



AF03 – Management of digital records in enterprise wide systems in the public sector: Zimbabwe

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Outline

- Introduction – an outline of the case study
- Progress to date including research

Contributors

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Outline & Objectives

- In December 2015, IP Trust Board of Directors approved the initial AF03 case study implementing enterprise content management systems in a Zimbabwe's public institution.
- Examine the technological environments within which records are being generated (ECM used?)
- ECM applications in use (open source or proprietary?)
- Are ECM applications implemented in a cloud environment or not?

Data collection outline

- Data collection is done in two phases
- 1st phase-the survey instrument was developed collaboratively between four country studies AF02, AF03, AF04 and AF 05.
- The survey instrument had 10 questions in the following broad categories
 - Background information (questions 1-3)
 - Cloud services (questions 4-6)
 - Enterprise resource planning (ERP) applications (questions 7 and 8)
 - Enterprise content management (ECM) and ERP integration (questions 9 and 10)

Survey Question 1-Respondents' composition (n=23)

Question	%	Description
Which sector best describes your institution?	60.87% (14)	Public Sector – Executive Branch: Social (including Education, Culture, Health, Information, Interior / Home Affairs, Justice / Law, Labour, Religion, Science and Technology, Sports, Tourism)
	17.39% (4)	Public Sector: Parastatals/ Independent Offices/ Commissions/ Institutions based on Chapters 12 and 13 of the Constitution
	8.70% (2)	Public Sector – Executive Branch: Leadership (including President and Vice President, Prime and Prime Minister)
	4.35% (1)	Public Sector – Executive Branch: Economics / Infrastructure (including Commerce / Trade, Communications, Finance/Treasury, Industry, Public Works/Infrastructure, Transport)
	4.35% (1)	Public Sector – Executive Branch: Environment / Natural resources (including Agriculture, Climate change, Energy, Environment, Fisheries, Forestry, Irrigation Land management, Mining, Natural resources, Petroleum/Oil, Water resources)
	4.35% (1)	Voluntary sector (i.e. Nongovernmental organizations and not for-profit institutions undertaking social activities)

Survey Questions 2 and 3

Section or department in the institution

Scope of institutional mandate

	Percentage
Activities limited to a particular Province	33.33% (14)
Activities take place across the nation	66.7% (7)

	Percentage
Records/Archives professional	61.90%
Administration	9.52%
Information Technology	9.52%
Other	9.52%
Accounting/Finance	4.76%
Operations (specific to the core business of the institution)	4.76%

Survey Question 4

	Percentage	
Does your institution use cloud computing?	52.38%	No
	23.81%	Yes in order to increase organizational performance
	9.52%	Yes in order to improve security
	4.76%	Yes in order to increase storage space
	4.76%	I don't know
	4.76%	Yes in order to reduce cost

Survey Question 5

	Percentage	
Which cloud computing service model does your institution use?	38.10%	I don't know
	33.33%	None
	14.29%	Community cloud - A cloud infrastructure deployment model in which a specified group of organizations with common privacy, security, or legal concerns, collaborate to share resources that may be managed by the organizations or a third party, on or off premises.
	14.29%	Private cloud - A deployment model in which a provider manages and supports infrastructure, platform, or software as a service for the exclusive use of a consumer.

Survey Question 6

	Percentage	
Which deployment model is used in your institution?	47.37	None
	10.53%	Platform as a Service (PaaS) - A mid-level cloud service with fundamental infrastructure resources, along with an operating system and commonly with basic utilities such as support for web services, databases, and programming languages that are managed by the provider, leaving the consumer to rapidly and conveniently deploy applications.
	26.32%	I don't know
	5.26%	Infrastructure as a Service (IaaS) - A low-level cloud service, with fundamental resources, such as processing, storage, and networks, managed by the provider, giving the consumer the ability to rapidly and conveniently deploy the platform and software.
	5.26%	Software as a Service (SaaS) A high level cloud service, managed and hosted by the provider, that offers consumers on demand access to applications.
	5.26%	A combination of two deployment models

Survey Question 7 (a)

	%	
Which functional areas are covered by the transactional system in your institution?	36.10 %	Accounting whether financial (general ledger, fixed asset, payables including vouchering, matching and payment, receivables cash application and collections, cash management, financial consolidation) or management (budgeting, costing, cost management, activity based costing)
	19.05%	Inventory or stock management
	19.05%	Project management (project planning, resource planning, project costing, work breakdown structure, billing, time and expense, performance units, activity management)
	19.05%	I don't know
	19.05%	None
	14.29%	Human resources (recruiting, training, rostering, payroll, benefits, retirement and pension plans, diversity management, retirement, separation)
	9.52%	Customer relationship management (sales and marketing, commissions, service, customer contact, call center support).
	9.52%	Marketing and sales

Survey Question 7(b)

	%	
Which functional areas are covered by the transactional system in your institution?	9.52%	Operations (activities undertaken in the core business of the institution with outputs either being goods or services)
	4.76%	Corporate services (real-estate management, travel management, environment as well as health and safety)
	4.76%	Data services that are "self-service" interfaces for customers, suppliers and/or employees
	4.76%	Manufacturing (bill of materials, work orders, scheduling, capacity, workflow management, quality control, manufacturing process, manufacturing projects , manufacturing flow, product life cycle management)
	4.76%	Order Processing (order entry, credit checking, pricing, available to promise, inventory, shipping, sales analysis and reporting, sales commissioning).
	4.76%	Supply chain management (supply chain planning, supplier scheduling, product configurator, order to cash, purchasing, inventory, claim processing, warehousing)

Survey Question 8

	%	
Which company supplied the transactional system in your institution use?	61.90%	I don't know
	23.81%	None
	9.52%	Microsoft Dynamics
	9.52%	SAP Business
	4.76%	Oracle E-Business Suite

Survey Question 9

	%	
Which company supplied the enterprise content management system in your institution use?	57.14%	I don't know
	28.57%	None
	4.76%	HP (TRIM/Records Manager)
	4.76%	Microsoft (SharePoint/Office 365)

Survey Question 10 (a)

Integration between ECM and transaction system

	None	Minimal	Full
None	71.43%	28.57%	0.00%
I don't know	100.00%	0.00%	0.00%
Collaboration – module that allow users to work with each other to develop and process content	16.67%	66.67%	16.67%
Digital Asset Management – module that consists of management tasks and decisions in the ingestion, annotation, cataloguing of digital assets	11.11%	77.78%	11.11%
Document Management – module that controls documents' check in/check out, version control, security and library services.	14.29%	71.43%	14.29%

Survey Question 10 (b)

Integration between ECM and transaction system

	None	Minimal	Full
Records Management – module that manages the administration of records including file plans, indexing, and retention policies in ensuring legal and industry compliance.	37.50%	50.00%	12.50%
Scanning – module that provides image-processing capabilities that allow conversion of paper files to digital images.	16.67%	16.67%	66.67%
Web Content Management – module that controls a website’s content through the use of management tools based on a core repository e.g. templating, workflow and change management as well as content deployment.	14.29%	42.86%	42.86%
Workflow Management – module that supports business processes, routing content, assigning work tasks and states as well as creating audit trails.	16.67%	33.33%	50.00%

Research & dissemination activities undertaken

- Presented papers at the following conferences
 - Chaterera, Masuku & Bhebhe (2017) “Use of ECMs in managing e-records in Zimbabwe’s public sector”
ProLISA Conference, Pretoria

Published articles

- Mehluli Masuku, Sindiso Bhebhe and Njabulo Bruce Khumalo, 2017. An Information management framework for the support of E-Government in Zimbabwe, *Tidsskriftet Arkiv journal*, vol 8, issue 1, Available at DOI: <http://dx.doi.org/10.7577/ta.1960>
- Chaterera, F . 2017. Managing public records in Zimbabwe, the road to good governance....