

Bringing MAGIC to Mississippi

SASHTO Briefing

August 25, 2014

A Word of Warning

Please bare with me today if I seem scattered, overwhelmed, or just plain...

MAGIC Phase I (Finance, Procurement, and Grants) just went live on July 1st...

And we are still trying to figure out what hit us

Topics

- ERP: State's Needs and MDOT's Needs
- MAGIC Project and MDOT's Interface Project
- Issues and Lessons Learned
- MDOT and MAGIC: What's Next?

Why MAGIC – Setting the Stage

1989 – State's Accounting System Implemented (SAAS)

2005 – Katrina; emergency projects and additional tracking/reporting requirements

2006 – The state began the planning and design phase to evaluate alternatives and ultimately decided to pursue an ERP system

2008 – Mississippi's Transparency and Accountability Law

2009 – ARRA; additional grant management and reporting requirements

2009 – The state issued an RFP to select the ERP Software provider (SAP).

2010 – The state issued an RFP to select the Implementation Services vendor (SAP Public Services)

2011 – MAGIC Project Kickoff

July 1, 2014 – MAGIC Phase I Go-live (Finance, Procurement, Grants)

January 1, 2015 – MAGIC Phase II Go-live (HR, Payroll, Travel, and Training)

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Why MAGIC - Statewide Needs

Scope

9,000+ functional requirements
Over 40 major processes
Over 100 agencies/ governmental units
35,000 eventual system users

Costs

State: \$100m+
MDOT: \$2m+
Ongoing Costs - Anticipate increased DFA agency billing beginning in FY2015

MAGIC Team

Finance and Administration (DFA)
Information Technology Services (ITS)
State Personnel Board (SPB)
STA Consulting
SAP Public Services

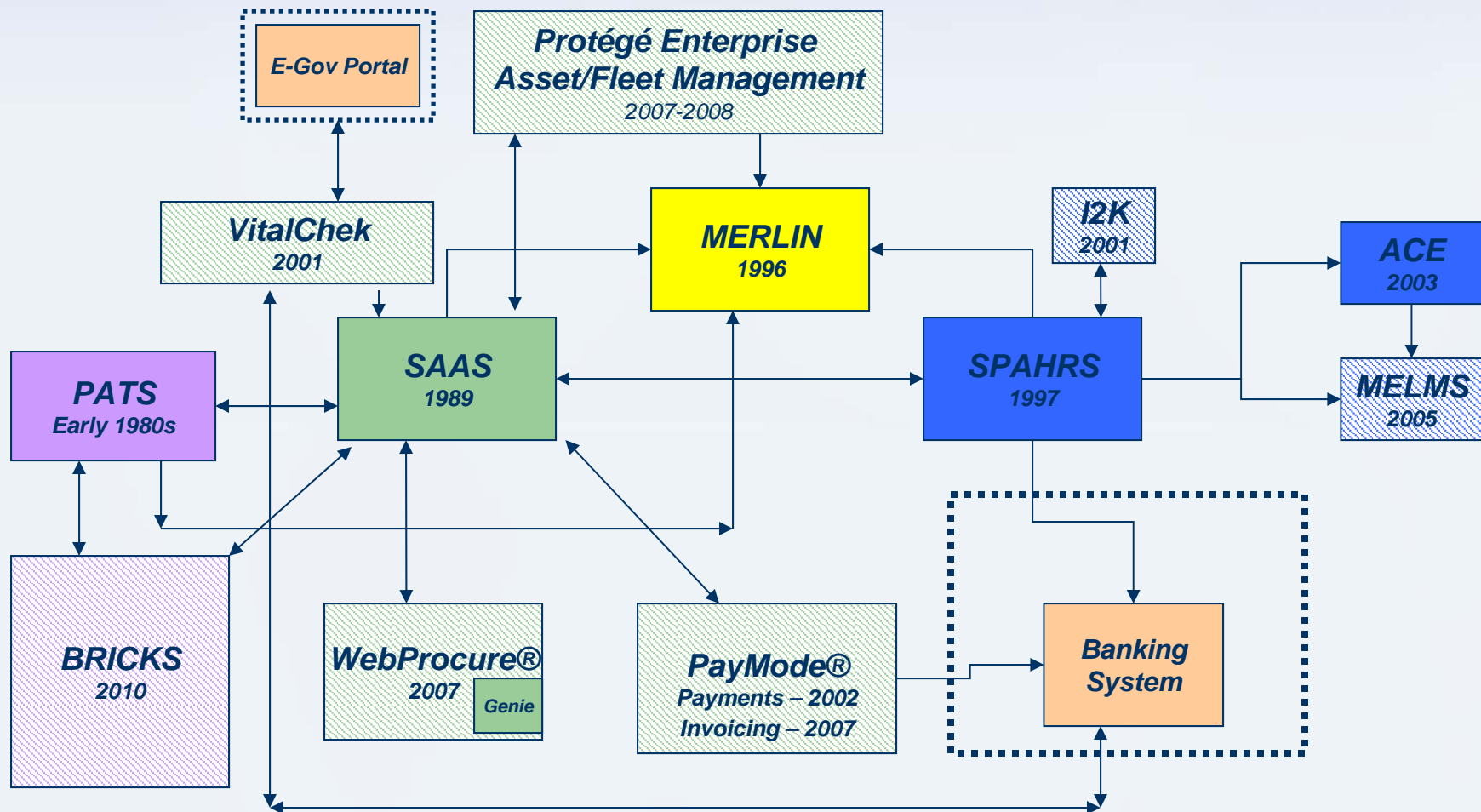
Purpose

MAGIC is Mississippi's pursuit of an Enterprise Resource Planning (ERP) solution that is managed by DFA and replaces the State's current central administrative systems: SAAS (1989), SPAHRS (1997), WebProcure, MERLIN, I2K, MELMS, Protégé, PATS, and ACE which are either at the end or are approaching the end of their lifecycles.

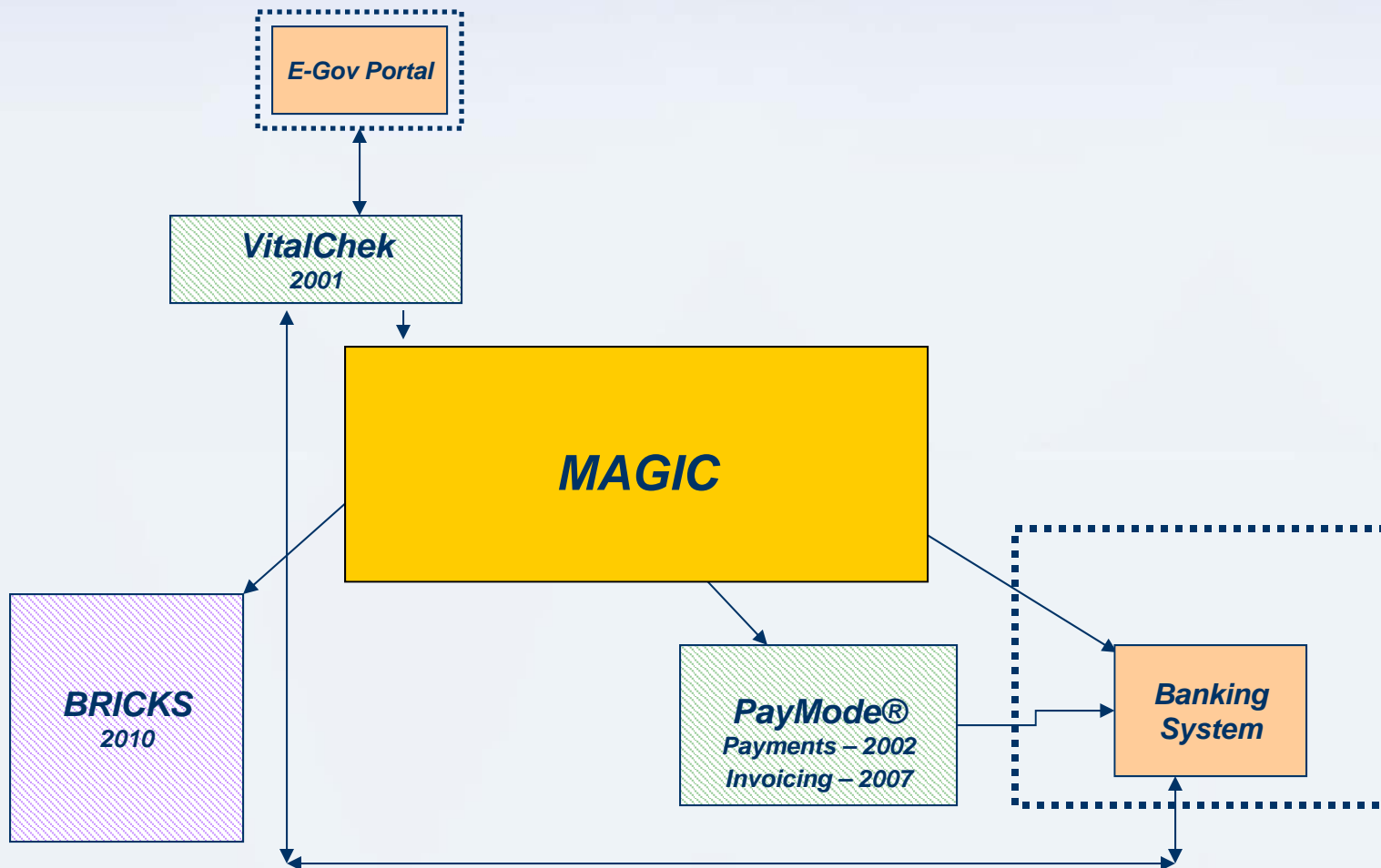
MAGIC Goals

- Standardize state procurement functions
- Improve reporting capabilities
- Standardize business processes across State government
- Reduce errors with automation of processes
- Streamline processes to reduce transaction time
- Consolidate redundant systems to lower costs
- Utilize electronic workflow and decrease paper usage

System Architecture (Pre-MAGIC)



System Architecture (Post-MAGIC)



Why not MAGIC - MDOT's Needs

MDOT's Key Concerns

Federal Billing: This is MDOT's most critical function in FMS as it drives our daily cash balances.

Application Support: MDOT maintains an IT staff that supports all daily operations of FMS and functional staff.

Data Integrity and Security: FMS data is clean; field-level security capability; minimal use of free-form fields; many edits in place

Loss of automation and functionality: FMS has many DOT-specific features that we do not want to lose

Return on Investment: Many things being sought by the state in a new system already exist in FMS. Time and money it would take to customize a system for DOT needs not cost effective

Level of Accounting Detailed Captured

MDOT Business System Model

- MDOT implemented FMS in 1998. We use a continuous improvement model with ongoing vendor support and maintenance to keep FMS a current system.
- Since then, MDOT has implemented 6 other core business systems integrated with FMS (preconstruction, construction management, equipment management, maintenance management, program management, and enterprise content management)
- Focus now on business intelligence systems; integration provides data mining opportunities

MDOT's Financial Management System (FMS)

- FMS is the center piece of all MDOT business. It is a comprehensive tool for processing MDOT's financial transactions and assets. FMS also tracks geospatial project information.
- Of 3,200 employees, 788 are FMS Users
- Approximately 45 purchasing departments
- 15 Inventory Warehouses
- 12 Imprest Accounts

FMS – Detailed Project Accounting

MAGIC	SAAS	FMS
Functional Area	• Appropriation Unit, Program	Department, Budgetary Program
Fund	• Fund (split and numbered by source)	Fund, Sub-fund
Fund Center	• Org Code, Office, Division	Organization/Division
Commitment Item	• Object Codes (Major, Minor)	Object Level 1,2,3,4 <input type="checkbox"/>
Funded Program	• Grant Budget	Grant No/Det/Billable Bdgt <input type="checkbox"/>
Funds Pre-Commitment	• New Process (no SAAS equivalent)	No FMS Equivalent
Funds Reservation	• New Process (no SAAS equivalent)	No FMS Equivalent
Shopping Cart	• Purchase Requisition – Pre-encumbrance	Purchase Requisition
Purchase Order	• Purchase Order – Firm Encumbrance	Purchase Order
		Program Cost Acct <input type="checkbox"/>
		Org Cost Acct <input type="checkbox"/>
		Project Cost Acct <input type="checkbox"/>
		GIS Data <input type="checkbox"/>

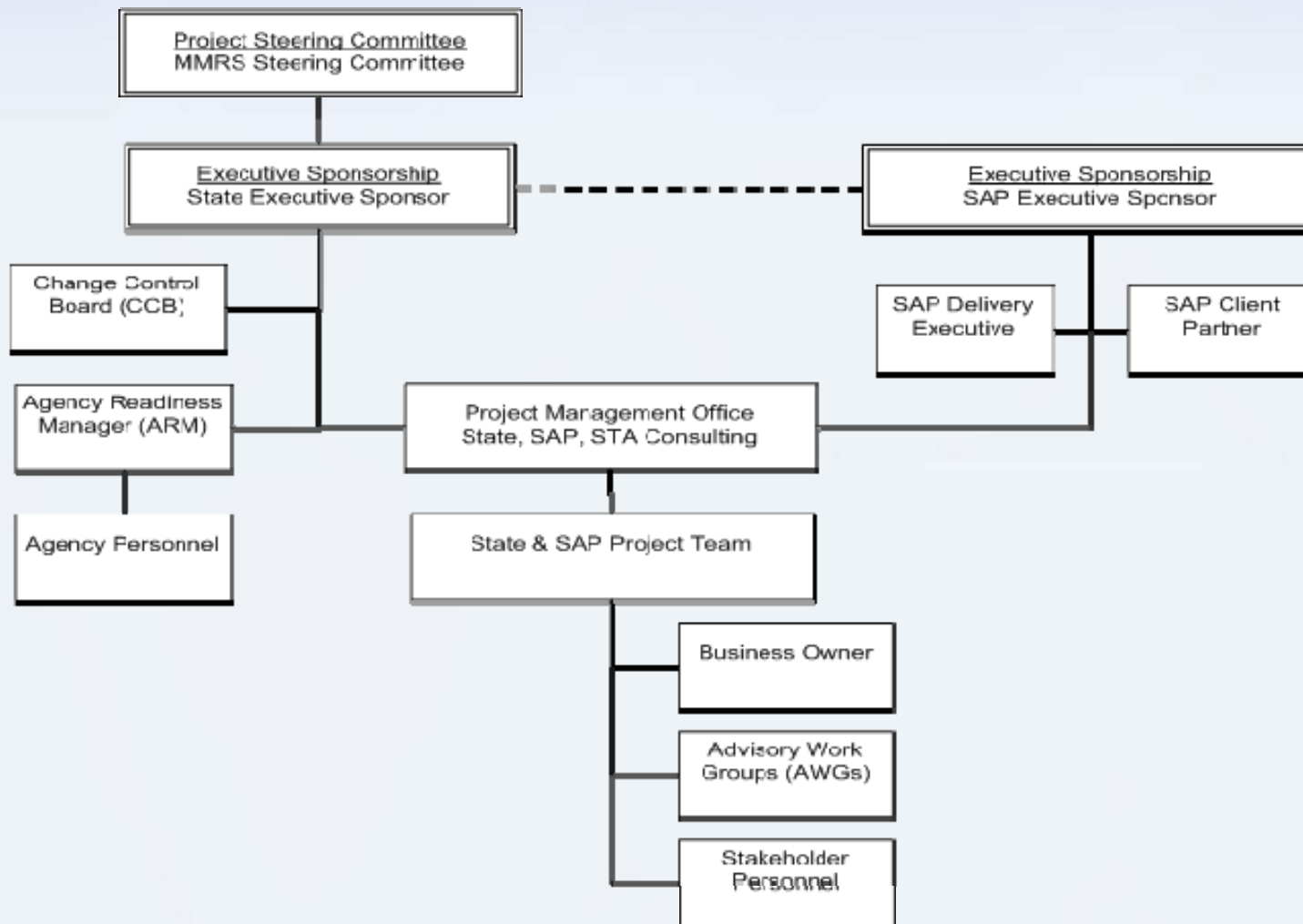
X - Where gaps currently exist in MAGIC (not an all-inclusive list)

MAGIC MOU

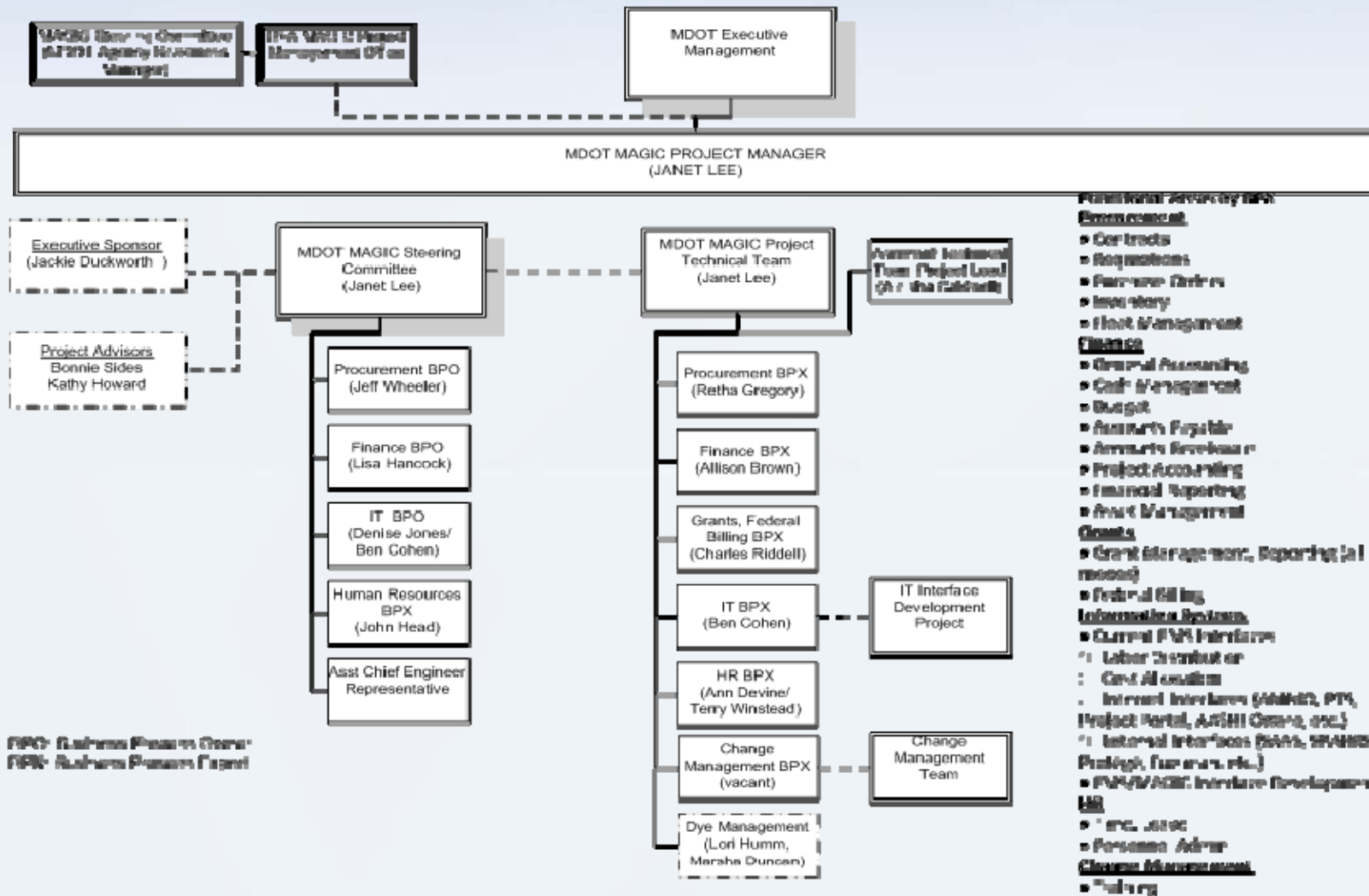
- MDOT has always maintained a financial system separate from the state's financial system
- In 1994, MDOT received approval to implement a new financial system external to SAAS that provided the level of project and cost accounting detail required by MDOT (FMS)
- In March 2009, MDOT and DFA entered into an MOU that outlined MDOT's interaction with MAGIC including:
 - Real-time interface
 - Full integration of Procurement not initiated in the MDOT construction management system
 - Continue to meet the statewide requirements for asset management, fleet reporting, contract reporting, grants management and grants accounting regardless of what system used
 - Follow same schedule as all other agencies for HR and Payroll

* This decision was changed during the project

MAGIC Governance Model



MDOT Governance Model



MAGIC Project Overview

MAGIC Project Timeline

July 2011 – MAGIC Project Kickoff

January 2013 ~~–~~ Phase I go-live

July 2013 ~~–~~ Phase I go-live

August 2013 ~~–~~ Phase I go-live

December 2013 ~~–~~ Phase I go-live

July 2014 – Phase I go-live

January 2014 – Phase II go-live

Implementation Approach



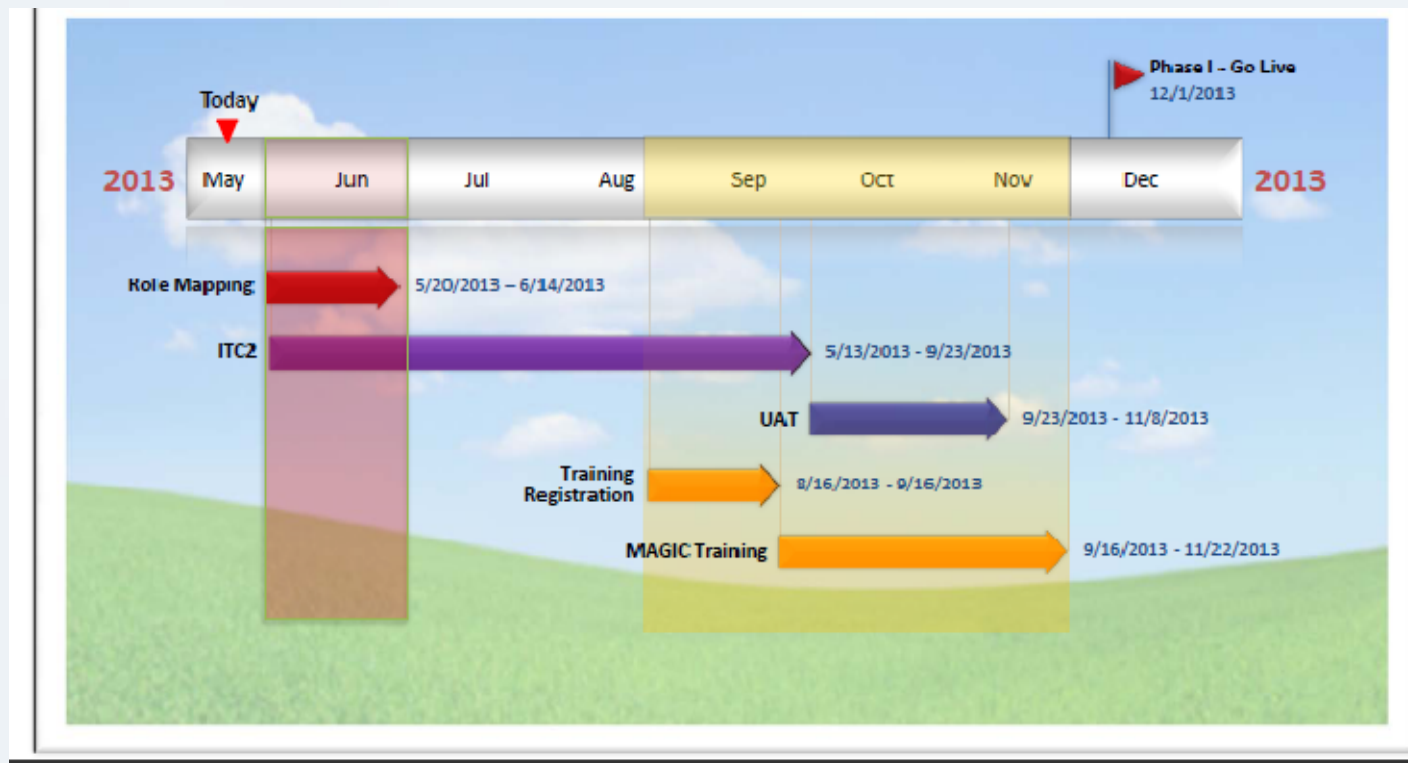
The State used the “Big Bang” approach

MAGIC Statistics

Work Tasks / Work Products (Documentation)	Finance	Human Capital Management	Logistics	Totals
Workshops Conducted	31	49	27	107
Master Data Descriptions	14	2	1	17
Organizational Data Descriptions	2	5	1	8
Business Scenario Documents	2	3	6	11
Business Process Documents	29	42	38	109
Key Decision Documents	8	18	10	36
In Scope Requirements	4,291	2,192	1,876	8,359
RICEFW	273	122	151	546

MAGIC Timeline (Revised Go-live #2)

- Compressed Training Schedule
- UAT ran concurrently with training
- ITC 3 ran concurrently to both



MDOT's MAGIC Interfaces

Interface Challenges

MDOT's Interface project was a project within a project. Many activities and decisions were not within our control

Keeping the Interface project plan synced with the State's plan was very challenging

Oversimplification of MDOT's interfaces; state team thought this was a very simple project

Misconception that because MDOT was interfacing certain transactions, MDOT would not be using MAGIC

Communication and receiving timely information is an ongoing issue

Phase I Interfaces – Both Replacements and New

MDOT Specific Interfaces:

Purchase Order

Goods Receipt

Logistic Invoices

Asset/Equipment create

State Interfaces:

Financial Inbound Interface

Interface Activities

- Secured SAP technical resources
- State's design documents and KDDs specific to MDOT's interfaces
- Involvement in ITC (testing)
- Activities since go-live
- No more outbound interfaces

MAGIC Go-Live Issues

- State has changed its business processes but has not updated its written guidelines, so all state manuals are out of date; the system is driving the business
- Changes were made to system after UAT that impacted our interfaces
- Data not converted correctly or missing altogether
- Contracts and incorrect approval workflows
- Issues splitting operating fund into separate state and federal funds
- New grant management functionality
- MAGIC reports replacing outbound interfaces were not ready so FMS crosswalk tables could not be completed

MAGIC Lessons Learned (So Far)

- Integration between MAGIC modules increased the complexity of the interface design
- Direct payments against contracts had to be done on purchase orders due to SAP interfacing defect (impacted many MDOT business processes)
- Impact to paymode was not clearly understood until after go-live

MAGIC and MDOT Moving Forward

MOU and the Business Case

Per the MOU, MDOT and DFA will jointly undertake a business case after July 1, 2016 to determine if MDOT's FMS system and other relevant systems (i.e., SiteManager, Project Management System) should be replaced by MAGIC

Key Factors to Consider

- Remaining lifecycle of FMS and other backend systems
- Federal billing and FHWA certification
- No loss of functionality or stability
- MAGIC Support Service Agreement (LOS requirements)
- Ability to continue to upgrade MDOT's core systems
- Data integrity and security