2016 e-Records Conference
Friday, November 4 | Austin, Texas

At the Intersection of Technology and Records Management

Sponsored by
Texas State Library and Archives Commission (TSLAC) and Texas Department of Information Resources (DIR)

#TXeRecords | @TSLAC | @TexasDIR
Welcome from DIR and TSLAC

The Texas Department of Information Resources and the Texas State Library and Archives Commission welcome you to e-Records 2016: At the Intersection of Technology and Records Management.

Over 125 different state agencies, state universities, local governments, and 20 exhibitors are registered. Some of the more than 300 attendees have been to several of these conferences and some are first-timers. Take this opportunity to network with colleagues and learn from each other. Please visit the exhibitors during the breaks and at lunch.

We are fortunate to offer a robust roster of both public and private speakers who will share their expertise. We welcome you and hope that you enjoy the conference today!

Conference Resources

Internet access is available during the conference
Connect to attwifi network. Open your web browser. Click on “I have a Coupon” & enter this code: WPND-TRQD-H4

Conference speaker materials
Available presentations: bit.ly/erecords2016_presentations
<table>
<thead>
<tr>
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<tr>
<td>8:00 AM</td>
<td>Registration and Networking</td>
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<tr>
<td>8:30 AM</td>
<td>Welcoming Remarks&lt;br&gt;Stacey Napier, Texas Department of Information Resources and Mark Smith, Texas State Library and Archives Commission</td>
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<tr>
<td>8:55 AM</td>
<td>Update from the Statewide Data Coordinator&lt;br&gt;Ed Kelly, Texas Department of Information Resources</td>
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<tr>
<td>9:10 AM</td>
<td>Accessing the Texas Digital Archive&lt;br&gt;Mark Myers, Texas State Library and Archives Commission</td>
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<tr>
<td>10:10 AM</td>
<td>Morning Break – Refreshments, Exhibits Open</td>
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<tr>
<td>10:30 AM</td>
<td>Case Study: Disposing of Paper Records after Scanning – Implementing Legally Defensible Policies and Procedures&lt;br&gt;Bob Guz, CRM, City of Austin and Katherine Cranford, CRM, City of Austin</td>
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<tr>
<td>10:30 AM</td>
<td>Vendor Neutral Data Management and Record Retention&lt;br&gt;David Cerf, StrongBox Data Solutions</td>
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<td>11:45 AM</td>
<td>Lunch (Provided) – Networking, Exhibits Open</td>
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<tr>
<td>12:45 PM</td>
<td>Process Mapping as a Best Practice: A Vehicle for Implementing Technology and Shaping a New Culture&lt;br&gt;Sarah Thomas, University of Houston</td>
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<td>12:45 PM</td>
<td>Showcase: Enterprise Information Management in SharePoint 2016&lt;br&gt;Jason Dausey, DataPoint Solutions</td>
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<td>Afternoon Break – Refreshments, Exhibits Open</td>
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<td>2:15 PM</td>
<td>Digital Workflow Optimization and Automation&lt;br&gt;Kumar Rachuri, Adobe</td>
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<td>2:15 PM</td>
<td>Records Management vs. #recordsmanagementrocks&lt;br&gt;Sarah Hendricks, Texas Department of Public Safety</td>
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<td>3:30 PM</td>
<td>Afternoon Break</td>
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<tr>
<td>3:45 PM</td>
<td>Email Redactions Made Easy&lt;br&gt;Theresa Scott, Town of Flower Mound</td>
</tr>
<tr>
<td>4:30 PM</td>
<td>Conference Wrap-up</td>
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</table>
Today’s Speakers

David Cerf, President and CEO, StrongBox Data Solutions

David Cerf is President and CEO at StrongBox® Data Solutions, Inc. With more than 30 years of experience in the IT industry, David is an accomplished author and speaker on topics surrounding data growth, storage and protection. He leads the SDS team to deliver new and innovative solutions to help simplify data management. Previously, David led strategy and business development at Crossroads Systems from 2005 to 2016 where he launched innovative products to solve big data preservation and protection. Prior to joining Crossroads, David served as Vice President of Sales and Business Development at NexQL, a leading provider of advanced database acceleration technologies. He was also a co-founder of 360World, a national provider of video and imaging solutions. In 1988, as the founder and managing director of the Dallas Business Incubator, he was responsible for the development and funding of more than 50 new high-growth startup companies.

Katherine Cranford, CRM, Corporate Records Analyst, City of Austin

Katherine Cranford, CRM is a Corporate Records Analyst for the City of Austin, Texas. She consults with City departments on electronic records management. Katherine was previously a taxonomist and knowledge management specialist for enterprise content management systems at Llesiant (Bloomberg BNA), Demand Media and Dell Computers. She holds a Masters in Information Science from the School of Information at the University of Texas.

Jason Dausey, Director of Professional Services, DataPoint Solutions

Jason is a recognized expert on business automation, content management, collaboration strategies within SharePoint and its integrated suite of products. DataPoint Solutions technical team is led by Jason Dausey, who has consulted and architected over 50+ SharePoint installations, configurations and/or development efforts. He has extensive SharePoint integration and deployment experience with a wide range of implementations especially with large scale Federal government agencies and Fortune 1000 organizations. He has performed numerous data migrations to SharePoint totaling over 5TB of data from various systems including: file shares, eRoom, earlier versions of SharePoint, Oracle 8G, and others. Jason has performed end user training, and classroom training for many organizations in addition to his community speaking events at local and national conferences including SharePoint Saturdays, company-held events and other industry conferences.

Bob Guz, CRM, Sr. Business Process Consultant, City of Austin

Bob Guz, CRM, ERMs, is a Sr. Business Process Consultant for the City of Austin, Texas. He is responsible for the management of technology projects within the Office of the City Clerk, is a lead for the implementation of a City-wide electronic records management system, and has over 25 years of technical and records management experience. Bob’s consulting and project management experiences include imaging and document management system development and records management program implementation. Previously, he was a program director with Iron Mountain Consulting Services and a technical project manager for First Consulting Group. He has also worked as an information and records management professional for SEMATECH, Texas Instruments, and NASA.

Sarah Hendricks, Project Manager, Texas Department of Public Safety

Sarah Hendricks currently serves as a Project Manager with the Texas Department of Public Safety’s Enterprise Project Management Office. She is also the agency’s main point of contact on matters involving agency records management. During her 10-year career with the agency, she has been instrumental in standing up the agency’s Policy, Projects, and Portfolio Management Office, which consolidated enterprise-level projects under one office. Sarah has held a number of positions with increasing responsibilities dealing with varied subjects including Government Relations and Media.
Mark J. Myers, Electronic Records Specialist, Texas State Library and Archives Commission

Mark J. Myers is the Electronic Records Specialist with the Texas State Library and Archives Commission (TSLAC) and has over 15 years of experience in electronic records management and digital preservation. Mark started with TSLAC in June, 2014, and is building a data archive to preserve and make accessible the electronic records of state government, beginning with the records of Governor Rick Perry in 2016. Mark will also be providing advice and assistance to state government agencies for the long-term preservation of their electronic records. Prior to his work in Texas, Mark was the electronic records archivist with the Kentucky Department for Libraries and Archives for 13 years. Mark has a bachelor’s degree in secondary education from the University of Kentucky and graduate work from Auburn University. He now lives in Austin, TX, with his wife and two children.

Kumar Rachuri, Director - State & Local Government Solutions, Adobe

Kumar Rachuri worked for the great State of Ohio for eighteen plus years. During his long and fulfilling career as a public servant, he contributed his services across five different agencies in various executive roles as a CIO and as a Deputy Director. As a CIO, Kumar was recognized for his exemplary work as one of the Nation’s Top 25 leaders by Government Technology Magazine in 2011, a distinction given to innovative and visionary leaders as the “Doers, Dreamers, and Drivers” in the United States. Kumar’s contribution towards Ohio Shared Services as the Deputy Director of Growth and Strategy received accolades from notable organizations, i.e., Gartner and Harvard Business Review. Eventually, leading them to write white papers of Ohio’s cutting edge implementation of business process re-engineering. Making the transition to private sector Kumar continues his successful professional career at Adobe as the Director of State of Local Government Solutions. In this role, Kumar leads Adobe’s growth and development strategy of its government solutions footprint with a special focus in providing solution oriented technology offerings solving public sector challenges.

Theresa Scott, Town Secretary, Town of Flower Mound

Theresa Scott has spent 14 years working in local government and 5 years as Town Secretary in Flower Mound, population 68,000. Before that she worked as Economic Development Director in St. Charles, Illinois.

Sarah Thomas, Project Manager, Gift Management, University of Houston

Sarah Thomas is the Project Manager for the Department of Gift Management at the University of Houston. She designs and leads large complex projects for the department, including implementing a document imaging system and electronic record management policies. In addition, she analyzes gift management practices and works with the team to identify inefficiencies. Sarah also serves as a resource to research best practices in gift processing, records management, technology trends, team building, and project management. Sarah also has over 10 years of experience in non-profit management.
Exhibitors

Please visit the exhibit area to learn more about products and services available.

Access Sciences
Adobe
AT&T
Austin ARMA
Box
Catapult Systems
DataPoint Solutions
Document Logistix
DocuNav Solutions
Information Builders
Institute of Certified Records Managers (ICRM)
MCCi
Neubus
Oracle
PacoTech, Inc.
Panasonic Office Products
Precision Micrographics & Imaging, Inc.
Precision Products, Inc.
Texas Department of Information Resources
Texas NIC
TSLAC Records Center Services
VENDOR NEUTRAL DATA MANAGEMENT AND RECORD RETENTION
• More than 19 years of storage/network expertise

• Austin based Globally deployed solutions

• Some of the largest customers in the world...
Worldwide Industry Leaders Trust StrongBox

- The US Government
- Government/Public Sector
- #1 Media Company
- #1 Aircraft Manufacturer
- #1 Film & Television Distribution Company
- #1 Supplier of Automotive Parts
- #1 Research Institution
- #1 Medical Library

And many more...
Archive Retention Requirements

- **Retention period**
  - 3-6 years: 1.9%
  - 7-10 years: 12.3%
  - 11-20 years: 15.7%
  - 21-50 years: 13.1%
  - 50-100 years: 18.3%
  - >100 years: 38.8%

- **Percent of respondents**

- **Long-term Archival Storage Requirements Increasing**
  - 20+ Years Retention Required by 70% of respondents
  - 50+ Years Retention Required by 57% of Respondents
  - Key Driving factors:
    - Compliance
    - Legal risk
    - Business risk
    - Security risk

*Source: 2013 Storage Developer Conference SNIA LTR TWG*
Top Ten Data Protection Challenges 2015

Which of the following would you characterize as challenges with your organization’s current data protection processes and technologies? Which would you characterize as the top challenges for your organization? (Percent of respondents, N=375)

- Cost(s): 43%
- Keeping pace with capacity of data to protect: 35%
- Managing the complexity of our data protection environment: 29%
- Data protection for virtual environment: 32%
- Remote site backup/recovery: 30%
- Managing multiple data protection vendors/solutions: 27%
- Protection of SaaS-based applications/workloads (e.g., Office 365, Salesforce.com): 27%
- Need to improve backup and recovery reliability: 29%
- Need to reduce backup time: 33%
- Bandwidth availability/cost for transferring copies off site: 23%

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DATA SILOS

1. Data workflows are often focused around a specific application, data type, use case or task/mission.
More DATA SILOS

2. Other use cases evolve, with different data types & requirements.
and More DATA SILOS

3. Data and infrastructure become difficult to manage and protect.
Too many DATA SILOS

4. Data workflows are often focused around a specific application, data type, use case or task/mission.
StrongLINK is a cognitive data management solution. A software-defined storage and data management solution that addresses long-standing obstacles to cost-containment, risk reduction, and productivity optimization.

<table>
<thead>
<tr>
<th>Improves Cost Containment</th>
<th>Reduces Risk</th>
<th>Improves Productivity &amp; Agility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bending the storage cost curve through optimization of data management across private storage and public clouds</td>
<td>Automatically protecting data based on its business value</td>
<td>Improving secure access to data assets when and where they are needed</td>
</tr>
<tr>
<td>Reducing administrative and operational costs and enabling more capacity to be managed by fewer hands</td>
<td>Simplifying governance and compliance</td>
<td>Adding capacity either permanently or as needed to meet business requirements</td>
</tr>
<tr>
<td>Reducing Capital expenses (purchases, hardware) and resource requirement</td>
<td>Minimizing exposure to technology obsolescence</td>
<td></td>
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</tbody>
</table>
SEARCH
MOBILITY & ORCHESTRATION
Connecting Everything
NON-DISRUPTIVE DEPLOYMENT

Works seamlessly with your current environment
Data Management Process

Discovery:
- Harvest
- Automated Policy for
  - Data Classification
  - Storage Classification

Policy execution
DISCOVERY

Powerful metadata discovery and indexing for all your data.
Metadata Discovery and Indexing
SEARCH

Global search across any file, object or metadata, StrongLINK connects everything.
Search for Anything, Anywhere.

Search ANY metadata tag
Add your own metadata
MOBILITY

Enable seamless file movement connecting on-site and off-site storage, cloud and archive.
Seamless File Movement

Data Migration
Archive
Redundant Copy
Curation

Your Current Storage Environment
ORCHESTRATION

Automated policies and AI technologies manage storage resources and services to simplify workflow and operations.
The Core of Cognitive Data Management
Gateway to secure, retention storage

- Policy driven content movement including migration, replication and multi-copy data protection.
- Cloud enable your current storage
- LTFS tape and object storage.
- No “rip and replace”
- Powerful ROI: Reduced storage costs
- Replaces applications like backup and HSM.
Secure, Cost Effective Storage Management

Data Integrity
Data Reliability
Tunable Performance
Curation and Data Protection

- Simple “set and forget” policies
- Business data continuity
- Multi-copy, multi-site, and cloud
- Version control, journaling and audit control
- Meet governance and compliance requirements
- Easy-to-use restore
Collaboration

• Search anything: object and file storage
• Accelerate business processes and workflow
• eDiscovery
• Access right and policy based management
• Translate across any type of file or object protocols
Virtual Storage Architecture

- Automatic migration for the right data to the right storage
- Maximize storage utilization and performance
- Automate data management by workflow
- Painless migrations, eliminate storage sprawl
- Reduce vendor dependencies
- Lower total cost of ownership
- “Evergreen” Storage Strategy
Managing Data Across Digital Silos

Different Storage Types and Use Cases Increase Management Complexity
1. New Data is added to each silo according to use case, performance, etc.
2. Each individual data group grows at different rates.
Quotas & Capacities Managed by Policy

Quotas and access rights defined by User, Role, Project, Data Types etc.
Adding or Removing Storage to Pools is Easy

New Devices are added to the DataPool by simply tagging them.
StrongLINK DataPools Virtualize Any Storage Type

Consolidate Storage Resources and Eliminate Silos

New Devices are added to the DataPool by simply tagging them.
AUTOMATED RECORD RETENTION

And improved workflow
AUTOMATED DATA CLASSIFICATION

Curation and retention policy defined by the data
MEET BUDGET GOALS

Use the most efficient and cost effective solutions, on-site and off-site.
FREE OF VENDOR OR PROPRIETARY TECHNOLOGIES

Never “rip and replace” and leverage what you already own.
EVERGREEN STORAGE STRATEGY

Seamlessly migrate and add the newest technology anytime to meet long-term retention
Unleash the Power of your data.

POWERFUL SEARCH & INDEX
DATA MOBILITY
DATA ORCHESTRATION
WORKFLOW AUTOMATION
DATA PROVENANCE
LET’S LOOK TOWARDS THE FUTURE AND GROW TOGETHER.

ANY QUESTIONS?

CONTACT US NOW: 1-512-349-0300 | info@strongboxdata.com
OR VISIT: strongboxdata.com
Find it. Use it. Share it. Own it.
Showcase: Enterprise Information Management in SharePoint 2016

E-Records Conference 2016 – Austin, TX
At the Intersection of Technology and Records Management
November 4, 2016
Introductions

SharePoint Guy
Director of Professional Services
DataPoint Solutions

6+ years
SharePoint experience

MCP
SharePoint 2007, Configuring
SharePoint 2010, Configuring
SP 2013 Core, Development
Server Virtualization w Hyper-V

jdausey
@jdausey

Datapointconsulting.com

www.datapointconsulting.com  855-866-4039
SharePoint Backstory

- **SharePoint Portal Server 2001**: 2001
- **SharePoint Portal Server 2003**: 2003
- **Office SharePoint Server 2007**: 2006
- **SharePoint Server 2010**: 2009
- **SharePoint Server 2013**: 2012
- **SharePoint Server 2016**: 2016

Cloud-Inspired Experiences

Core Collaboration, Content Management, Cloud and Enterprise Social, Cloud-Inspired Experiences

Reference: Microsoft.com
SharePoint Server 2016 Vision & Value

Modernize the on-premises infrastructure improving speed, scale, and user experiences. SharePoint Server 2016 brings cloud innovation to your datacenter so you can get the best of both worlds – speed and productivity for your users with flexibility and control for IT.

- **Improved User Experiences**
  - New user experiences enable users to quickly and productively consume new apps and experiences across devices and screens.

- **Cloud-Inspired Infrastructure**
  - Based on our learning from Office 365, SharePoint 2016 delivers a reliable software-defined infrastructure foundation that’s proven at scale with best in class hybrid experiences.

- **People-Centric Compliance**
  - Integrated data-loss prevention and protection and with built-in and cloud connected compliance, security, and threat protection for both administrators and end users.

Reference: Microsoft.com
SharePoint 2016 Areas of Concentration

**Experiences**
- Modern collaboration
- Personalized insights
- File storage and collaboration

**Infrastructure**
- Improved performance and reliability
- Hybrid cloud with global reach
- Support and monitoring tools

**Compliance**
- New data protection and monitoring tools
- Trusted platform

Reference: Microsoft.com
Hybrid Deployment

Office 365
Cloud-first delivery

Continuous innovation

Rapid feedback

Cumulative update
Cumulative update
Service pack
Cumulative update

New version

Exchange/SharePoint server

Consistent release rhythm

Simplified update model
Cumulative update stats
Service packs

Next version
Exchange 2016
SharePoint 2016

Reference: Microsoft.com
Why does this matter?

Information explosion

In next decade, mankind’s data will increase 44 times\(^1\), while the number of IT professionals will grow by only 1.4 times… in the next year alone, there will be more data generated than in all of mankind’s history.

87%

Of senior managers admit to regularly uploading work files to a personal email or cloud account\(^2\)

58%

Have accidentally sent sensitive information to the wrong person\(^3\)

---

\(^1\)http://www.itpro.co.uk/622942/idc-data-explosion-goes-into-the-zettabytes
Information Architecture

Enterprise information is no longer just documents, in SharePoint there are ways to achieve success across all mediums of information.

<table>
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<tr>
<th>Web Pages and Sites</th>
<th>Content Types</th>
<th>Search</th>
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<td>Metadata Columns</td>
<td>Modern Sites</td>
<td>OneDrive for Business</td>
</tr>
<tr>
<td>Folders</td>
<td>Integration Systems</td>
<td>SharePoint Libraries / Lists</td>
</tr>
</tbody>
</table>
SharePoint UI Improvements

- Hybrid Sites
- Site Pages Pinning
- Improved Sharing
- Better Mobile Experiences
- Image and Video Previews
- Document Library Accessibility
Better File Handling

• **Large File Support**
  - Previous versions of SharePoint did not support uploading or downloading files larger than 2,047 MB. SharePoint 2016 now allows you to upload or download larger files.
  - Keep it under 10GB

• **Special Character Support**
  - SharePoint has historically blocked file names that included the &, ~, {, and } characters, file names that contained a GUID, file names with leading dots, and file names longer than 128 characters. These restrictions are removed in SharePoint Server 2016 and are now available to use.
  - Restricted characters such as % and # are still not allowed in file names.

• **ODF for document libraries**
  - The Open Document Format (ODF) enables you to create new files in a document library and save as ODF files so that users can edit the new file with a program they choose.

• **Durable Links**
  - Resource-based URLs now retain links when documents are renamed or moved in SharePoint
Compliance Features

- Document Deletion Policies
- Identification and Search for sensitive content
- IRM
- Existing Features
  - E-Discovery
  - Document ID
  - Multi-Stage Retention
  - Per-Item Audit Reports
  - Hierarchical File Plans
  - File Plan Report
  - Taxonomy and Centralized Content Types
  - Content Organizer
Compliance Features

- Document Deletion Policies
Compliance Features

- Identification and Search for sensitive content
Compliance Features

• IRM Integration
Compliance Features

- Existing Features
- E-Discovery
- Document ID
- Multi-Stage Retention
- Per-Item Audit Reports
- Hierarchal File Plans
- File Plan Report
- Taxonomy and Centralized Content Types
- Content Organizer
Hybrid Capability

- **Hybrid Sites**
  - Followed sites from both locations are consolidated in the SharePoint Online followed sites list. SharePoint Server links to the followed sites list redirect users to the SharePoint Online followed sites list.

- **Hybrid OneDrive for Business**
  - OneDrive links are provided in SharePoint Server which direct users to OneDrive for Business in Office 365.

- **Hybrid Search**
  - Search results between the two locations are combined in one of two ways. Cloud hybrid search crawls on-premises content and indexes it in the search index in Office 365. Users can search the Office 365 index from either location. Hybrid federated search combines search results from each search index in a single search center.
Contact Us

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LinkedIn: DataPoint Solutions

Facebook: DataPoint Solutions

Case Study:
Implementing Legally Defensible Policies and Procedures for Disposing of Paper Records After Scanning

Bob Guz, CRM
Sr. Business Process Consultant

Katherine Cranford, CRM, CIP
Corporate Records Analyst

Is it possible to dispose of paper records after they have been scanned?

• Yes.

• Requires:
  – Policy
  – Process
  – Additional considerations
Disclaimer
Objectives

• Digitization Project Concerns – Why bother?
• Development of:
  – City Ordinance
  – Office of the City Clerk Procedure
  – Approval process for City department procedures
  – Noncompliance reporting
• Impact of digitization approval
• Lessons Learned
• Questions
City of Austin Reporting Structure

• City Departments
  – Report to City Manager
  – Department Records Administrators provide leadership for records management program in their departments
  – Department Records Analysts execute records management program in their departments

• Office of the City Clerk
  – Reports to City Council
  – Corporate Records Analysts serve as consultants to all City departments
  – City Clerk staff issue Annual Reports to Department Directors on the progress of their records management programs
Digitization Projects Overview
Common Traits of Digitization Projects

• Result from visible, perceived problems
• Time-sensitive
• Underfunded
• Understaffed
• Often misunderstood and poorly planned
Common Types of Digitization Projects

• Desk sweeps
• Clear out the cabinets
• Paperless directive
Risks Inherent to Digitization Projects

- Poor or no scope
- Low-priority, but high-impact
- Liability for long-term data
Goals of Developing Defensible Procedures

• Reduce risk
• Improve Department project planning
• Enhance the records
• Save taxpayer money
Developing Defensible Procedures

- Review/Approval
- Procedures
- Engagement
- Guidelines
- City Code / Ordinance
Ordinance Development
2014 Records Management Ordinance

- First major revision to Chapter 2-11 (Records Management) of the City Code in over a decade
- In development for ~2 years
- City Code Chapter 2-11 (Records Management) was entirely repealed and replaced via Ordinance No. 20141120-015 (effective 12/1/2014)
- Changes now codified and available in MuniCode: https://www.municode.com/library/tx/austin/codes/code_of_ordinances
RIM Ordinance Updates

• Updates the scope of the Records Management Program to clarify that it *includes records in digital form* and that the creation, maintenance, preservation, and storage of digital records must comply with the records management program.

• Requires the establishment of guidelines and standards for *converting records to a digital format*, and guidelines for the disposition of source records after conversion.
RIM Ordinance Updates

• Department directors and officials must consult with the Office of the City Clerk before implementing an information technology system or service that creates, stores, manages, protects, preserves, destroys, or provides access to digital City records to ensure that the system or service is consistent with the Records Management Program.
§ 2-11-1 - Definitions

[...]

(5) **DIGITAL**, when used in reference to a record, means the record is maintained in an electronic data format that requires an electronic device to create, store, access, retrieve, or read the record.

[...]

(9) **PHYSICAL**, when used in reference to a record, means that the record is maintained in a tangible form, such as paper, photographic film, analog tape, or a similar medium.
§ 2-11-3 - Records Management Officer

(A) The city clerk is the records management officer under Local Government Code, § 203.025 (Designation of Records Management Officer) for the City, and shall:

[---]

(3) serve on each director-level technology governance or oversight committee established by a City department;
IT Governance

CIO Council

Dept. Directors Advisory Council

Information Management Governing Board

Other Essential IT Governing Boards

- Asset Management
- Case Management
- Human Capital Management
- GIS
- Etc.

Application Steering Committees

§ 2-11-5 - Records Management Program

(B) The records management program must:

[...]

(5) establish guidelines for City information technology systems and services to ensure that the systems and services create, store, manage, protect, preserve, dispose of, and provide access to records in compliance with the records management program;

[...]

(11) establish guidelines and eligibility criteria for transferring records to microfilm, or to an electronic or digital format, including guidelines for the disposition of records that have been transferred;
§ 2-11-7 - Duties of Department Directors

(F) A department director [...] must consult the city clerk or the city records manager before recommending or implementing a change to records management or information technology that is reasonably likely to affect:

(1) compliance with the records management program; or

(2) the City's processes or capabilities relating to the creation, storage, retention, destruction, disposition, security, or accessibility of records.
§ 2-11-8 - Department Records Administrators

(A) Each department's records administrator shall:

[...]  

(8) review each new information technology system or system enhancement to ensure that the new system or system enhancement addresses and complies with the records management program;
§ 2-11-11 - Destruction /Disposition of Records

[...]

(E) Before an official or employee may destroy the original or source document of a record that has been transferred to microfilm or to an electronic or digital format, the employee or official must obtain written authorization from the city clerk.
§ 2-11-13 - Management of Digital Records

(A) The creation, maintenance, preservation, and storage of a digital record, including the conversion of a physical record to a digital record, must comply with the records management program.

(B) The city clerk shall review a department or inter-departmental plan to acquire or implement an information technology system or service that creates, stores, manages, protects, preserves, destroys, or provides access to digital records. If the system or service is inconsistent with the records management program the city clerk shall report the inconsistency to the appropriate director and the city manager.
§ 2-11-15 - Ownership of City Records

(E) A record received or created by a City contractor in fulfillment of the contract, except a record specifically relating only to the contractor's internal administration, is the property of the City. The contractor may not dispose of or destroy a record that is City property, and shall:

(1) maintain the record within compliance with this chapter; and

(2) deliver the record, in all requested formats and media, along with all finding aids and metadata, to the City at no cost:

(a) when requested by a director or an authorized City employee; and

(b) when the contract is completed or terminated.
From Ordinance to Process

• Ordinance approval language:

(E) Before an official or employee may destroy the original or source document of a record that has been transferred to microfilm or to an electronic or digital format, the employee or official must obtain written authorization from the city clerk.
Developing a Defensible Process
Next step: Developing Defensible Procedures

• Total timeline: 18 months
• Goal: Approve conversion of official records from paper to digital format
• Components:
  – Approval Process for Departmental Projects
  – Standardizing Operating Procedure (SOP) Template to document conversion and disposition procedure
  – Approval Memo
  – Noncompliance Reporting if necessary
  – Recordkeeping System Functional Requirements
Developing an Approval Process

• Staff questions:
  – How do we authorize conversion?
  – What happens if the ordinance is ignored?
  – Are we (as consultants) approving disposition?

• Project Answers:
  – We issue a formal memo from the City Clerk.
  – We issue a noncompliance memo to Council.
  – No. We approve the conversion process.*

*This depends on your organization’s structure.
Roles and Responsibilities

- OCC Records Analysts:
  - Review department projects
  - Enter information into a template

- Departments Records Analysts (and team):
  - Document their processes
  - Ensure their processes are defensible
  - Iterate until City Clerk issues approval memo

- City Clerk:
  - Issues approval authorization memo
  - Issues noncompliance memo
Stakeholder Benefits: Reduce Risk, Improve Process

- Departments receive SOP template
- Departments use a crosswalk document to complete SOP template
  - Corresponds to Generally Accepted Recordkeeping Principles
- OCC Consulting services include:
  - Project analysis
  - Workflow improvement
  - Procedure creation review & approval
SOP Template Sections

• Purpose
• Introduction
• Scope
• Roles & Responsibilities
• Procedure
• Disposition
• Forms/Templates
• Internal and External References
• Change History
Highlight: Scope

Transparency

An organization’s business processes and activities, including its information governance program, shall be documented in an open and verifiable manner, and that documentation shall be available to all personnel and appropriate interested parties.

Departments must create policies and procedures to document records conversion projects. This ensures transparency for open records requests, litigation, audit, and additional reviews as applicable.

SOP Section 1
Before the records conversion project starts, work with the departmental Records Management Team. Ask the following questions to improve departmental resource management:

- What is the goal of the scanning project?
- Is it a good use of resources to pursue the scanning project?
  - Consider a cost/benefit analysis.
  - What are the consequences if not proceeding with the project?
- Is there another way of achieving the goals of the project?
Procedure

• Preparing documents to be scanned
• Storage of paper documents & digital files
• Indexing and naming conventions
• Configuring and testing the scanner
• Scanning documents
• Image enhancements
• Quality Control
• Additional considerations
Example: Quality Control

• Q: Appropriate level of risk to consider?
• A: Depends on project
  – Consider longevity, risk, and access requirements
• Resource: Northwest Territories - Public Works and Services Guidelines for Scanning Projects
  – Identifies risk types and acceptable standards for error in large scanning projects
Template: Quality Control

5.10 Quality Control for scanned images

The amount of quality control that you perform on your records will vary, depending on the level of risk, the type of record, and the time dedicated to the project.

At a minimum: every 10th document (10%) must be reviewed to ensure the scanning quality is consistent and the images are usable.

For vital records, permanent records, legal documents, or high-risk records, every document must be reviewed.

Image files should also be checked to ensure that the scan team followed procedures listed in 5.8 regarding the content of an individual image file (individual pages, multi-page documents, or multiple documents per file).

Notify [person responsible] that the images have been reviewed.

Determine how you will notify scanners/indexers if a batch is rejected. How will you handle the rejected files (delete or correct digitally)? How will you control for duplicate files?
Crosswalk: Integrity (Quality Control)

Integrity

An information governance program shall be constructed so the information generated by or managed for the organization has a reasonable and suitable guarantee of authenticity and reliability.

SOP Sections 2.5.10

Quality Control

- Available staff time and resources that must be allocated
- Quality controls in place to ensure accuracy of initial scanning
- Procedures to scan and index records/boxes
- Identify staff responsible for conducting quality control
- How quality control results are documented and reported
- Measures in place to ensure that all created records are uploaded into the system and content of the record is complete
- Acceptable levels of accuracy for both legibility and percentage of pages missing
- Frequency of image auditing.
  - Ex. Daily, weekly, or percentage.
- System controls to capture duplicate/missing files, if available
Wait - where are the digitized records stored?

- Problem: Records land on unsecured drives or external services for long-term storage
  - Increases risk of loss, obsolescence, and tampering
- Solution: Recordkeeping System Functional Requirements
Recordkeeping System Functional Requirements

- Correspond to Generally Accepted Recordkeeping Principles
- Provided at onset of scanning projects and native electronic projects

Recordkeeping systems must support the following functional requirements:

- **Preservation.** Recordkeeping systems must prevent the loss or unauthorized deletion of records before the expiration of their retention period as authorized by an approved records control schedule or with the written permission of the Texas State Library and Archives Commission. *Texas Local Government Records Act §202.001(a).*

- **Integrity.** Recordkeeping systems must prevent the unauthorized alteration of records before the expiration of their retention period. A best practice is for systems to provide logs or audit trails that document edits and views of records. This is a requirement for records governed by HIPAA and depending on the type of record there may be additional integrity requirements.
Typical project results

• Stakeholder departments:
  – Focus on smarter scanning projects
  – Develop standardized procedures
  – Mitigate common risks to records and technical systems
• Records Management built into workflows
• Time, resources and money saved
• Historical documents moved to archives
• Records Management Team members develop technical and project management skills
Resources:

• TSLAC Webinars: Planning an Imaging Project Parts 1 & 2
• ANSI/ASQ Z1.4–2003 (R2013): Sampling Procedures and Tables for Inspection by Attributes
• Northwest Territories - Public Works and Services Guidelines for Scanning Projects (free)
• NARA - Technical Guidelines for Digitizing Archival Materials for Electronic Access: Creation of Production Master Files – Raster Images
• ALCTS - Minimum Digitization Capture Recommendations
Questions?
Thank you!

Contact us if you would a copy of any of the templates/documents we’ve discussed today

Bob Guz: Bob.Guz@austintexas.gov

Katherine Cranford: Katherine.Cranford@austintexas.gov
Case Study:

Implementing Legally Defensible Policies and Procedures for Disposing of Paper Records After Scanning

Bob Guz, CRM
Sr. Business Process Consultant

Katherine Cranford, CRM, CIP
Corporate Records Analyst

Records Management vs. #recordsmanagementrocks!

Successfully navigating the intersection of IT and Records when multiple generations are involved
Who am I and what are we learning about today?

What will we learn....
• Generations in today’s workforce
• Communication methods
• SharePoint

A little about me....
• Member of Generation X
• 10 years in State Government
• Mom of 2 Millennials
Who is out there in the workforce?

**Traditionals**
- 1900-1945

**Baby Boomers**
- 1946-1964

**Generation X**
- 1965-1981

**Millennials**
- 1982 - current
Traditionalist 1900-1945

- Great Depression
- Dust Bowl
- FDR’s New Deal
- Pearl Harbor & World War II
- Radio/Television
- Empire State Building completed
- Space Age

“The only thing we have to fear is fear itself.”
Franklin D. Roosevelt

“Good night, and good luck.”
Edward R. Murrow
Baby Boomers 1946-1964

- Civil rights movement
- Vietnam War
- Cold War
- Space Travel
- Woodstock
- Economic prosperity

Influences and defining events:

- Civil rights movement
- Vietnam War
- Cold War
- Space Travel
- Woodstock
- Economic prosperity

“Life’s most persistent and urgent question is, what are you doing for others.”

Martin Luther King Jr.

“Efforts and courage are not enough without purpose and direction.”

John F. Kennedy
Generation X  1965-1982

➢ Influences and defining events

• Watergate
• End of Cold War
• Dual Income Families/Mothers working outside of home
• 1st Generation with latchkey kids
• Corporate downsizing
• Oklahoma City Bombing
• “Be all YOU can be.”
Millennials 1982-current

➢ Influences and defining events

- Google/Yahoo
- Blogging
- Wikipedia
- Myspace, Facebook, Instagram, Twitter and Snapchat
- Economic expansion
- 9/11 Terrorist Attacks
- “Be all WE can be.”
Technology is different to everyone

Traditionalists
- The Hoover Dam

Baby Boomers
- The Microwave

Generation X
- Tangible

Millennials
- Intangible
Traditionalists – Records & Technology

- Documents
- Newspapers
- Radio
- Books and Magazines
- Rotary Phones
- Automobiles
- Postcards, Telegrams, letters
Baby Boomers – Records & Technology

- Records maintained by paper
- Room sized computers
- Floppy discs
- Touchtone phones
- Reel to Reel film
- Microwave
Generation X - Records & Technology

- Floppy discs
- VHS
- Cassettes
- Portable phones
- CDs
- Dial up internet
- Email, Chat Rooms
- Newspapers
Millennials - Records & Technology

- Cloud storage & Services
- Social Media
- Email
- Wi-Fi internet
- Smart phones, emoji
- Flat screens and HD
Communication Styles

- **Traditionalsists**
  - Discrete

- **Baby Boomers**
  - Diplomatic

- **Generation X**
  - Blunt/Direct

- **Millennials**
  - Politically Correct/Polite
The communication path

Planned

Actual
# Talking a different language

<table>
<thead>
<tr>
<th>Traditionalists</th>
<th>Baby Boomers</th>
<th>Gen X</th>
<th>Millennials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methods</strong></td>
<td>Written</td>
<td>In person</td>
<td>Written or in person</td>
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<tr>
<td><strong>Work Ethics</strong></td>
<td><strong>Dedicated;</strong> focused on quality</td>
<td><strong>Driven;</strong> willing to work long hours to get the job done</td>
<td><strong>Balanced;</strong> focused on productivity</td>
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<tr>
<td><strong>Technology Style</strong></td>
<td><strong>Adapted</strong></td>
<td><strong>Acquired</strong></td>
<td><strong>Assimilated</strong></td>
</tr>
</tbody>
</table>
Adapting our methods

- Handwritten communication
- Electronic communication; email, blog posts, video conferences
- Manuals, Standard Operating Procedures
- Visuals; PowerPoints, live action videos, pictures
- Face to face
- By phone
Paper to poof!

How do we successfully transition from physical to virtual records?
Managing the paper to poof transition

- SharePoint:
  Your tool for success in the gray area; technology accessible by all generations!
<table>
<thead>
<tr>
<th>Issue ID</th>
<th>Requestor (RML)</th>
<th>Division</th>
<th>DPS Agency #</th>
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<tbody>
<tr>
<td>50</td>
<td>Powers, Mary Ann</td>
<td>Texas Highway Patrol*</td>
<td>DPS.0135;</td>
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<tr>
<td></td>
<td></td>
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<td>DPS.0144;</td>
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<td></td>
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<td>DPS.0153;</td>
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<td>287</td>
<td>Smith, Zoe</td>
<td>Law Enforcement Support Division*</td>
<td>DPS.0291;</td>
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<td>298</td>
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<td>DPS.0099*</td>
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<td>962</td>
<td>Howard, Jennifer</td>
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<td>DPS.0298;</td>
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<td>1000</td>
<td>Lazaine, Vanessa</td>
<td>Law Enforcement Support Division*</td>
<td>DPS.0257;</td>
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<tr>
<td>1026</td>
<td>Hinesley, Barbara</td>
<td>Directors Office*</td>
<td>DPS.0502;</td>
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<tr>
<td>1832</td>
<td>Whiting, Katherine S</td>
<td>Administration*</td>
<td>DPS.0000;</td>
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<td>1041</td>
<td>Whiting, Katherine S</td>
<td>Administration*</td>
<td>DPS.0000;</td>
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<td>1056</td>
<td>Howard, Jennifer</td>
<td>Law Enforcement Support Division*</td>
<td>DPS.0213;</td>
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<tr>
<td>1057</td>
<td>Howard, Jennifer</td>
<td>Law Enforcement Support Division*</td>
<td>DPS.0425;</td>
</tr>
</tbody>
</table>

**Disposition Logs**

- **View:**
  - Version History
  - Alert Me
  - Shared With
  - Workflows

- **Division:**
  - Law Enforcement Support Division*

- **Departments:**
  - Crime Lab – Midland

- **District:**
  - Overtime Authorizations

- **Requestor (RML):**
  - Howard, Jennifer

- **DPS Agency #:**
  - DPS.0213, DPS.0215

- **Record Series Title:**
  - Time Cards And Time Sheets

- **Current Retention Period:**
  - 2

- **Description of Records:**
  - 4
Tools to help your organization

The Texas Record - Texas State Library Records Blog

This blog is maintained by the Records Management Assistance unit of the State and Local Records Management (SLRM) division of the Texas State Library and Archives Commission. The SLRM division assists Texas state agencies and local governments in establishing and implementing records and information management programs.

View and subscribe now!

Leverage the tools at your fingertips:

- SLRM Blog Posts
- Archived Training videos
- RMICC - Records Management Interagency Coordinating Council
Tools to help your organization

- Make your schedule accessible
- Educate employees
- Create a Discussion Board
- Leverage the Library
### Retention Period Calculator

<table>
<thead>
<tr>
<th></th>
<th>RETENTION</th>
<th>MUST BE OLDER THAN</th>
<th>RETENTION</th>
<th>MUST BE OLDER THAN</th>
<th>RETENTION</th>
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<tr>
<td>2</td>
<td>10 days</td>
<td>10/5/2014</td>
<td>AC+90 days</td>
<td>7/17/2014</td>
<td>CE+1 year</td>
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<tr>
<td>3</td>
<td>90 days</td>
<td>7/17/2014</td>
<td>AC+1 year</td>
<td>10/15/2013</td>
<td>CE+2 years</td>
</tr>
<tr>
<td>4</td>
<td>3 months</td>
<td>7/15/2014</td>
<td>AC+2 years</td>
<td>10/15/2012</td>
<td>CE+3 years</td>
</tr>
<tr>
<td>5</td>
<td>1 year</td>
<td>10/15/2013</td>
<td>AC+3 years</td>
<td>10/15/2011</td>
<td>CE+5 years</td>
</tr>
<tr>
<td>6</td>
<td>13 months</td>
<td>9/15/2013</td>
<td>AC+4 years</td>
<td>10/15/2010</td>
<td>CE+10 years</td>
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<tr>
<td>7</td>
<td>2 years</td>
<td>10/15/2012</td>
<td>AC+5 years</td>
<td>10/15/2009</td>
<td>CE+15 years</td>
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<tr>
<td>8</td>
<td>3 years</td>
<td>10/15/2011</td>
<td>AC+6 years</td>
<td>10/15/2008</td>
<td>FE+1 year</td>
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<tr>
<td>9</td>
<td>4 years</td>
<td>10/15/2010</td>
<td>AC+7 years</td>
<td>10/15/2007</td>
<td>FE+2 years</td>
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<tr>
<td>10</td>
<td>5 years</td>
<td>10/15/2009</td>
<td>AC+10 years</td>
<td>10/15/2004</td>
<td>FE+3 years</td>
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<tr>
<td>11</td>
<td>10 years</td>
<td>10/15/2004</td>
<td>AC+15 years</td>
<td>10/15/1999</td>
<td>FE+5 years</td>
</tr>
</tbody>
</table>
Deep in the heart...

Methods to take your message statewide:

- Group and/or agency wide emails
- Training sessions
  - In person session
  - WebEx Session
- Instant Message/Screen Sharing
- Phone calls
- Agency Blog
Strength in diversity

- **Traditionalist** – Experienced, consistent and dependable
- **Baby Boomer** – Hard working, breaks down big picture into manageable tasks and good team players
- **Generation X** – Adaptable, tech savvy and determined
- **Millennials** – Collaborative, tech savvy and tenacious
Questions?

Sarah Hendricks
Texas Department of Public Safety
sarah.hendricks@dps.texas.gov
512-424-7328
“Accessing the Texas Digital Archive”
Long-term Digital Preservation and the Texas Digital Archive

E-Records Forum
Nov. 4, 2016
Digital Preservation in 30 minutes or less (probably more) . . .
WHAT IS A RECORD?

Texas Code 441.108(11) defines a “state record” as:

- “means any written, photographic, machine-readable, or other recorded information created or received by or on behalf of a state agency or an elected state official that documents activities in the conduct of state business or use of public resources. The term includes any recorded information created or received by a Texas government official in the conduct of official business, including officials from periods in which Texas was a province, colony, republic, or state.”
Electronic Records

• Sec. 441.189. ELECTRONIC STATE RECORDS.
• (a) Any state record may be created or stored electronically . . .
Characteristics of an Electronic Record

• Four essential characteristics:
  – **Authenticity** - A record must be what it purports to be.
  – **Reliability** - A record must be a full and accurate representation of the transactions, activities, or facts to which it attests.
  – **Integrity** - A record must be complete and unaltered.
  – **Usability** - A record must be able to be located, retrieved, presented, and interpreted.

• Digital preservation is the challenge of maintaining all of these characteristics over time
Authenticity = TRUST
Reliability = completeness
Integrity = Protecting the bits

Example of Bit Rot
Usability
It’s all about the metadata!
(Sung to the tune of Meghan Trainor’s – “All About the Bass”)
Authentic Electronic Records

• It’s all about the Metadata: documents the activities of creation and use
  – Administrative metadata:
    • Access information
    • Audit trails
    • Retention Schedules
  – Technical metadata:
    • File format information
    • Checksums
    • System information/requirements
  – Descriptive Metadata
    • Bibliographic data (Who, what, when, where, why)
    • Indexes/Finding aids
Unlike some paper records, digital records do not survive without constant attention.

Biggest Challenge facing electronic records - CHANGE

- Technological Dependency
  Hardware, software, etc.

- Technical obsolescence
  Hardware, software, media

- Media Deterioration
  Magnetic, Optical,
Preservation Challenge

- **Short-term (0-5 years)**
  - Highly active – on-line storage
  - “Normal” management issues
  - Possible application version upgrade

- **Mid-term (5-10 years)**
  - Less active – Near-line/Off-line storage
  - Multiple version control issues
  - System upgrades
  - Possible hardware/software migration

- **Long-term (10+ years)**
  - Least active – Off-line storage
  - Migration/conversion likely

Eventually all electronic records must migrate
When Records Are at Risk

• Software is obsolete or getting to end of life
• Dependency on specific hardware or system
• Non-standard/specialty formats used
• Systems being replaced
• Records no longer in use
• Records are on removable media
Get control over your records!

• Starts with Records Management
  – Records Retention Schedules
    • Identify what records you have and what purpose they serve
    • Establish appropriate retention periods to manage volume
      – Dispose of records at the right time
      – Protect records that need to be retained
  – Recordkeeping systems
    • Organize and Categorize Records
    • Centralized control
    • Improved Access and Storage
  – Policies and Procedures
    • People know how to use the system
    • Train people on the culture of management
What are you trying to preserve?

- **Information** - The raw data or information contained in the record
- **Functionality/Appearance** - Look & Feel
- **Context** – How the records relate to other records
2. Active Records

Records management can have the greatest positive impact when applied to active records. These are among the most important records in a local government because they are used most frequently, cost the most to maintain, and are essential to the current management of the government.

Activities Eligible for Support

a) Files Management supports projects to reorganize paper or electronic files and develop and implement files classification systems, to develop written policies and procedures, and to train staff. Eligible expenditures include file shelving (including that with locking covers), side-tab file folders and associated supplies. Fire-resistant filing cabinets are eligible only if their need is sufficiently justified, but filing cabinets (storage devices with drawers) and top-tab file folders are not eligible.

b) Disaster and Business Recovery Planning supports projects to develop and test disaster and business recovery plans.

c) Indexing and Access supports projects to index or improve access to any active records, including minutes, vital records, or student records. Methods used to improve access might include traditional indexing, implementing full-text searching software, scanning and converting printed text to electronic text, or some combination of these.

d) Imaging and Document Management supports imaging and document management needs assessment and implementation projects. A document management system allows for the creation, indexing, maintenance, and retrieval of documents in various formats through a single interface.

e) Geographic Information Systems (GIS) supports GIS needs assessment and implementation projects. The State Archives provides seed money for the initial implementation of GIS in local governments, but does not fund continued improvements to GIS beyond this point.

f) Electronic Records Systems covers the development of needs assessments or the implementation of a recordkeeping system not covered under another category. Such recordkeeping systems could include database management systems (such as fire incident reporting software), computer output to laser disc (COLD) applications, and many others.

b) Business Process Analysis (BPA) supports the analysis and improvement of business processes that create or maintain records. BPA projects are a good choice for a government that has identified a problem with the way it conducts a specific recordkeeping activity but does not have a specific technological solution to that problem.
The value of context

This is a GIS shapefile – one layer out of GIS system. By itself it’s just a bunch of dots. (Stockyards in KY)

All of the dots have data attached to them

But without more map layers behind it, it’s just a bunch of dots.
Long-Term Preservation Strategies: Convert to Hardcopy (Eye-readable)

- Solution when
  - All necessary metadata is captured
  - No need to maintain functionality of records
  - Frequency of use goes down as time goes on
  - Color is not a major concern

- Examples
  - Print electronic data to paper
  - Digital to Microfilm

Best for text-based data:
- Text files
- Imaged paper
- Digital Photos (mainly B&W)
Long-Term Preservation Strategies: Standard (Sustainable) Formats

Formats expected not to change, or change slowly

- Widely supported & used
- Easily Transferable
  - Compatible with other applications
  - Forward/Backward Compatibility
  - Version Control
- Non-proprietary or open/published standards

Types of Standards
- State/Enterprise
- National/International Standards (ANSI, ISO)
- Industry Standards
- “De facto” Standards
### Types of Image formats

<table>
<thead>
<tr>
<th>FORMAT</th>
<th>FILE EXTENSION</th>
<th>TYPE OF COMPRESSION</th>
<th>METHODS</th>
<th>USAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMP (bitmap)</td>
<td>.bmp</td>
<td>Considerably compressed with lossless</td>
<td>ZIP</td>
<td>used to store bitmap digital images</td>
</tr>
<tr>
<td>JPEG (Joint Photographic Experts Group)</td>
<td>.jpg, .jpeg, .jpe</td>
<td>Lossy</td>
<td>- Discrete Cosine Transform (DCT) &amp; Chroma Subsampling - Run-Length Encoding (RLE)</td>
<td>For natural images</td>
</tr>
<tr>
<td>GIF (Graphics Interchange Format)</td>
<td>.gif, .giff, .gfa</td>
<td>Lossless</td>
<td>LZW (Lempel-Ziv-Welch)</td>
<td>For artificial images (sharp-edge lines and few colors) &amp; support animation</td>
</tr>
<tr>
<td>PNG (Portable Network Graphics)</td>
<td>.png</td>
<td>Lossless</td>
<td>DEFLATE</td>
<td>Better compression &amp; features than GIF, but don’t support animation</td>
</tr>
<tr>
<td>TIFF (Tagged Image File Format)</td>
<td>.tiff, .tif</td>
<td>Lossless</td>
<td>RLE / LZW / DEFLATE / ZIP</td>
<td>Flexible file format, can store multiple images in a single file</td>
</tr>
<tr>
<td>JPEG2000</td>
<td>.jp2, .j2c, .jpc, .j2k, .jpx</td>
<td>Lossy &amp; Lossless</td>
<td>Discrete Wavelet Transform (DWT)</td>
<td>Better image quality than JPEG (up to 20%), not widely used because of some patent issues</td>
</tr>
</tbody>
</table>
Word about compression

• Digital media files come in 3 types:
  – Uncompressed – “raw” files in actual size
    • Audio – Wave (.wav)
    • Image – Tiff (.tff)
  – Lossless – Compressed but without loss of quality
    • Audio – Windows Media Audio (.wma)
    • Image – PNG (.png)
  – Lossy – Compressed but with loss of quality
    • Audio – Mp3
    • Image – JPEG (.jpg)
Cost

• **Storage**
  • IT Support and Maintenance
    – Unending and on-going
  • Backup/Replication Practices
  • Preservation Original
    – Distribution Copies
    – Preservation Versions
• **Data Volume**
  – Continuous increase without purging
• **Staff Resources**
  – Description, preservation, access
  – Backlog size
Volume - We can’t keep everything...

- Volume of records in electronic format is growing
  - Digital audio/video,
  - High resolution photos,
  - Databases
- Keeping everything diminishes the value of what is kept...
  - Strain on resources
  - Takes resources away from other projects
Volume

Issues:

Multiple versions

Final “official” version
176 GB

Raw or unedited “original”
2.21 TB

15.5 GB
Photos from Gov. Perry, Office of the First Lady

What do we know:
• Originals:
  • Raw, uncompressed camera file.
  • Proprietary format
  • All the pics taken
• Other 3 folders
  • All JPEG files of various size (compressed)
  • Only a sample of the total photos
  • But shows the ones actually used
Collaborating with IT

- IT maintains the technology
  - IT is the physical custodian
- IT does not own the data
  - Creator is the legal custodian
- IT focuses on maintaining the storage devices
  - IT does not consider long-term access/preservation
- Data owner must define its need for retention and communicate with IT
  - Data owners often assume IT is already addressing this need
"ARCHIVE"

THAT WORD

I do not think it means what you think it means
Building the Texas Digital Archive
TSLAC’s Mission

• Preserve the record of government for public scrutiny,

• Secure and make accessible historically significant records and other valuable resources, both for print and electronic documents,

Been having issues with the electronic part. Now looking to change that.
Enter Gov. Perry
Preservation System Functional Requirements

• Ingest electronic records from state agencies
• Characterize, validate and track digital formats over time
• Monitor integrity and security of digital files
• Migrate to sustainable formats for preservation
• Collect and store all appropriate metadata about the records
• Allow for proper access to records that meets the needs of our users
  – Provide records in access formats based on user needs
• Follow appropriate archival standards for preservation
<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>FirstLadyAnitaPerry</td>
<td>FirstLadyAnitaPerry</td>
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<td>GeneralSubjects</td>
<td>GeneralSubjects</td>
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<td>GovernorRickPerry</td>
<td>GovernorRickPerry</td>
</tr>
<tr>
<td>0</td>
<td>Governor's Mansion</td>
<td>Images of the Governor’s Mansion before and after the June 2008 fire. Images show fire damage at the Governor’s Mansion, elements of the investigation of the arson, tours of the new construction and renovations, and public fundraising events.</td>
</tr>
<tr>
<td>0</td>
<td>Staff Photos</td>
<td>Staff Photos</td>
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Filter:
- Show accused files
- Show children
- Show deprecated

Name: 2001
Collection Code: 2001
Type: Files
Size: Reference: bc1c62bb-3b04-4a0c-80dc-a00df5381104
Ingest Workflow – how we bring a file into the repository.

- Runs a series of “micro-services” on the files
- Most important for long-term preservation being the “Characterize” step.
- Characterize step identifies the file format
- Plugged in to an international registry of file formats
These are MS Word documents marked as the Original.
After migration now have a “Presentation” format in PDF.
https://www.tsl.texas.gov/texasdigitalarchive
The Texas Digital Archive (TDA) manages, preserves, and facilitates access to the electronic records collections of the Texas State Library and Archives Commission, including those transferred by State agencies or digitized by the State Archives. All records visible in this portal are unrestricted and available for public use.

Locating records in the TDA
- Use the links to the descriptive guides under "Collections" below to locate records in the TDA.
- Browse the TDA holdings by using the "explore archive" button at the top of the page.
- Searching is available through the "Search Archive" bar at the top of each page.
- For more information and help with using the TDA, go to the "Search Tips" page.

Collections in the TDA

Governor X Records
- Rick Perry 2000-2014

Prints and Photographs Collections

Texas State Agencies

For a listing of Online Collections not held in the Texas Digital Archive, please click here. For more information concerning our holdings, including materials not available online, visit the Archives & Reference page.

To return to the TSLAC main website, please click here.

When using maps and other records from the Texas Digital Archive for publication or display, please use the credit "Courtesy of Texas State Library and Archives Commission (and cite the collection name and record title or image number)."
TDA
Next Steps
Expanding our capacity for preservation

• Forensic Workstation to start working with legacy media
  • Hard drives
  • Floppy disks
  • Old formats
Building Partnerships with other state agencies

• Working with 3 new agencies:
  – Historical Commission
  – Office of the Attorney General
  – TX Parks and Wildlife

• Refining our transfer procedures
  – Contact us first
  – Fill out survey/inventory
  – Negotiate method(s) of transfer
What we are looking for – the short form

• Total volume (MB or GB) of “A” or “R” series
• What % of your volume is:
  – Databases
  – Audio/Video
  – Images
  – Unstructured data (Word, Excel, PDF, etc.)
• How are you storing your records?
  – Servers
  – Local network
  – Cloud
  – Removable media
  – Tape
  – Other
• What is the volume of the most valuable series that could be sent to the State Archives?
The short form continued

• How is the data being backed up?
• What issues are you encountering providing access to your electronic records?
• Would you be interested in transferring your archival electronic records to TSLAC?
Providing advice and assistance

• Assist agencies in managing their long-term records
  – Guidance documents & Best practices
  – Work with SLRM to develop training packages for long-term digital preservation
  – Serve as a knowledge base for state and local agencies
Questions?

Thank You!

Mark Myers
Senior Electronic Records Specialist
E-mail:

mmyers@tsl.texas.gov

https://www.tsl.texas.gov/texasdigitalarchive

Current Lobby Exhibit at TSLAC:
Greetings from Texas: A History of Postcards from the Lone Star State
Open Records Request

Email Redactions Made Easy
Overview

- What’s the law
- How technology can be your friend
- 7 easy steps to make your job easier
- You might even smile when you get that PIR for all emails to & from
What’s the law?

GC Sec. 552.137(a)

CONFIDENTIALITY OF CERTAIN E-MAIL ADDRESSES

...an e-mail address of a member of the public that is provided for the purpose of communicating electronically with a governmental body is confidential and not subject to disclosure...
What’s the issue?

- In 2014 FM received 24 PIRs for emails
- In 2015 FM received 124
- Records responsive ranged from 300 – 3,000 pages of emails
Where we started...

- IT compiles emails
- TSO:
  - Makes PDF
  - Read
  - Review
  - Apply redactions
What we learned...

There is a better way that will keep you from pulling your hair out... and instead give you more time to do what you really want to do be doing!
What we learned..
You can apply the steps I am about to show you to Email or other documents.
Tell me how…

- Step 1
  - Collect all emails (records responsive) in one Outlook folder (for example PIR 1041-15)

Utilize clean-up conversation feature in Outlook to omit redundant emails (takes a thread of multiple back & forth emails down to one email/conversation)
Step 1 example..

Now you have a folder in Outlook that contains all of the emails responsive to that open records request.

In this example it’s PIR # 1041-15 & contains 141 emails.
Step 2...

Simply right click the folder you created & select the option of "extract only from this folder"
Step 3..

Filtering allows you to keep (doesn’t redact) all of those government email addresses as part of your results that you can’t redact.
Step 4...

Right click to check all boxes.

Right click again to copy checked to clipboard (email addresses only).
Step 5...

Paste into a program like Notepad that results in a .txt file.

This type of file is what is used when working with Adobe for the importing step.
Step 6... Packaging it up...

- Open Adobe Pro
- Add all emails
- Combine files
- Now all of your emails are in one PDF Binder Document
Step 7...

- Adobe Tools
- Protection
- Search & Remove Text
Step 7 (continued)

- Multiple words or phrase
- Select Import
- Select your .txt file
- Click on “ok”
Step 7 (continued)

Thank you for your interest in serving our Town,

Ginger Choate
On behalf of Theresa Scott
Town Secretary
Town Secretary's Office
2121 Cross Timbers Road
Flower Mound TX 75028
972-874-6071

From: Brian Smiley [mailto: m.briansmiley@gmail.com]
Sent: Tuesday, October 20, 2015 2:02 PM
To: Town Secretary's Office
Subject: TC Place 1

Hi Theresa,

Works like magic!

All of those emails are now ready to apply redactions!
Bonus tip!

What about those emails that are hyperlinks within the PDF?
SUCCESS!
E-mail redactions done!!!

Now you just have to read & review for any applicable exceptions & watch for those signature blocks where email address is a graphic.
And for what price you ask?

- $5,000?
- $500?
- $300?

**ANSWER: $30 – ONE TIME COST!!!**

*(at the time we purchased in 2015)*
Questions

Theresa Scott
Town Secretary
Town of Flower Mound
(972) 874-6076
theresa.scott@flower-mound.com
Process Mapping as a Best Practice: A Vehicle for Implementing Technology and Shaping a New Culture

Texas State Library and Archives Commission
E-RECORDS CONFERENCE 2016 - AUSTIN, TX
AT THE INTERSECTION OF TECHNOLOGY AND RECORDS MANAGEMENT
Process Mapping as a Best Practice

A Vehicle for Implementing Technology and Shaping a New Culture

Gift Management

To view Prezi please press http://prezi.com/ge7jfrsubagy/?utm_campaign=share&utm_medium=copy
Introduction
The Presenter

Sarah Thomas
Project Manager, Gift Management
About The University of Houston

Located in Houston, TX

Tier 1 Research Institution

Gift Management

Our main functions include the following:
- Gift Acceptance
- Processing
- Receipting
- Records Management
- Compliance
- Agreements
- Endowment/Scholarship Reporting
Gift Management

Our main functions include the following:
- Gift Acceptance
- Processing
- Receipting
- Records Management
- Compliance
- Agreements
- Endowment/Scholarship Reporting
What Records Do We Manage?

All of The University of Houston System's Donor Records
Gift Management
Encompasses
Gift Processing and Records
and
Gift Compliance

Gift Management
1 Executive Director
1 Project Manager
1 Administrative Assistant

Gift Compliance
1 Manager
4 Coordinators

Gift Processing and Records
1 Director
1 Manager
8 Gift Processing Staff
2 Students
Gift Management
1 Executive Director
1 Project Manager
1 Administrative Assistant
Gift Compliance
1 Manager
4 Coordinators
Gift Processing and Records
1 Director
1 Manager
8 Gift Processing Staff
2 Students
An Overview of Process Mapping
What is Process Mapping?
Process mapping is a tool used to visualize the inputs and outputs of a business process.

Process Mapping Identifies:
- Automation Opportunities
- Redundancy
- Decisions
- Roles & Responsibilities
- Duplication
- Non-Value Added vs. Value Added Steps
Process Mapping Identifies

- Automation Opportunities
- Roles & Responsibilities
- Redundancy
- Decisions
- Non-Value Added vs. Value Added Steps
- Duplication
The Purpose and Benefit of Process Mapping

- Seeing the Big Picture
- Pinpoints Bottlenecks and Vague Issues
- Morale Booster
- Identifying Roles, Responsibilities, and Stakeholders
- Team Building
- Compliance Auditing
- Measurable Analysis
- Training Tool
- Transparency
Stimulates Creative Thinking and Innovation
Reaching Your Team
Different Types of Learners

Visual Learners

Audio Learners

Kinaesthetic Learners

Visual Learners

Audio Learners

Kinaesthetic Learners
When either training your team, designing your process maps, or engaging in a team building activity, always address the learning needs of your team.
### Visual Learners

**Learn by Sight**

<table>
<thead>
<tr>
<th>How They Learn</th>
<th>Characteristics</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pictures</td>
<td>Needs Quiet Time</td>
<td>Concept Maps</td>
</tr>
<tr>
<td>Written Languages</td>
<td>Fast Talker</td>
<td>Outlines</td>
</tr>
<tr>
<td></td>
<td>Thinks in Pictures</td>
<td>Meeting Minutes</td>
</tr>
<tr>
<td></td>
<td>Likes to Sit in Front</td>
<td>Visual Aids</td>
</tr>
<tr>
<td></td>
<td>Takes Detailed Notes</td>
<td>Color Coding</td>
</tr>
</tbody>
</table>
## Audio Learners

Learn by **Hearing**

<table>
<thead>
<tr>
<th>How They Learn</th>
<th>Characteristics</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>Speaks Slowly</td>
<td>Record Meetings</td>
</tr>
<tr>
<td></td>
<td>Natural Listener</td>
<td>Group Discussions</td>
</tr>
<tr>
<td></td>
<td>Tends to Repeat Things Out Loud</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thinks Literally</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reads Slowly</td>
<td></td>
</tr>
</tbody>
</table>
## Kinesthetic Learners

Learn by **Doing**

<table>
<thead>
<tr>
<th>How They Learn</th>
<th>Characteristics</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Activity</td>
<td>Tends to Talk Slow</td>
<td>Design Trainings or Activities that are Hands-On</td>
</tr>
<tr>
<td>Participating in the Process</td>
<td>Learns by Doing and Solving Real-Life Problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Likes Hands-On Approaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can't Sit Still Long</td>
<td></td>
</tr>
</tbody>
</table>
**Read/Write Learners**

**Learn by Writing and Reading**

<table>
<thead>
<tr>
<th>How They Learn</th>
<th>Characteristics</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Down Information and then Reading What They Wrote</td>
<td>Prefers Written Text</td>
<td>Handouts</td>
</tr>
<tr>
<td></td>
<td>Enjoys Reading and Writing</td>
<td>Being the Note Taker</td>
</tr>
<tr>
<td></td>
<td>Emphasizes Text Based on Input and Output</td>
<td>Work Instructions</td>
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</tbody>
</table>
Design Your Process Maps to Address the Needs of Your Team
Which Means Your Map Might Not Look Like This
Which Means Your Map Might Look Like This
Applying Process Mapping to **Implementing** Technology

- Implementing New Technology can be Daunting
- Process Mapping Walks Your Non-Technical Team Through the Process
- Make the New Technology Less Scary and More Transparent
- It Assists with Team Buy-In
- It Opens Conversation For Concerns and Innovation
Process Mapping Methodology
Types of Professional Process Mapping Methodology

- Six Sigma: Focuses on Quality Improvement
- Lean: Focuses on Eliminating Waste
- TQM (TOC): Focuses on Reduce Loss and Increase Quality
- Agile: Incremental Work and Feedback
Types of Process Maps

- Cross-Functional
- Rendered (Current and Future)
- Detailed
- High-Level (Top-Down)
Cross-Functional

Research Donors → Prospect Management and Research

Craft Proposals/Asks → Donor agrees to terms?

Development & Communications

Gift Compliance

Gift Agreements

Gift Processing and Records

Deposit Funds

Donor Relations

Stewardship
High-Level (Top-Down)
(Top-Down)

1. Research Donors
2. Craft Proposals/Asks
3. Donor Agrees to terms?
   - Yes: Gift Agreements
   - No: Return to step 2
4. Deposit Funds
5. Stewardship
Rendered (Current and Future)
Process Mapping Basics

Start/Input

Activity Box

Decision

Activity Box

End/Output

Arrows show the direction/flow of the process.

Decision points should contain yes/no possibilities and all loops should be closed. That is, all arrows should lead forward or back to another step.
Process Analysis

Detailed Process Evaluation and Design Model

Workflow Analysis

<table>
<thead>
<tr>
<th>Entity</th>
<th>Internal</th>
<th>Selection Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read aloud</td>
<td>Unknown</td>
<td>Ability to hear</td>
</tr>
<tr>
<td>Source</td>
<td>Unknown</td>
<td>Speech</td>
</tr>
<tr>
<td>Board Chair</td>
<td>Unknown</td>
<td>UTI</td>
</tr>
<tr>
<td>Location</td>
<td>Unknown</td>
<td>Team Culture</td>
</tr>
<tr>
<td>Observation</td>
<td>Unknown</td>
<td>Noise level</td>
</tr>
<tr>
<td>Connected</td>
<td>Unknown</td>
<td>Number of patients</td>
</tr>
<tr>
<td>Infection</td>
<td>Unknown</td>
<td>Impact on treatment</td>
</tr>
<tr>
<td>Infection</td>
<td>Unknown</td>
<td>Impact on treatment</td>
</tr>
<tr>
<td>Infection</td>
<td>Unknown</td>
<td>Impact on treatment</td>
</tr>
</tbody>
</table>
Detailed Process Evaluation and Design Model
Policy and Process Evaluation and Design Model

Phase 1: Research and Discovery
- Read Current Policy and Process
- Map Past Policy and Process
- Identify Changes
- Research External Case, IRS, SAMM, MAPP, and PASB
- Identify Anything Unknown About Policy and Process
- Identify Current Experts and Interview Expert About Policy and Process
- Conduct Participation Observation of Policy and Process
- Identify Any Unknowns About the Policy and Process

Phase 2: Mapping and Analysis
- Read Past Policy and Process
- Map Current Policy and Process
- Map Current Written Policy and Process
- Analyze Research Findings
- Analyze Policy Changes and Translations
- Identify Issues with Policy and Process with Background Research

Phase 3: Planning
- Formally Identify Issues with Policy and Procedure
- Define the Situation
- Identify Target Audience And Stakeholders
- Define Intended Outcomes and Objectives

Phase 4: Design
- Work with Experts and Stakeholders to Redesign Policy and Process
- Evaluate Compliancy
- Evaluate for Any Policy and Process Enhancements
- Write and Map Policy and Process

Possible Inputs That Could Impact Policy or Process:
- Staff Change
- Onboarding
- Training
- Structure Change
- Communication
- Technology
- Approval Process
- Incorrect Audience
- Incompliance with IRS, CASE, SAMM, MAPP, or PASB
- Due to New Policy Change
- Departmental Changes
- Policy or Process too Complex
- Policy or Process too Simplistic
- Policy or Process is Out of Date

Phase 5: Editing Process
- Present Draft Form to Experts and Stakeholders as a Team Receive Feedback
- Edit Policy and Process from Feedback from Experts and Stakeholders
- Write and Map Policy and Process

Phase 6: Approval and Implementation
- Receive Leadership Approval
- Publish Policy and Procedures
- Train Staff and Stakeholders on Policy and Procedures
- Disseminate Any Change and Effects from Changes of Policy and Procedure
- Research Long Term Impacts

Phase 7: Measure
- Evaluate Policy and Process Cleanup
- Continue to Evaluate Policy and Process for Changes

Sarah Thomas, Project Manager, v2, 10.15.16
## Workflow Analysis

<table>
<thead>
<tr>
<th>Identify</th>
<th>Understand</th>
<th>Selection Factors</th>
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<tbody>
<tr>
<td>Bottlenecks</td>
<td>What it is?</td>
<td>Ability to Fix</td>
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<td>Source of Delay</td>
<td>Who needs it?</td>
<td>Time</td>
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<tr>
<td>Rework Due to Errors</td>
<td>Where do you use it?</td>
<td>Cost Factors</td>
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<tr>
<td>Cycle Time</td>
<td>When do you use it?</td>
<td>Team Culture</td>
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<tr>
<td>Duplication Efforts</td>
<td>Purpose and Benefit</td>
<td>Training</td>
</tr>
<tr>
<td>Unnecessary Steps</td>
<td>Impact to Stakeholders</td>
<td>Resources</td>
</tr>
<tr>
<td>Automation Opportunities</td>
<td>Why are we doing this?</td>
<td>Impact to Donors</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td></td>
<td>Overall Impact</td>
</tr>
<tr>
<td>Stakeholders Roles</td>
<td></td>
<td>Impact to Stakeholders</td>
</tr>
<tr>
<td>Cause and Effect</td>
<td></td>
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</tr>
</tbody>
</table>
Applying Process Mapping to Implement a Compliance Monitoring System and an Electronic Records Management Program in Gift Processing and Records
Applying Process Mapping to Implement a Document Imaging System and an Electronic Records Management Program in Gift Processing and Records
Overview

The University of Houston, Office of Gift Processing and Records has embarked on a 3 year process improvement project.

The process started to simply to review, update, and streamline policies, procedures, and processes.

But resulted in abstract thinking, changing the team culture, and using innovative technologies to improve their processes.

And an Electronic Records Management Program.
Our Goals and Objectives

Review and update our Gift Processing and Records procedures and processes by deploying process mapping techniques

Change our team's culture by challenging staff to step outside their comfort zones and think creatively

Use process mapping as a team building and training exercise

Develop process mapping techniques that would address our staff's needs

Deploy technology to streamline processes
The Changing World of Gift Processing and Records

Gift Processing and Records Must Know the Following:

- Advacement Service Standards
- IRS
- FASB
- Database System
- PMI (Project Management Institute)
- Information Security
- Basic IT
- Your State's Records Management Programs
Changing the Culture

**Why**
- To have the team to adapt to the changing trends in the field of Gift Processing and Records
- To spark innovation and harness creativity
- To have the team embrace utilizing technology in their daily processes to increase efficiencies

**How**
- Create a transparent environment and encourage everyone to question everything
- Enhance team buy-in by involving them in creating the plans
- Conduct Weekly Process Meetings
Question Everything!

If we don't know **WHY** we do something, then question the process!
And
Of Course Process Mapping
Starting the Process for Improvement

Preliminary Research
- Participate in Observation
- Transitioning Staff
- Reviewing University, State, Federal, and Industry Standards
- Review All Departmental Work Instructions, Policies, and Processes Process Maps
- Staff Role Analysis
- Time Study

Developing Our Factors for Selecting a Process to Focus On
- Align with Our Priorities
- Impact of Changes
- Big Bang Factor

Data Table:

<table>
<thead>
<tr>
<th>Process</th>
<th>Time</th>
<th>Cost</th>
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<tbody>
<tr>
<td>A</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>B</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>C</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>D</td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td>E</td>
<td>50</td>
<td>250</td>
</tr>
</tbody>
</table>
Preliminary Research

1. Participant Observation
2. Interviewing Staff
3. Reviewing University, State, Federal, and Industry Standards
4. Review all Departmental Work Instructions, Policies, and Previous Process Maps
5. Staff Role Analysis
6. Time Study
## GPR Time Study

<table>
<thead>
<tr>
<th>Time</th>
<th>8/10/2015</th>
<th>8/11/2015</th>
<th>8/12/2015</th>
<th>8/13/2015</th>
<th>8/14/2015</th>
<th>Notes</th>
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<td>7:00-7:15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7:15-7:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>7:30-7:45</td>
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<tr>
<td>7:45-8:00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00-8:15</td>
<td>Receiving Process</td>
<td>Receiving process</td>
<td>Receiving process</td>
<td>Receiving Process</td>
<td>Receiving process</td>
<td></td>
</tr>
<tr>
<td>8:15-8:30</td>
<td>Printing Reports and &quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Large Number of Receipts</td>
<td></td>
</tr>
<tr>
<td>8:30-8:45</td>
<td>Journals</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Due to the ATH Batches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:45-9:00</td>
<td>Verifying Batches and &quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>9:00-9:15</td>
<td>Inserting People Soft Journals</td>
<td>&quot;</td>
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<tr>
<td>9:15-9:30</td>
<td>Printing Receipts</td>
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<td>9:30-9:45</td>
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<td>9:45-10:00</td>
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<tr>
<td>10:00-10:15</td>
<td>Verifying Receipts</td>
<td>&quot;</td>
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<td>10:15-10:30</td>
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<td>10:30-10:45</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>Process July Payroll Deduction batches</td>
<td></td>
</tr>
<tr>
<td>10:45-11:00</td>
<td>Folding and Stuffing</td>
<td>Reviewing Campus</td>
<td>Processing ATH Batches</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td>11:00-11:15</td>
<td>Receipts and Taking Payroll Deduction Report</td>
<td>&quot;</td>
<td>&quot;</td>
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</tr>
<tr>
<td>11:15-11:30</td>
<td>Take the Mail Room for JUNE 2015</td>
<td>&quot;</td>
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</table>
Developing Our Factors for Selecting a Process to Focus On

- Align with Our Priorities
- Impact of Inefficiencies
- Big Bang Factor
Our Steps for Improvement

Our General Method in Process Mapping

Selecting the Process

Preliminary Scanned

Our Gift Handling Process

Team Process Mapping

The Gift Handling Process

Previous Scanning Process

Batch Scanning Pain Points

1. Process pain: 3000 pages per day
2. No batch scan service
3. Year gift for 1 year
4. High quality for design
5. Must be a single
6. Step by step instruction
7. Price

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Our General Method to Process Mapping

1. Select Process
2. Conduct Preliminary Research
3. Identify Inputs, Process, and Output
4. Identify Process Owners
5. Identify Stakeholders
6. Identify Intersection Points
7. Identify Process Boundaries
8. Design Map
9. Identify Inefficiencies
10. Design Improved Process
11. Implement
12. Measure

As a Team

Inputs → Process → Outputs
Selecting the Process

The first process we chose to analyze was our gift handling process to focus on batch scanning.
Preliminary Research

- We Needed to Partner With UH Record Retention
- We Were Batch Scanning on This
- 6 Months Behind on Batch Scanning
- Staff Manually Searching for Batch Files
Team Process Mapping
The Gift Handling Process
Previous Scanning Process

1. Prep batches (Remove staples and clips)
2. Scan batches to UA server

1. File in GPR for 1 year and then box/prepare for records retention
2. Store in Records Retention for 3 years
Batch Scanning Pain Points

Role Ambiguity
Ownership Over Batch Scanning and Understanding Everyone's Interaction

Training
A Specific Training for Batch Scanning

Our Technology
On Average it Took 20 Min. to Scan a 50 Page Batch with a Multifunction Scanner

Quality Assurance
Checks and Balances

The Process Itself
Not Well Defined and Lack of Department Policy

Record Increase

Graph showing record increase from 2011 to 2016.
Improving The Process

Purchase a Scanner with the following requirements:
- 40ppm
- Multiple Sizes
- Color Imaging
- Variable Data Printing
- Dual Duty Side
- Easy to use
- Multiple Languages

Developing an Innovative Business Process Management System:
1. Designing a Basic Scanning Process and Map
2. Reviewing Workflows: rocky and nebulous
3. Designing the new Scanning Environment: Concurrent, and
4. Designing the Scanning Environment: Designing the new Scanning Environment: Concurrent, and
5. Designing the Scanning Environment: Designing the new Scanning Environment: Concurrent, and
6. Designing the Scanning Environment: Designing the new Scanning Environment: Concurrent, and
7. Designing a Decentralized Management Policy

Preparing Staff for Change
- Model Process Change and Policy Based Meetings
- Scared the Staff for Change as Implementers
- Presented the Plan to the Activist Management Program
- Designing Process Change as Policy Based Meetings
- Making sure the process is in the "old"
- Making sure the process is in the "old"
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- Making sure the process is in the "old"

Implementing New Technology:
Out with the old and in with the new
Purchase a Scanner with the following requirements:

- At Least 300 dpi
- 2D Barcode
- Multiple Sizes
- TWAIN/ISIS
- Optical Character Recognition
- Capacity of 200 Sheets
- Packaged Imaging Software
- Color Imaging
- Scanning Speed of at Least 90 ppm and 180 ipm
- Daily Duty Cycle of at Least 15,000 Pages
Team's Feelings About Document Imaging

- Ok, I am Not Comfortable With This!
- Ok, I am Comfortable With This as Long as I Don't Have to Use it Ever!
- Ok, It's Just a Scanner!
- Oh, This is Pretty Cool!
Implementing New Technology

Out with the old and in with the new
Developing an **Electronic Records Management Program**

1. Designing a Batch Scanning Process and Map
2. Review Institutional, State, and Federal Standards
3. Design Electronic Record Management, Scanner, and Document Imaging Training
4. Assign Roles within the Electronic Records Management Program
5. Design a Batch Certification Checklist
6. Start Scanning Batches Daily Starting in FY17
7. Designing a Document Management Policy
The Document Imaging Process

**The Office of Gift Processing and Records**
**The Document Imaging Process**

**Pre-Prepping Process**

- Step 1: GPR staff reviews the batch for any confidential information and redacts the following:
  - Credit Card Numbers
  - Social Security Number
  - Driver’s License Number
  - Checking Account and Routing Number
  - Birthdate
- Step 2: Place documents in the following order:
  1. Journal Entry
  2. Batch Reader
  3. Deposit Summary
  4. Receipt Order with Summary
  5. Proof Report
- Note: Proof Reports should only be included for HPA Payroll and Athletics. There is not a document order for batch modifications.
- Step 3: After the receipting process, batches should be placed in the “To be Scanned Draw.”

**Prepping Process**

- Step 1: Remove staples and paperclips
- Step 2: Remove sticky-notes that are not needed and any papers that should not be included in the batch. Batch must have any documentation that relates to the following:
  - Correspondence
  - Agreements
  - Batch Information
  - Requests
  - Contracts
  - Guidance Documents
- Step 3: Review document for any information that must be redacted and the document order
- Step 4: Place “Batch Certification Checklist” in folder, count pages in batch, place batch number on top, place batch number on top, check off the completed steps, and sign
- Step 5: Hand to the person who will scan

**Start The Scanning Process**

- Step 1: Login into PaperStream Capture
- Step 2: The review preparation process
- Step 3: Place file folder with batch facing down, horizontal to the scanner, the smaller pages on top, and press scan
- Step 4: Review scan for quality, remove blank pages, and rotate pages to correct angle
- Step 5: Review scan for quality, remove blank pages, and rotate pages to correct angle
- Step 6: Verify scanned page numbers
- Step 7: Verify that the electronic document is accessible and that the file can open
- Step 8: Electronically sign document
- Step 9: Stamp folder “Scanned”
- Step 10: Hand to the person who reviews the batches

**Review and Release Scan**

- Step 1: Staff reviews the batch and checks the batch against the electronic document for errors and compliance
- Step 2: After reviewing the electronic document, staff electronically signs the “Batch Certification Checklist”
- Step 3: Stamp folder “Approved”
- Step 4: Place file in filing cabinet
Batch Certification Checklist

Batch Number: ________________________ Total Pages: ______

Preparation

☐ Paper and binder clips have been removed
☐ Any objects that are obstructing the document information has been approved and been removed
☐ Social Security Number, Drivers License, Birth Date, Checking Account Number, and Credit Card Number has been redacted
☐ Pages of the batch has been counted
☐ The batch has been placed in the following order
  1. Journal Entry
  2. Batch Header
  3. Deposit Summary
  4. Receipt Order with Supporting Documentation
  5. Proof Report Notes: Proof Reports should only be included for HPM, Payroll, and Athletics

I hereby certify that this document has been prepared according to The University of Houston and The State of Texas Standards.

Signature: __________________________ Date: __________________

Document Imaging

☐ The preparation process has been reviewed before scanning the document
☐ The image is of exceptional quality, blank pages have been deleted, and pages are rotated in the correct fashion
☐ The batch title has been reviewed within the FJ Shared Folder
☐ The page numbers has been verified
☐ The electronic document has been verified that it is accessible and that it can be open

I hereby certify that this document has been reviewed and imaged according to The University of Houston and The State of Texas Standards.

Signature: __________________________ Date: __________________

Review

☐ The document has been reviewed for compliance and quality assurance

I hereby certify that this document has been reviewed according to The University of Houston and The State of Texas Standards: therefore, this electronic document is the official government document from hence on.

Signature: __________________________ Date: __________________

Sarah Thomas, Project Manager, Gift Management, 8/31/2016
Electronic Records Management Program Roles

**Prepper**
- Reviews for compliance standards
- Redacts confidential information
- Removes staples and clips
- Ensures that the batch has all the correct correlating documentation
- Organizes batch in correct order

**Scanner**
- Scans documents
- Page numbers have been verified
- Quality of image
- Batch title review
- Check electronic file to make sure it opens

**Reviewer**
- Reviews the batch for compliance, quality of image, page number, file name, the file can be located, and the file can open

**Compliance Officer and Administrator**
- Ensures program is aligned with institutional, State, and federal standards
- Administers all document imaging software
Preparing Staff for Change

Weekly Process Mapping and Policy Review Meetings

Encouraged the Staff to Create an Implementation Process for Electronic Records Management Program

Designing Process Maps to Deploy Technology That are Not for IT Staff

Allowing for Trial and Error

Training, Training, Training

Open and Honest Conversations

Having an Implementation Plan
Challenges

Batch prepping time has increased due to the new quality assurance techniques deployed

The "Sticker Situation"

Getting out of the mindset of "Well this is the way we always have done it or we tried this 7 years ago or scanning is just not important"

Getting staff comfortable deploying a small technology implementation project to be prepared for a "much larger" technology project

Understanding that batch scanning is just not scanning paper but it's a part of an Electronic Records Management Program

New Staff vs. Well Seasoned Staff

Tech Savvy Vs. Not

Change is not overnight

The process is very long and time consuming
Results

Document imaging of batch documentation's quality assurance has increased

Batch scanning time decreased from 20 min. per 50 page batch to 30 sec. per 50 page batch

Staff no longer have to cut and paste documents together for the scanner to accept

There is no backlogged batches to be scanned (FY17)

Batches are scanned within the 8 hours after batch has closed

Staff have a better understanding of electronic record management and compliance standards

Team building, process mapping, and trainings have made the team feel more comfortable utilizing technology and have enhanced their skills

Staff no longer have to manually search for batch files

Staff feel more empowered and engaged since deploying process mapping and team activities

There are assigned roles within the Electronic Records Management Program (Prepper, Scanner, Reviewer, and Compliance)
Also......

Process mapping has helped us configure our document imaging software to increase the scanning efficiency and automate the scanning process.

We now have configured the scanner to extract the batch number from the Batch Cover (Using OCR) and then auto populate the document name.

Then it automatically sends the file to the correct shared folder.

We are currently using patch code separators to scan multiple batches at once.
Questions
How to Contact Us

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713-743-7945