



Documentation

- Standard Operating Procedures
- Document Preparation
- Scanning Processes
- Indexing Methods
- Quality Control
- Quality Assurance
- Disposition
- Contact



Migration

- Exit strategy
- Necessary for all systems
 - Needs to be addressed in the planning stage
- Additional considerations
 - Technical expertise
 - Migration software
 - Hardware
 - Risk of information loss
 - Vendors




State of Michigan Solutions



Master Contracts

- Microfilm conversion (from paper or images)
- Imaging conversion (from paper or microfilm)
- Vault storage
- Microfilm inspection and repair
- MMCC (Michigan Master Computing Contract)
 - Purchase/Lease/Rent



Benefits of using the SOM contracts

- Eliminate the "bid" process
- All billing is done through RMS
- RMS works directly with the vendor throughout the project
- Gain from RMS expertise, experience and volume
- Confidence that scanning standards are followed



State EDM Initiative

- Assesses state agencies interested in EDM
- Makes recommendations on if EDM is a good fit
- Provides pricing for different EDM options



EDM Initiative Objectives



To create a single process by which the Electronic Document Management (EDM) needs of a State of Michigan agency can be defined and evaluated.



To analyze and present information in a way that allows the agency to determine the best solution for their needs and resources.



To assist State agencies with the selection, implementation, and support of the most efficient, cost-effective solution to their document management problems.



EDM Process



Common Recordkeeping Problems



Paper Is Not Dead

- 15% of an organization's revenues are spent creating, managing and distributing documents
- 60% of employee time is spent working with documents
- 85% of business documents are in paper form
- The average document is printed five times
- 90% of a business's information is in documents
- At \$30 an hour, knowledge workers waste \$4,500 a year working with paper

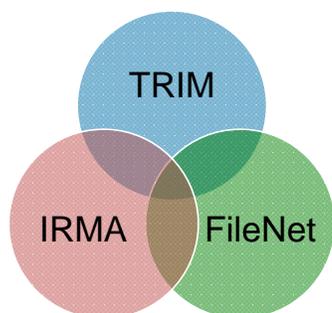
Source: [The Paperless Project](#) 2013

SharePoint

- Why not use SharePoint as our agency's EDM solution?
 - SharePoint is a collaboration tool, not an EDM solution
 - Sites and documents often are abandoned
 - Security and retention must be added
 - While SharePoint is available to State of Michigan agencies, it is not a State of Michigan enterprise electronic document management solution
 - Preferred solution is to manage records in an EDM solution and expose them to SharePoint for collaboration needs



Enterprise Available Solutions



EDM Features & Benefits

	IRMA 	TRIM 	FileNet 
Disaster Recovery and High Availability	X	X	X
Version/Revision Control		X	X
Automated Routing in Workflow			X
User-Driven Workflow		X	X
Retention and Disposal	X	X	
Redaction Capabilities	X	X	X
Application Integration		X	X



IRMA

Image Repository for Michigan Agencies



Developed to provide simple image storage and retrieval functionality for state agencies



A digital records center for active and inactive records



Low total cost of ownership



IRMA Users

- 60+ Different Applications
- 180+ Databases
- 1,700+ Users

- DEQ
- DHHS
- DTMB
- LARA
- MDARD
- MDOC
- MEDC
- MSCS
- MSHDA
- MSP



IRMA Basic Model

- Records are submitted to the state's imaging vendor for scanning
- Vendor provides images and indexes to RMS
- RMS imports images into IRMA and notifies agency
- Agency has access to images via Intranet



IRMA Service Fees

Monthly
per GB

- 1 GB = approximately 30-45 thousand pages -or- approximately 15 record center boxes




IRMA Demonstration



HP TRIM

Total Records and Information Management

-  A centralized repository for managing all SOM records, from the point of creation to final disposition, regardless of format
-  Developed to provide robust document management functionality for state agencies
-  Administered at the program level
-  Low total cost of ownership



HP TRIM Users

- 38 Different Business Units
- 850 Users

<ul style="list-style-type: none"> <input type="checkbox"/> DEQ <input type="checkbox"/> DHHS <input type="checkbox"/> DIFS <input type="checkbox"/> DMVA <input type="checkbox"/> DNDR <input type="checkbox"/> DTMB 	<ul style="list-style-type: none"> <input type="checkbox"/> LARA <input type="checkbox"/> Lottery <input type="checkbox"/> MDARD <input type="checkbox"/> MSHDA <input type="checkbox"/> Treasury
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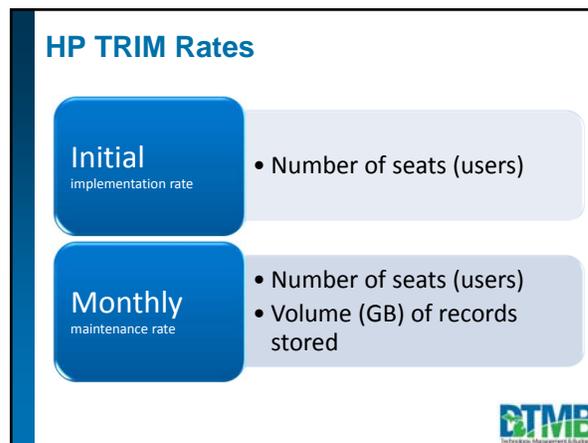
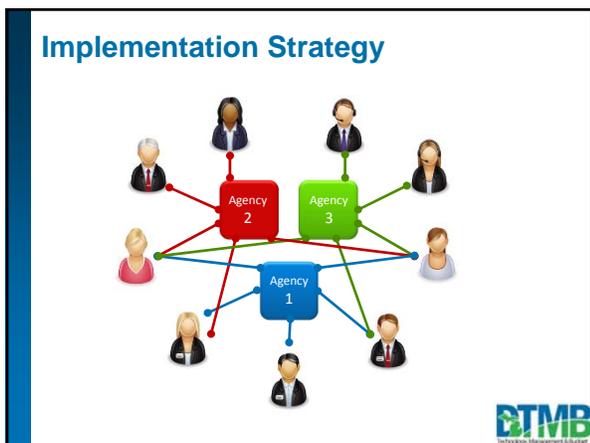
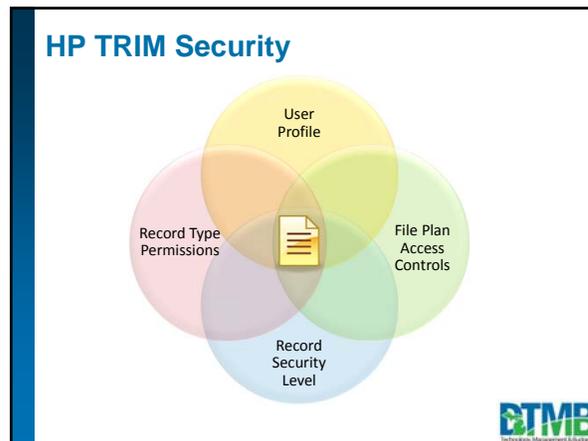
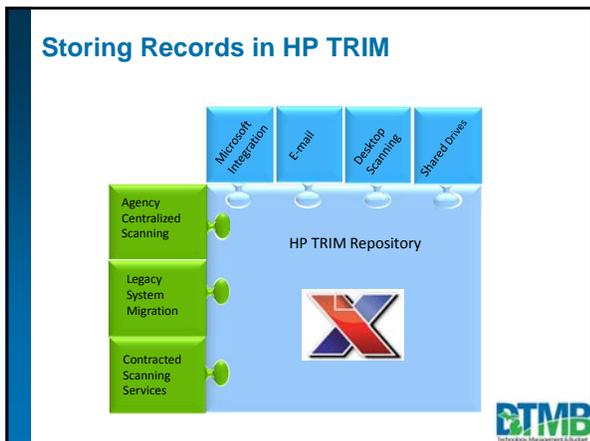


Benefits of HP TRIM



- Robust Searching
- Improved Sharing
- Retention and Disposal
- Robust Security
- Centralized Storage
- Reduced Duplication
- Workflow
- Enhanced Authenticity
- Version Control
- Document Mobility
- Audit Trails





- ### FileNet
- Business process automation using workflows
 - Application integration
 - User licensing based on type of use
 - Includes capture software license (Datacap)

FileNet Users

- 6,000+ users

□DHHS	□MDOS
□DTMB	□MDOT
□LARA	□MSP
□MCSC	□Treasury



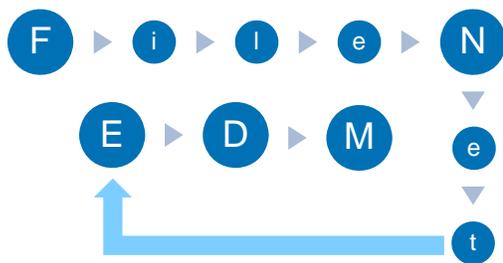
Benefits of FileNet




Search Query Development




Automated Workflows




Capture Software (Datacap)




FileNet Rates

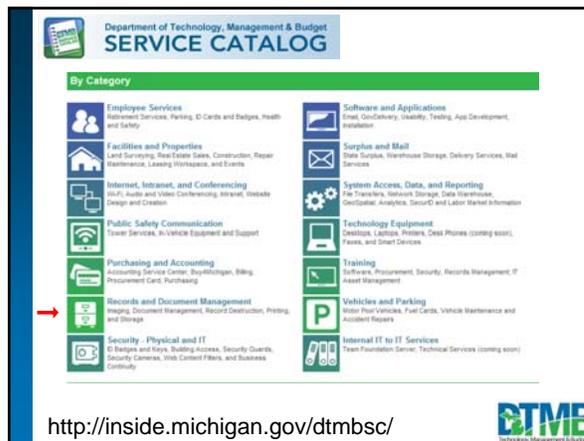
Initial implementation rate	<ul style="list-style-type: none"> Number of seats (users) Any custom workflow or application integration development
Annual maintenance rate	<ul style="list-style-type: none"> Number of seats (users) Development and configuration (hourly when applicable) Volume (GB) of records stored





FileNet Workplace XT Demonstration

DTMB



**Department of Technology, Management & Budget
SERVICE CATALOG**

By Category

- Employee Services**
Bathroom Services, Parking, ID Cards and Badges, Health and Safety
- Facilities and Properties**
Land Surveying, Real Estate Sales, Construction, Repair Maintenance, Leasing Workspaces, and Events
- Internet, Intranet, and Conferencing**
VoIP, Audio and Video Conferencing, Intranet, Website Design and Creation
- Public Safety Communication**
Tower Services, In-Vehicle Equipment and Support
- Purchasing and Accounting**
Accounting Service Center, BuyMichigan, Billing, Procurement Card, Purchasing
- Records and Document Management**
Imaging, Document Management, Record Destruction, Printing, and Storage
- Security - Physical and IT**
ID Badges and Keys, Building Access, Security Guards, Security Cameras, Web Content Filter, and Business Continuity
- Software and Applications**
Email, On-Delivery, Usability, Testing, App Development, Installation
- Surplus and Mail**
State Surplus, Warehouse Storage, Delivery Services, Mail Services
- System Access, Data, and Reporting**
File Transfers, Network Storage, Data Warehouse, Operational Analytics, SecurID and Labor Market Information
- Technology Equipment**
Desktops, Laptops, Printers, Cell Phones (coming soon), Pagers, and Smart Devices
- Training**
Software, Procurement, Security, Records Management, IT Asset Management
- Vehicles and Parking**
Motor Pool Vehicles, Fuel Cards, Vehicle Maintenance and Accident Repairs
- Internal IT to IT Services**
Team Foundation Server, Technical Services (coming soon)

<http://inside.michigan.gov/dtmb/sc/>

DTMB
Technology, Management & Budget



We can help!

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