

Building Executable Enterprise Architecture: Framework and Practice

Presentation to a/EA

May 10, 2006

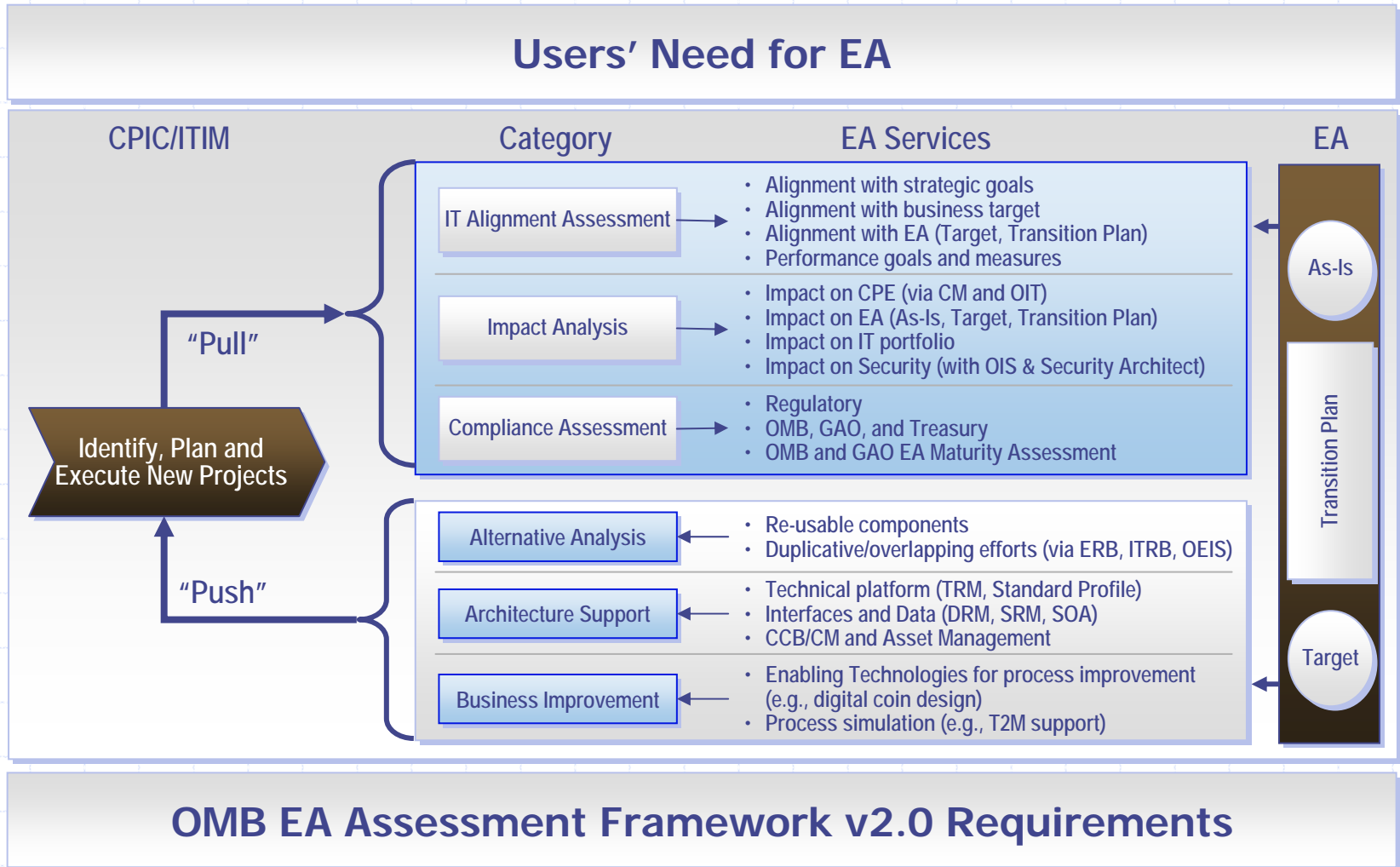
Challenges in EA

- ◆ Existing EA frameworks emphasize on how to develop EA, not on how to use EA
 - Need a new way of thinking
- ◆ EA is primarily treated as a compliance tool, not a intrinsic mechanism of the enterprise governance and decision making process
- ◆ The vast majority of EA tools are designed for developing and storing EA contents
 - Easy to get data in but tough to extract data
- ◆ Duplicate data stored in multiple repositories (CM, CPIC, EA)
 - Consolidation and integration through Globally Unique Identifier

EA in Users' Perspective

No.	Questions	Potential User Groups	Business	Strategic Planning	CM/CCB	SDLC	ITIM (CPIC)	PMO	Source of EA Data for Analysis
1	What applications/systems currently support Process/Activity X?	SBUs, Directors, CIO	Y	Y	Y	Y	Y		AS-IS EA
2	Who owns those applications/systems? Where are they located?	SBUs, OIT, OIS, OEIS, EA, EAM	Y	Y	Y	Y	Y	Y	AS-IS EA
3	What is the status of each application/systems in terms of (1) operational status, (2) security status, and (3) mission critical?	OCIO, SBU		Y	Y	Y	Y	Y	AS-IS EA
4	What other systems interface with this application and in what format?	OCIO		Y	Y	Y			AS-IS EA
5	What improvement/modernization initiatives are in place to improve Processes/Activities? What is the status of those initiatives?	OCIO, SBUs	Y	Y	Y		Y		Target EA, Transition Plan, Release Architecture
6	What data do my Business Processes/Activities create and use? How are the data collected and stored?	SBUs, OCIO	Y	Y	Y	Y			AS-IS EA
7	Which business process/activity areas provide opportunities for improvement?	SBUs	Y	Y			Y	Y	AS-IS EA, Target EA, Transition Plan
8	What components can be reused, consolidated, and integrated?	OCIO, Chief Architect			Y	Y		Y	Target EA, Transition Plan
9	What systems or applications will be retired due to initiatives?	OCIO, SBUs	Y	Y	Y	Y	Y		Transition Plan, Target EA
10	What activities or processes does my organization perform? How are they related to my performance measures and objectives?	SBUs	Y	Y					AS-IS EA
11	What are the on-going projects? How are they related to the Process/Activities, Existing Applications/Systems, and planned systems and applications?	SBUs, OCIO, Chief Architect, CPIC, OCFO	Y	Y	Y	Y	Y	Y	Transition Plan, Target EA
12	What is the total cost of those projects?	OCIO, OCFO		Y	Y		Y	Y	Transition Plan, Target EA
13	What is the status of those projects?	OCIO, SBUs	Y	Y	Y		Y	Y	Release Architecture
14	What are the impacts of those projects on the current production environment?	OCIO, Chief Architect, CCB			Y	Y		Y	Transition Plan, Target EA
15	How is Project X related to Project Y? Is there any redundancy or overlap?	SBUs, OCIO, Chief Architect, CCB	Y	Y	Y	Y	Y	Y	Transition Plan, Release Architecture
16	What components can be reused for Project X?	OCIO, Chief Architect				Y		Y	Transition Plan
17	What project can we drop if the budget situations change?	CIO, CFO, SBUs	Y				Y		Transition Plan, Release Architecture

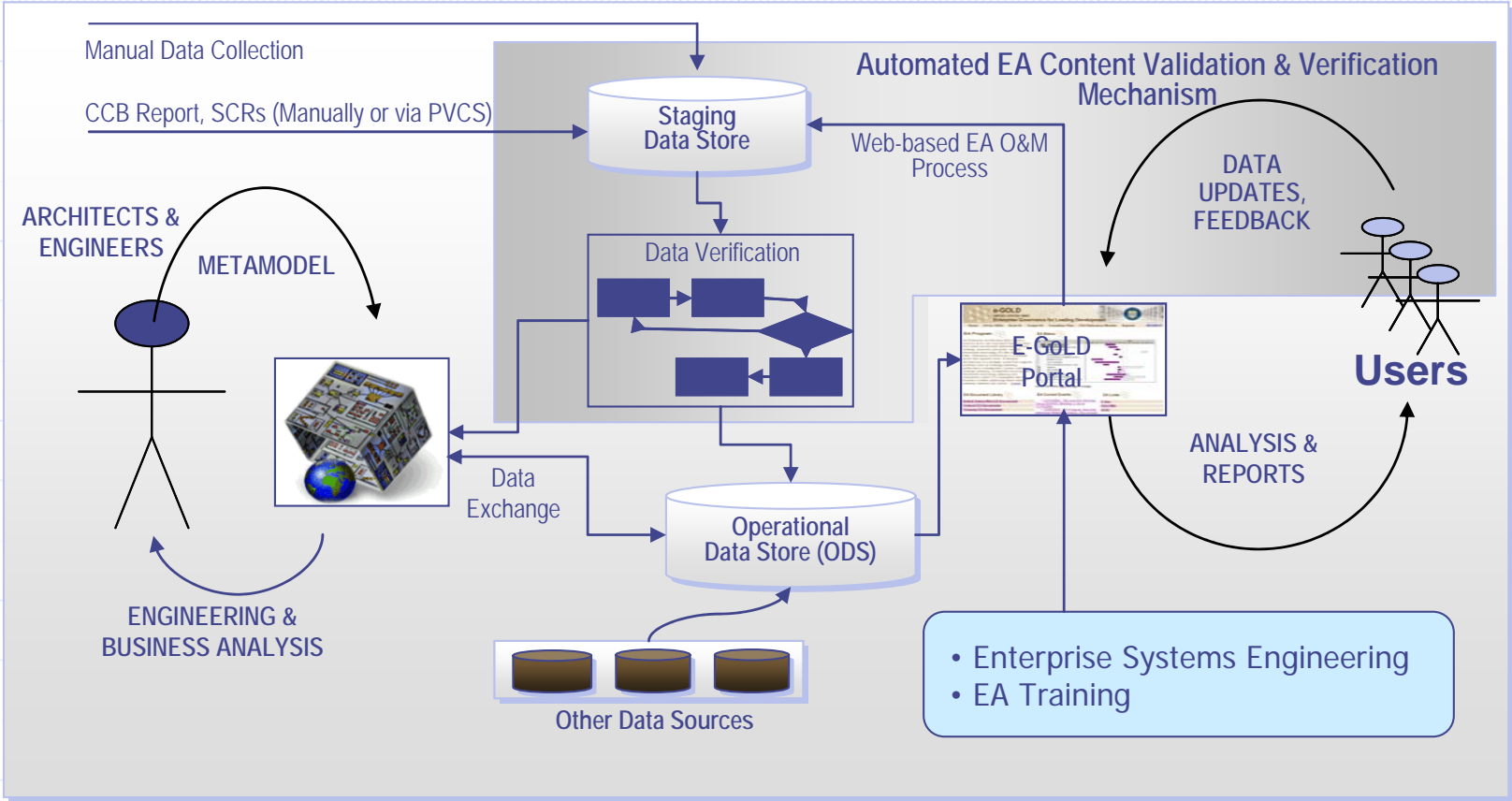
Enterprise Architecture Engineering Framework (EAEF)



Need for Executable EA

- ◆ EA is used as a common source of input in a multitude of planning activities, including IT strategic planning, CPIC, business improvement, etc.
- ◆ A discipline is defined in standard processes and procedures regarding the effective use of EA in the decision making processes
- ◆ An adequate EA training program to educate and assist users on how to effectively use EA
- ◆ Accurate and meaningful EA content available to users in a user-friendly and accessible format. (via an intranet Web site)
- ◆ A mechanism and technical means for consistently updating the EA content in a timely manner
- ◆ Repositories for both EA modeling and content storage to support EA development, maintenance, and utilization
- ◆ Integration of various data and contents from different sources and making this integrated data available via the Web site

Executable EA Tool Suite



Demonstration

The screenshot displays a web application interface with a navigation bar at the top containing links for Home, Browse, Queries, Reports, Documentation, and Site Manager. The 'Browse' link is highlighted in red. Below the navigation bar, the page is divided into several sections:

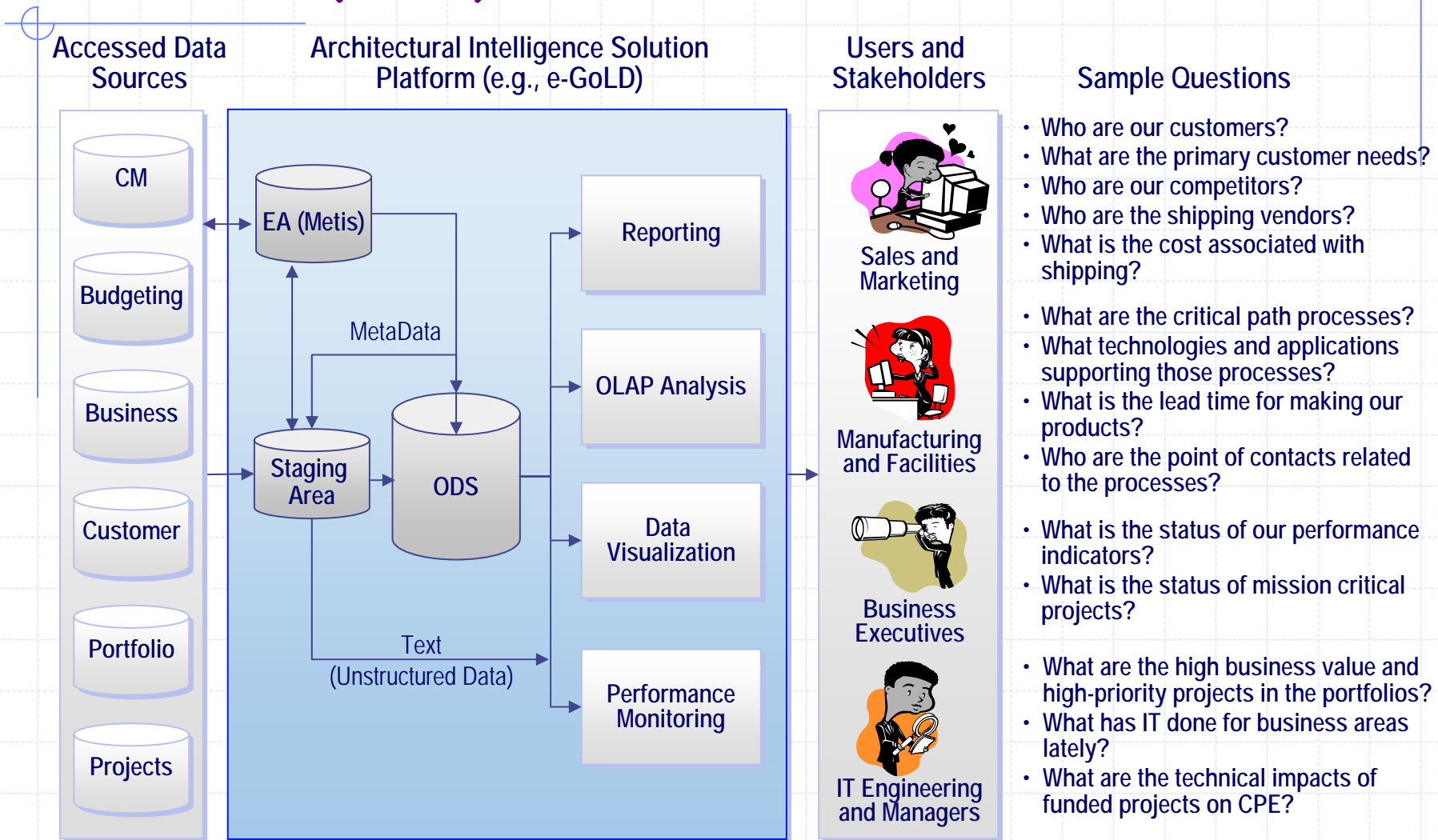
- Browse EA Repository**: A section for browsing the repository.
- By Type**: A dropdown menu currently set to 'Mint Application'.
- Advanced Search**: A search interface with a dropdown set to 'Starts With', an empty text input field, and a 'Find' button.
- Results(114)**: A list of search results. The first result, 'Project Codes & Cost Centers System (PCCS)', is highlighted in blue. Other results include ProSight Portfolio IT Investment Reporting E, Public Transportation Incentive System (PT), PVCS Tracker, PVCS Version Manager, Reuters, San Francisco LAN (SF-LAN), Security Intranet Incident Management Syst, STAR Web, SunGard PreCoverly ePlanner, Supervisory Control And Data Acquisition (S), Supply Chain Management (SCM), Telemoney, Teloquent, Transportation Schedule, Treasury Acquisition Data System (TADS), Treasury Information Executive Repository (, Visitor Request System, Vista Report Repository (Vista Plus), Vulnerability Management Solution, Wasp BarCode, Web Content Management System (WCMS), Web Services, WebSphere Commerce Suite (WCS), and WebStar.
- Mint Application**: A section for the selected application, 'Project Codes & Cost Centers System (PCCS)'. It includes a link for [Submit Change Request](#) and a detailed description: "The Project Codes & Cost Centers System (PCCS) was developed by the U.S. Mint (Microsoft Access 2000) to maintain Project Codes and Cost Center codes and to identify valid combinations of project and cost center codes; Location - H None;". Below the description is a table of metadata:

Application Number	CFOPCC008
Purpose	Standalone system used to maintain project codes and Cost Center codes and to identify valid combinations of codes (accounting codes)
Software Name	Microsoft Access
Vendor	U. S. Mint developed custom application
- deployed on/deloys**: A section showing deployment options. It includes a button for '<-----Origin View' and a button for 'Target View ----->'. The 'MS Access 2000' option is highlighted.
- located in/location of**: A section showing location options. It includes a button for '<-----Origin View' and a button for 'Target View ----->'. The 'Headquarters' option is highlighted.

Lessons Learned

- ◆ Sharing data between Metis and other applications (e.g., ODS)
- ◆ Automatic EA content update and verifications (e.g., SDS)
- ◆ User friendly access to EA information via Web Portal, i.e., e-GoLD
- ◆ EA Analytics for using EA

Future: Architectural Intelligence Solution (ArIS)



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