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Overcoming Enterprise Architecture Adoption Barriers to Enable Business Transformation at Australia Post

by Marina Malenovic

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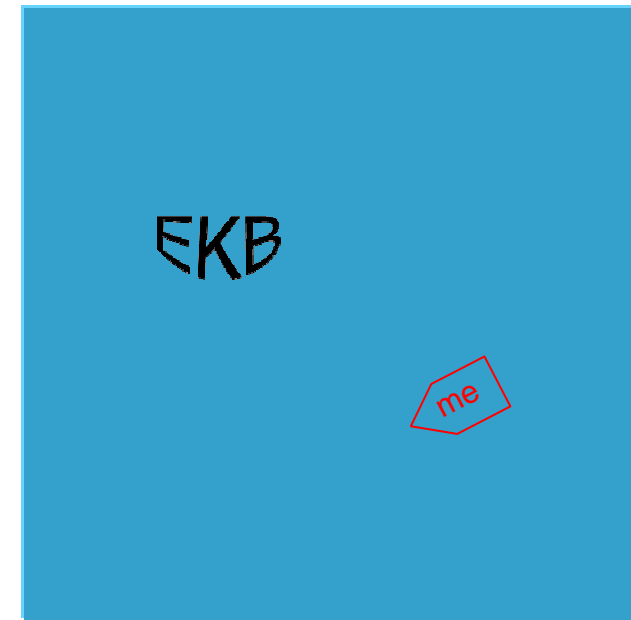
19-July Sydney, Australia

21-July Melbourne, Australia



About Me

- Extensive experience in delivering architectures and strategic plans across a range of industries and business functions
- Proven record in configuration and implementation of Enterprise Architectural Repositories/Tools (eg. IBM Rational System Architect, Metis, Cool*Biz, ERWin, CE LBMS Systems Engineer, In House developed ...)





History

- In 2009 Australia Post celebrated 200 years as Australia's oldest, continually operating organisation

Present (in numbers)

- Total revenue \$4.9 billion
- 4 Strategic Business Units, 3 Functional Units, More than 35,000 people (135 nationalities)
- 10.7 million delivery points nationwide, 4,433 retail outlets (including 2,541 in rural and remote areas)
- 20.4 million articles each business day, 5,323,400,000 mails a year
- More than 1,000,000 customers served every day, 1.3 million Australian passport interviews a year





Our Strategy

- Restore our letters business to profitability
- Grow our leading parcels business especially with online retailers
- Become one of Australia's most trusted provider in communications, financial, government and identity services

How We Get There

- Stabilise – build a solid base
- Rebuild – change how we do things
- Grow – unlock the opportunities
- Enable - build a Future Ready business



Were Enterprise Architecture was in April 2008

1. EA was fairly established in some parts of Australia Post however it was fragmented and was lacking coherence.
 - number of architecture teams - business and IT
 - lack of common framework
 -
2. There was not a well established Architectural Knowledge Base (EKB)
 - number of attempts to implement EKB using System Architect with somewhat limited success:
 - **Resistance:** modelling, reporting and publishing was extremely labour intensive, limited access to information;
 - **Content:** inconsistent, unstructured, incomplete, unlinked and not trustworthy
 - **Process:** lack of governance, common framework, common data model and clear data ownership
 - **Infrastructure:** the tool was not configured to support AP needs and it was not in production



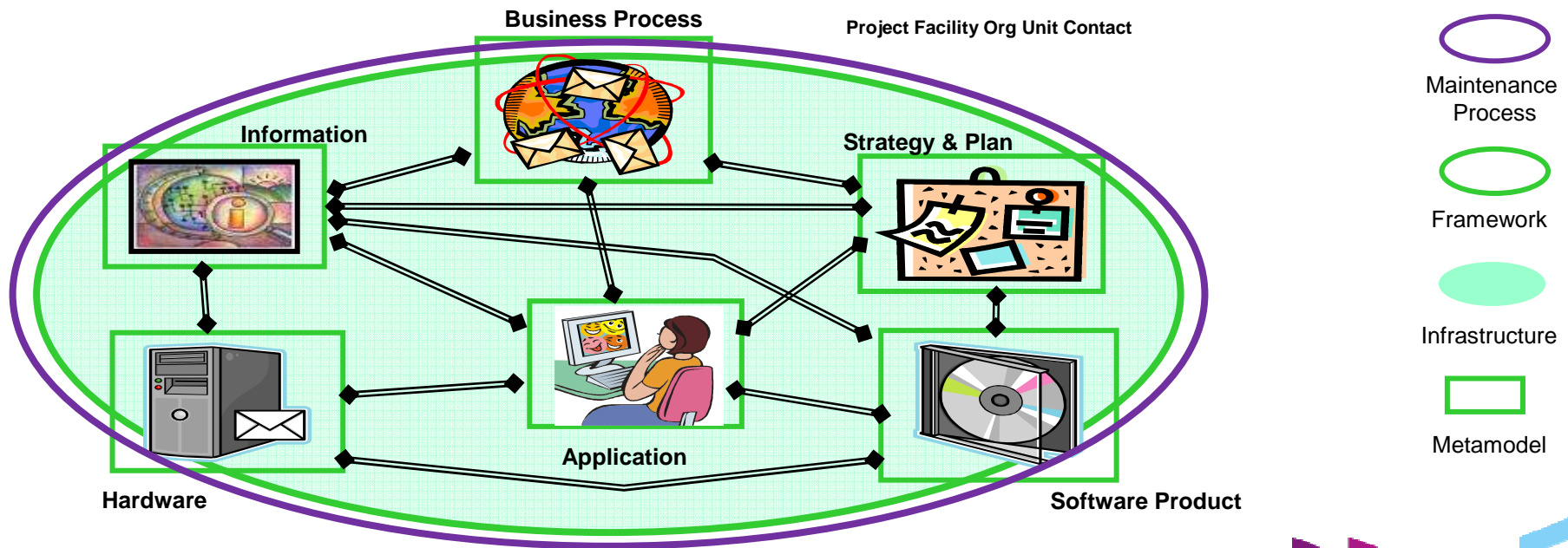
Post Integrated Architecture Framework (PIAF)

- established and endorsed from the collaboration efforts of multiple business and IT stakeholders
- strives to improve decision making from a trusted single source of information and knowledge
- models are governed and maintained within the Enterprise Knowledge Base (EKB). **The EKB is the point of truth for all PIAF models**



EKB Vision

Establish Enterprise Knowledge Base (EKB) as a **structured, integrated and central** repository of architectural knowledge regarding the Post Business & IT landscape, represented as a collection of objects and models and capability for advanced analysis



Benefits

- Better management of Australia Post Processes and IT assets (applications, infrastructure, etc...):
 - single point of truth
 - visibility
 - reuse of information & models
- Increased speed to market:
 - reduce feasibility time
 - improve analysis and decision making
 - reduce cost of doing it
- Enable process integration and improvement:
 - end to end view (business & technology)



Delivery Plan

- EKB Project had 3 phases to deliver
 - Content
 - content delivered in each phase to be governed and managed as part of ongoing support
 - Enabling Infrastructure
 - in each phase, content delivery to be preceded by delivery of enabling technology component



Process

- Engaged and consulted business & IT Stakeholders to define requirements
- Agreed Framework (PIAF - Post Integrated Architectural Framework, tailored Zachman/TOGAF),
- Developed Metamodel
- Defined Data Ownership
- Imbed EKB usage and maintenance into AP processes
- Established Governance and Maintenance Process
- Monitoring, Auditing and Controlling processes defined and enforced



Challenges

- People (resistance, conflicting priorities, skill, etc...)
- Process (internal processes, change management, etc...)
- Technology (new technology eg. Terminal Services, 64 vs 32, SA extended functionality, SA Publisher, etc...)



Where we are now

EKB Governance

- Governance process defined, published & enforced
- Data maintenance process defined, published & enforced

EKB Functionality

- Data Entry
- Data integration
- Automated Visualisation/Diagramming
- Analytics, Overlays & Heat maps
- Reporting
- Automated Export to Visio & MS Access
- Data auditing & data quality/integrity reports

EKB Content

- Enterprise Processes Models (L0-L4) + Overlays
- Enterprise Capabilities Models (L0-L2) + Overlays
- Enterprise Application Function Model (L1-L3) + Overlays
- Enterprise Technology Model (L1-L3) + Overlays
- Enterprise Information Model (L1-L3) + Overlays
- Detail data models for a number of projects
- Business System Inventory (BIP) + Overlay
- Application Roadmap & FSA

EKB Website

- EKB content published daily/weekly
- Metamodel, User Guides & Templates
- Dashboard published daily

EKB Framework & Metamodel

- Building Blocks
- 104 Definition Types
- View Points
- 20 Diagram Types
- 143 Report Templates
- 116 Web Publisher Reports
- 351 Analytic Templates
- 45 Macros

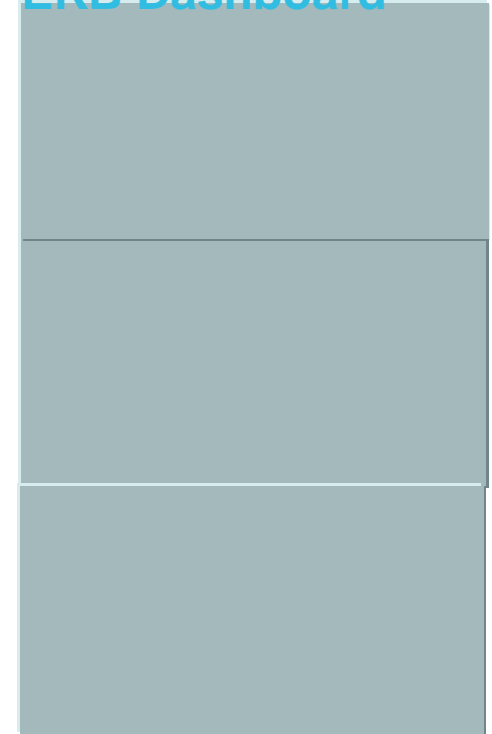
EKB Supported Processes

- Strategic planning
- Business Case assessment & approval
- Solution Architecture Outline
- IT Asset Management
- Cost Transparency
- Application Life Cycle Management
- etc...

EKB Infrastructure

- SA running in Production
- SA **configured & extended** to support AP business
- Partnership with the IBM development to enhance the tool

EKB Dashboard



System Architect Publisher - Microsoft Internet Explorer

Address: http://ekb.corp.uspost.local/

EKB Enterprise Knowledge Base

Home Troubleshooting

- Information Security Classification
- Marketing Classification
- Process
- Process Area
- Process Group
- Project
- Multiple entry
- SA Definition
 - Access Path
 - Activity
 - Activity To Project
 - Analysis
 - Analysis Definition
 - Analysis Complex Query
 - Analysis Parameter
 - Analysis Report
 - Copy Control
 - Application Alias
 - Application ID
 - Application Function Level 1
 - Application Function Level 2
 - Application Function Level 3
 - Application Function To Project
 - Application Function To Software Pro
 - Application Instance
 - Application Instance To Project
 - Application Instance
 - Application Name
 - Application To Project
 - Application Map
 - Application Map To Project
 - Application Map To Project
 - Application Reference
 - Alias
 - Alias
 - SPAN Process
 - Business Category
 - Capability
 - Capability To Category
 - Category Query
 - Category Type
 - Channel

Definition:

Application
 defines Application used by Australia Post:
 an application is one of:
 - Physical Application: complete, self-contained program or group of programs that:
 - performs a specific function directly for the user or another application,
 - is implemented on one platform,
 - displays a single software package
 - can be hosted internally or externally, when hosted externally it is usually called Application Service Provider.
 The function performs may be:
 - a database interface
 - a processing function
 - a reporting function where the reporting function performed uses a separate technology or platform from the main application.
 - an integration between different applications by transferring or collating information from one application in order to send or receive it from another application.
 - a configuration facility of some kind.
 - Website: set of mostly static interconnected web pages, usually including a homepage, prepared and maintained as a collection of information.

Description:

- External Agent: an application/software that is controlled by an external party (an organisation or a person) to which Australia Post communicates electronically. An application/software is classified as External Agent one or more of the following criteria is met:
 - Australia Post does not have it installed
 - Australia Post does not have insight knowledge about it and/or
 - Australia Post does not have influence over it operation.

An application name should comply with the following rules:
 - application name is a full name of the application in whole words
 - must be unique within Australia Post and commonly used by the business
 - have all words separated by a space and have the first letter in each word as a capital followed by lower case letters. Exception to this rule is when Vendor/Product name or industry standard is used (eg. netPOS, eLetter, etc...)
 - where a single application is known by more than one name across business groups, one name that is commonly used by the business must be selected as the 'main' name. All other names are to be documented as aliases. A project name should not be used as main Name; it should be shown in full as an alias.
 - permissible values are whole words, numbers
 - avoid abbreviations
 - only use a hyphen to separate a suite name from an application name, spaces on either side of hyphens are mandatory.

Admin: SA Definition Property

Label	Property	Description	Key	Admin	Type	Length	Related Definitions
Acronym	Acronym	Identifies abbreviated (short/ternary) name of the application. An Acronym must comply with the following rules: - must be unique within AP - consists of the first letters of the full name of the application, but may be shortened versions of words in the full name. Where business does not use an acronym to refer to an application then the full name should be used instead. - if required suffix can be used to clarify the difference between an Application and Application Suite - letters, numbers and hyphens are permissible - where a single application is known by more than one acronym across business groups, one acronym must be selected as the 'main' acronym. All other acronyms are to be documented as aliases. A project name should not be used as main acronym; it should be documented as an alias. - maximum length is 20	F	F	Text	20	
Activity	Activity	defines activity (user Level 4) that are to be supported by this application.	F	F	LIST	1,500	ACTIVITY
Agreed Maintenance Window	Agreed Maintenance Window	An outage period that is planned and agreed between Post IT 2 Vendor/Service Provider and the owning Post Business area for the application to be unavailable to the customer for conducting any planned maintenance, changes etc. Customer's during this period will likely be unable to use the application.	F	F	Text	250	
Alias	Application Alias	Where a single application is known by more than one Acronym/Name across business groups, one Acronym/Name must be selected as the 'main' Acronym/Name. All other Acronym/Names are to be documented as aliases. A project name should not be used as main Acronym/Name; it should be documented as an alias. Includes subgroups that the application belongs to, for classification from the following categories: Physical Application: complete, self-contained program or group of programs that: - performs a specific function directly for the user or another application, - is implemented on one platform, - displays a single software package	F	F	LIST	1,200	Application Alias



ENTERPRISE CAPABILITY MODEL - Post IT Supported Application

DRAFT

Interact with Partner & Supplier
Partner & Supplier Support

1. Strategic Alliance Acquisition and Creation Management
2. Strategic Alliance Management
3. Procurement Management
4. Supplier Relationship Management
5. Supplier Relationship Management

Interact with Customer
Customer Management

6. Sales Planning and Management
7. Sales Execution
8. Customer Channel Management
9. Customer Relationship Management
10. Customer Transaction Execution
11. Customer Retention

Fulfillment Operations

12. Supply Network Management
13. Logistics Preparation
14. Transport
15. Logistics Acceptance
16. Sort
17. Deliver
18. Goods Storage and
19. Order fulfillment
20. Information Systems Management
21. Manufacturer Products
22. Freight Import and Export

Fulfillment Support

23. Operations Management
24. Network Development
25. Business Management
26. Customer Order Tracking
27. Integration Management
28. Fulfillment Quality Control
29. Location Plan & Resource Management

Organization Enablement
Strategy & Marketing

1. Research, Analysis & Insights
2. Corporate Vision & Strategy Management
3. Market Planning
4. Product & Service Management
5. Other Development
6. Advertising & Promotion Management
7. Market Analysis

Information & Knowledge Management

8. Business & Operational Information Management
9. Information & Operational Content
10. Systems Planning
11. Systems Delivery
12. Systems Operation & Maintenance
13. Systems Optimization

Business Management

14. Business Change Management
15. Business Information Management
16. Corporate Governance, Policy and Compliance
17. Employment & Communications
18. Systems Performance Management
19. People Planning
20. People Capability
21. People Performance
22. People Management & Support
23. Business Resilience Management

Financial Management

24. Financial Governance
25. Financial Control
26. Asset Lifecycle Management
27. Process Optimization

System Management

28. System Planning
29. System Delivery
30. System Operation & Maintenance
31. System Optimization

People Management

32. People Planning
33. People Capability
34. People Performance
35. People Management & Support

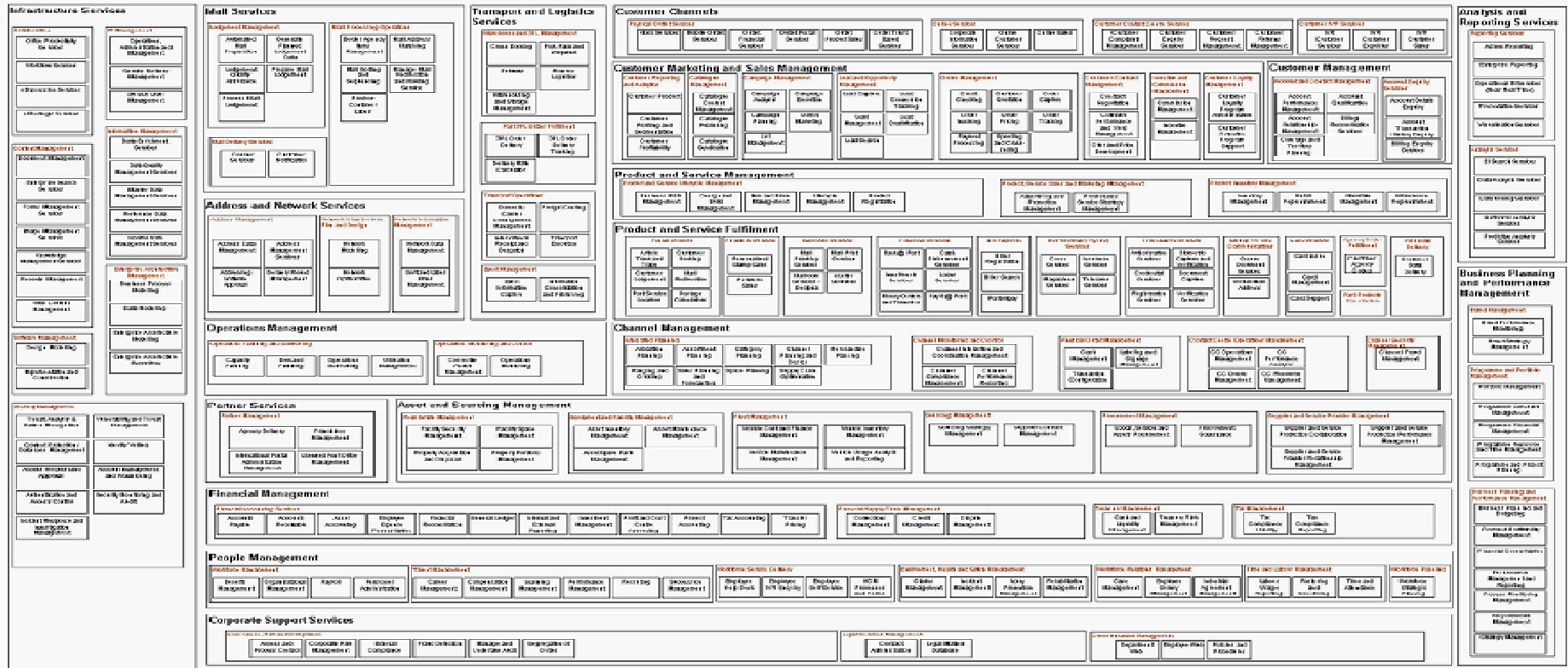
PIAF
IBM
POST

PIAF is a joint effort between IBM and POST to create a new generation of software and services that will help businesses and organizations to improve their performance and reduce their costs. PIAF is a strategic partnership between IBM and POST, two leading technology companies. PIAF is a joint effort between IBM and POST to create a new generation of software and services that will help businesses and organizations to improve their performance and reduce their costs. PIAF is a strategic partnership between IBM and POST, two leading technology companies.



Application Function Model - Level 3

PIAF Plan It. Architect. Analyze. Implement. Automate. Optimize.



EAFM - L3 (Enterprise Application Function Model), READ ONLY
System Architect
Monday, 15 November 2010 9:56 PM



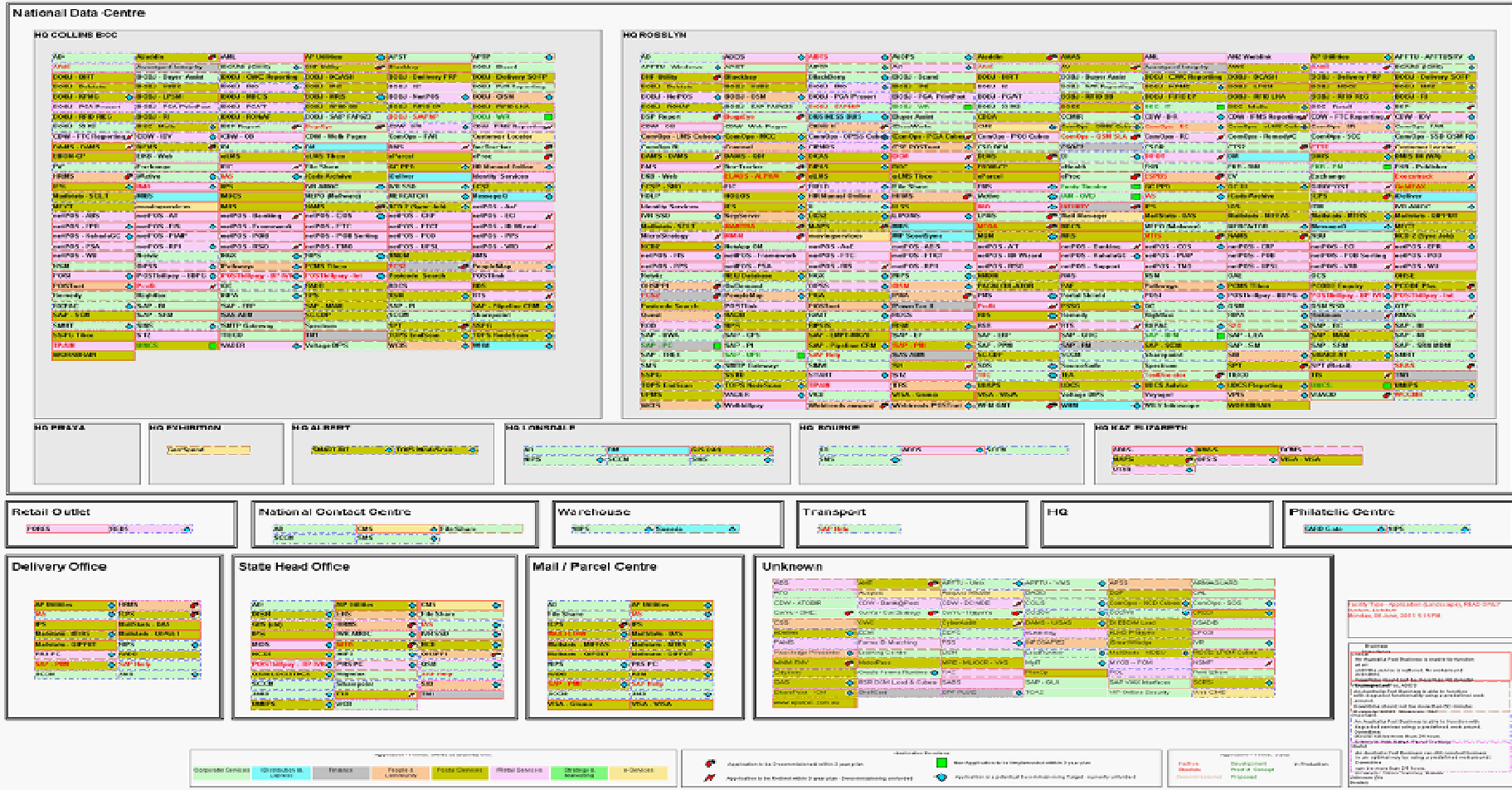
Application Function Model - Level 2 - Application FSA 2011+ View - Post IT Supported

The image displays a comprehensive grid of application function models, organized into several main sections:

- Human Resources:** Includes modules for Recruitment, Compensation, Performance, and Learning.
- Finance:** Covers Accounting, Tax, Treasury, and Risk Management.
- Operations:** Encompasses Supply Chain, Manufacturing, and Logistics.
- Customer Relationship Management (CRM):** Includes Sales, Marketing, and Service.
- Information Technology (IT):** Covers Infrastructure, Security, and IT Support.
- Other Business Functions:** Includes Compliance, Legal, and Environmental, Health, and Safety (EHS).

Each application code is accompanied by a brief description of its function, such as 'SAP HR - Payroll' or 'SAP FI - General Ledger'.

Facility Type - Application - Post IT



System Architect Publisher - Microsoft Internet Explorer

http://ekb.corp.us.ibm.com

Enterprise Architecture Knowledge Base

Home | ESI/BSP Report | Data Models | User Manuals | Templates | About EKB | Troubleshooting

EKB

Enterprise Knowledge Base

Home | Help | Troubleshooting

- Model
 - Enterprise Application Function Area
 - Enterprise Capability Model
 - Enterprise Information Model
 - Enterprise Process Model
 - Enterprise Technology Model
 - Entity Reference
 - Layer/Block
 - Overlay Enterprise Application Function Model
 - Overlay Enterprise Capability Model
 - Overlay Enterprise Process Model
 - Overlay Enterprise Technology Model
 - Overlay Post-ISA Page
 - View Application Enabled
- Report
 - Building Block Definition
 - Category
 - Application
 - Application Alias
 - Application Function Level 1
 - Application Function Level 2
 - Application Function Level 3
 - Application Instance
 - Architectural Reference Framework
 - Attribute
 - Business Strategy
 - Capability
 - Conceptual Entity
 - Data Element
 - Data Model
 - Data Store
 - Entity
 - Hardware Component
 - Hardware Function Level 1
 - Hardware Function Level 2
 - Hardware Function Level 3
 - High Level Process Group
 - Information Group Classification
 - Identity Classification
 - Process
 - Process Area
 - Process Group
 - Process
 - Relationship
 - Sub Definition
 - Software Product Function Level 1

Post IT Supported Applications by Owner

Report Date: 11-July-11

	Corporate Services	Distribution & Express	Finance	Human Resources	Insurance	Postal Services	Retail Services
Development	5	9	1	1	1	1	1
Production	125	9	9	9	27	136	85
Testable	1				1	2	4
Obsolete	14			3	3	4	9
Proof of Concept	1						
Proposed	6					6	10

Post IT Supported Applications by Category

Report Date: 11-July-11

	Application Service Provider	External Agent	Physical Application	Website
Development			8	
Production	11	7	385	5
Testable			8	
Obsolete			30	1
Proof of Concept			1	
Proposed			20	

Business System Inventory (BSI)

- Dashboard - Current
 - By Center
 - By Category
- Dashboard - Historical
 - By Status
 - By Category

EKB

- ekb.corp.us.ibm.com



Project Delivery Team

- Principal Architect - Architecture Knowledge Management (full time)
- Architecture Analyst / Technical Expert (full time)
- Project Manager (2 D/W), Solution Architect (2 D/W) & Technology Support during infrastructure delivery
- IBM Consultants

EKB Stakeholders

- Architects (Business, IT)
- Planners
- Application Account Managers
- Technology Services
- Application Controllers

EKB Team

- Principal Architect - Architecture Knowledge Management (full time)
- Architecture Analyst / Technical Expert (full time)



Tips

- Right team to drive, implement & run repository (right mixture of enterprise architecture and technical skills, disciplined, focus and believing in the value)
- Engage Stakeholders, get high level requirements and ownership commitments
- Defined and agreed Vision
- Defined Benefits and Cost
- Deliver in phases
- Implement as a Project and then manage it as Business As Usual
- Establish and enforce Governance, Data Ownership and Maintenance Process
- Imbed contribution / usage in your processes and KPIs
- Stay relevant and on track; take time to understand stakeholders' needs, communicate with them regularly, seek feedback...
- Provide user manuals, help & training
- Provide alternative data entry (eg. spreadsheet templates) and centralised data entry services where appropriate.
- Engage and communicate with IBM to resolve issues and to propose enhancements
- **It is technically challenging to implement System Architect in a large corporation, get IBM's commitment to provide and own overall end to end Enterprise technical solution**

