Xcel Energy®
RESPONSIBLE BY NATURE™

Productivity through Technology

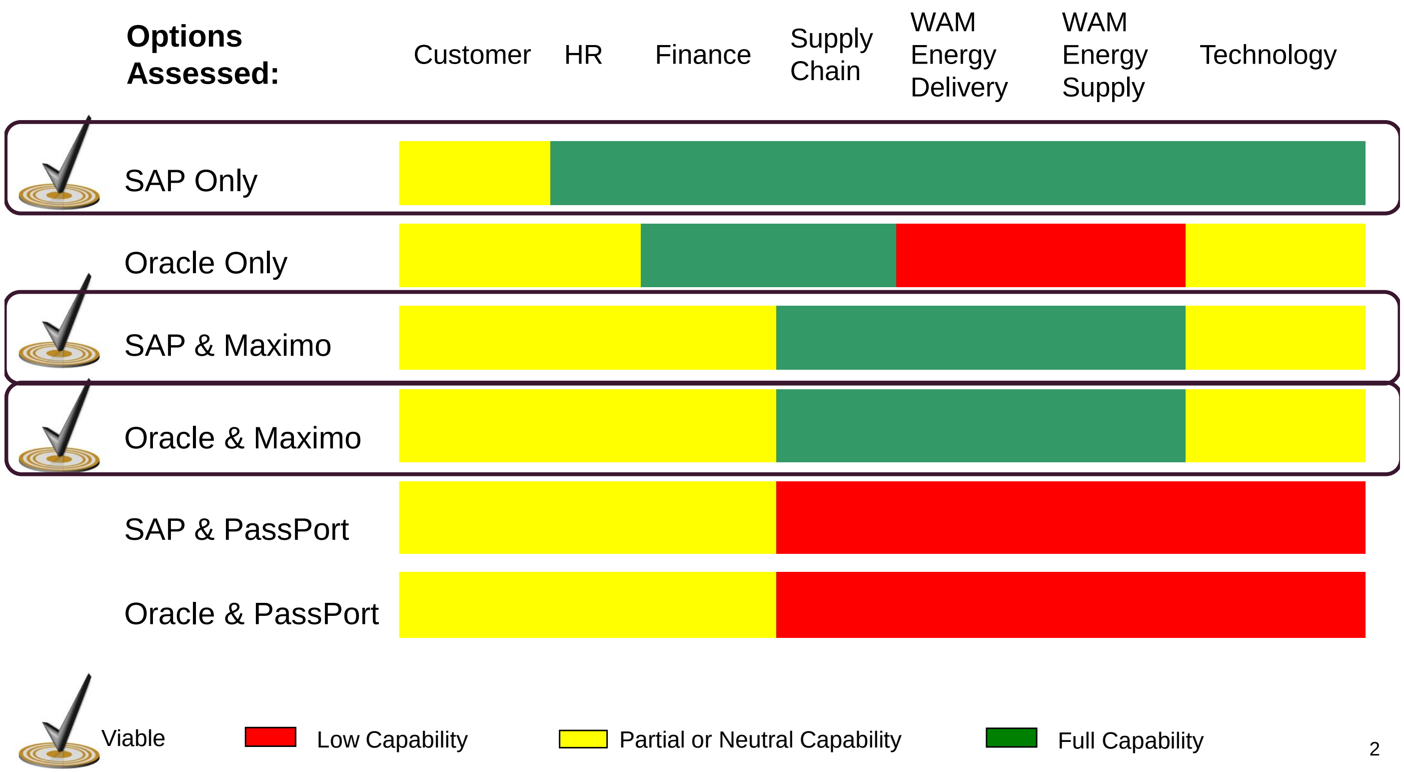
Program Update

Sponsor Meeting

August 28, 2013

Solution Option Summary

Solution Selection Option – Preliminary Findings



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Solution Option Summary

Solution Selection Option Preliminary Findings

- **SAP Only**
  - New Business model of integrated functions
  - Mobility, employee self services, process configuration
  - Relevant, transparent and timely integrated financial information

- **SAP or Oracle with Maximo**
  - Visually Appealing – User Interface
  - Maximum Configurability
  - WO Completion Tracking (wrench time)

Open Questions

- Do we want one vendor for many functions?
- Could predefined processes lead to increased costs for process changes?
- What is the risk for potential business disruption?
- Will we really transform legacy system(s)?
- Maximum Configurability – will we limit to common processes?
- Would we lose SAP mobility benefits?
- Forrester report (Oracle's Dilemma: Applications Unlimited Versus Fusion)

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Industry Landscape / Peer Comparison

Considerations

Degree of Enterprise / Process Integration

BU Autonomy & Flexibility ← → **Enterprise / Process Integration**

Best-of-Breed
- Non-standard cross-BU business processes
- Minimal use of enterprise systems

Multiple Point Solutions
- Differentiated business processes
- Enterprise systems for common or undifferentiated processes

Minimal Point Solutions
- Principal enterprise system default for new applications
- Point solutions justified by incremental value

Enterprise
- Functionality consolidated to single enterprise system
- Point solutions limited to one off processes

Low — **High**

Degree of IT Integration and Application Uniformity

Exelon → Entergy. THE POWER OF PEOPLE

Duke Energy → Wisconsin Energy Corporation

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Ameren FOCUSED ENERGY. For life.

FPL

SOUTHERN COMPANY Energy to Serve Your World

Detroit Edison A DTE Energy Company

hydro one

SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

SAP + Maximo

SAP Only

Oracle + Maximo

Xcel Energy Future Alternatives

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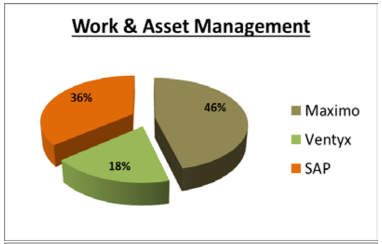
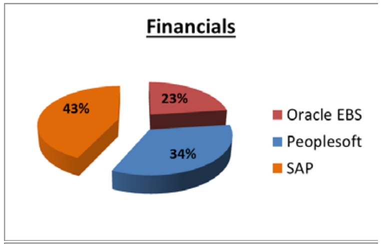
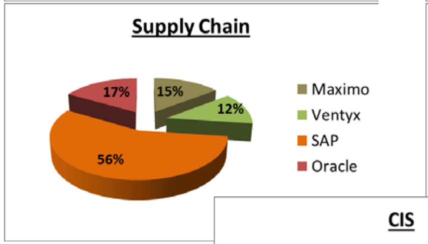
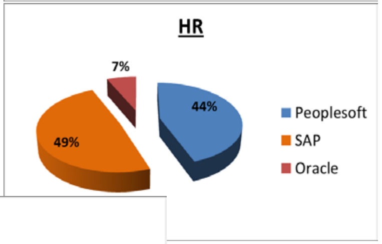
Enterprise Solution Selection

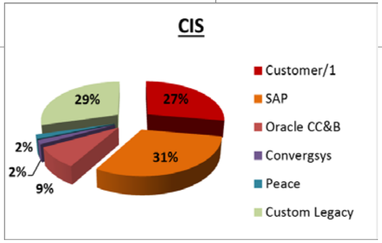
Industry Adoption of Similar Solutions











Represents ~70 North American Government / Municipal & Investor Owned Utilities

Other utilities in Xcel territory are using similar platforms combinations. **Ameren** (Oracle, Power Plant, Mincom Ellipse), **PNM** (Oracle), **Colorado Spring Utilities** (Maximo), **Denver Water Department** (Maximo), **Minnesota Power** (Maximo)

Utility	SAP	Oracle	Maximo
OG&E	X		
CenterPoint	X		
PSE&G	X		
PG&E	X		
FPL	X		
National Grid	X		
Hydro One	X		
Sempra	X		
American Water	X		
SCE	X		
DTE	X		X
SRP	X		X
Entergy*	X		X
Duke*		X	X
Southern*		X	X
Portland General*		X	X
Keyspan		X	X
NiSource		X	X
El Paso Electric		X	X
Nova Scotia Power		X	X
TVA		X	X

*running Oracle Peoplesoft HR / Finance

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Solution Option Definition Process

Option List:

- **SAP Only**
  - New Business model of integrated functions
  - Mobility, employee self services, process configuration,
- **SAP or Oracle with Maximo**
  - Visually Appealing – User Interface (UI)
  - Maximum Configurability
  - WO Completion Tracking (wrench time)

ESS: By the numbers

- Team prep for vendor demonstrations**:** **4,800 hours**
- Vendor demonstrations: **3,200 hours**
- **Team:**
  - **Directors: 13**
  - **Managers: 15**
  - **SMEs: 12+**
  - **Consultants: 6**

Implementation Options	Customer	HR	Finance	Supply Chain	WAM Energy Delivery	WAM Energy Supply	Technology
1. SAP Only							
2. Oracle Only							
3. SAP & Maximo							
4. Oracle & Maximo							
5. SAP & PassPort							
6. Oracle & PassPort							

Low Capability　Partial or Neutral Capability　Full Capability

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Solution Option Details
SAP Only

- **Functional Assessment – ability to deliver PTT Outcomes**
  - **Strengths**
    - New Business model of Ingratiated functions: Finance, HR, Supply Chain, W&AM
    - Demonstrated understanding of the utility industry
    - Intuitive UI and workflow (but dated appearance)
    - Mobility, employee self services, process configuration,
    - Most disciplined deployment and maintain methodology
    - Surprisingly strong experience in utility industry – growing nuclear presence
    - Strong business process change management - upgrade path
  - **Weaknesses**
    - Short – long cycle integrated scheduling – need greater insight for R2
    - Business Objects Analytics not developed for Utilities
    - Least flexible data structure – how nimble can Xcel be on SAP – Really a weakness?? Need to speak to this.
    - Lock Out / Tag Out

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Solution Option Details
SAP Only, continued

- **Technical Assessment**
  - **Strengths**
    - Significant strength with regards to enabling efficient change management and supportability
    - Common information model enables fewer integrations and a simple technical foot print; Geospatial Data ready.
    - Most mature mobile technology platform
  - **Weaknesses**
    - Rigidity of required change management and process provided needed structure but slows movement.
- **Risks**
  - **One vendor for many functions**
  - **Predefined processes could lead to increased costs for process changes**

- **Customer Call with** *First Energy (Ohio, Penn, NJ)* alternative *PSEG (New Jersey)*
  - **Relationship – change over time as more functions added to SAP**
  - **Change from BoB to ERP**
  - **Nuclear processes (CAP, EC, RP,) Lock Out / Tag Out**

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Solution Option Details
SAP and IBM – Maximo

SAP:

Finance, HR, Customers & Supply Chain

- **Functional Strengths**
  - New Business model of Ingratiated functions: Finance, HR, Supply Chain, W&AM
  - Demonstrated understanding of the utility industry
  - Intuitive UI and workflow (but dated appearance)
  - Mobility, employee self services, process configuration,
  - Most disciplined deployment and maintain methodology
  - Surprisingly strong experience in utility industry – growing nuclear presence
- **Functional Weaknesses**
  - Short – long cycle integrated scheduling
  - Business Objects Analytics not developed for Utilities
  - Least flexible data structure – how nimble can Xcel be on SAP
  - Lock Out / Tag Out

IBM - Maximo

WAM

- **Functional Strengths**
  - Visually Appealing User Interface (UI)
  - Maximum Configurability
  - WO Completion Tracking (wrench time)
- **Functional Weaknesses**
  - Short – long cycle integrated Scheduling
  - Mobile application
  - Lock Out / Tag Out Under development
  - External document management

Solution Option Details
SAP and IBM – Maximo, continued

SAP:

Finance, HR, Customers & Supply Chain

- **Technical Strengths**
  - Significant strength with regards to enabling efficient change management and supportability
  - Common information model enables fewer integrations and a simple technical foot print; Geospatial Data ready.
  - Most mature mobile technology platform
- **Technical Weaknesses**
  - Rigidity of required change management and process provided needed structure but slows movement.
- **Risks**
  - One vendor for many functions
  - Hidden costs for process changes
- **Customer Call with DTE Energy (Michigan) alt Dominion**
  - Relationship – change over time as more functions added to SAP
  - Change from Bob to ERP
  - Nuclear processes (CAP, EC, RP,) Lock Out / Tag Out

IBM - Maximo

WAM

- **Technical Strengths**
  - Business rules flexibility and reporting capabilities
  - Well structured technology architecture that leverages proven industry standards

Technical Weaknesses

  - Complex integrations required; 3rd party vendor support for adapters lacks a clear and long-term strategy
  - Minimal insight into impact of changes to the technical environment
- **Risks**
  - Will Xcel really transform legacy system
  - Maximum Configurability – will Xcel limit to common processes
  - Would you lose SAP mobility benefits?
- Customer Call with *DTE Energy (Michigan) alt Dominion*
  - SAP & Maximo integration and relationship
  - Supply Chain functions
  - Nuclear Specific processes

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Solution Option Details
Oracle and IBM – Maximo

Oracle:

Finance, HR, Customers & Supply Chain

- **Functional Strengths**
  - Intuitive UI
  - Mobile tool (wrench time)
  - Analytics – Supply chain
- **Functional Weaknesses**
  - Acquired components vs.. developed ERP (BoB from one vendor?)
  - Integration with Oracle acquired products – Primavera, Portfolio tool?,
  - Xcel needs to determines which 3rd party to use (Signum does not understand our business)

IBM - Maximo

WAM

- **Functional Strengths**
  - Visually Appealing User Interface (UI)
  - Maximum Configurability
  - WO Completion Tracking (wrench time)
- **Functional Weaknesses**
  - Short – long cycle integrated Scheduling
  - Mobile application
  - Lock Out / Tag Out Under development
  - External document management (offset with Oracle?)

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Solution Option Details
Oracle and IBM – Maximo, continued

Oracle:

Finance, HR, Customers & Supply Chain

- **Technical Strengths**
  - Well established application base at Xcel Energy including database, Primavera, NMS, PeopleSoft, JDE
- **Technical Weaknesses**
  - Unclear technology roadmap for Enterprise Solutions including WAM
  - ERP is composed of a significant number of separate products
  - Minimal insight into of how changes impact the enterprise across the solution
- **Risks**
  - Forrester report (Oracle's Dilemma: Applications Unlimited Versus Fusion)
- **Customer Call** *Southern Company (Atlanta) and/or TVA*
  - **Oracles understanding of the Utility industry**
  - **Integration of Oracle solutions (Primavera) and 3rd party products (GIS)**
  - **Oracle & IBM integration and relationships**
  - **Supply Chain functions**

IBM - Maximo

WAM

- **Technical Strengths**
  - Business rules flexibility and reporting capabilities
  - Well structured technology architecture that leverages proven industry standards

Technical Weaknesses

  - Complex integrations required; 3rd party vendor support for adapters lacks a clear and long-term strategy
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- **Risks**
  - Will Xcel really transform legacy system
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- **Customer Call** *Southern Company (Atlanta) and/or TVA*
  - Oracle & Maximo integration and relationship
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  - Nuclear Specific processes

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Solution Option Details

Oracle Only or Combinations with Ventyx Passport

Oracle Only

- **Functional Assessment: WAM (Energy Delivery & Supply)**
  - **No US Nuclear locations – significant risk to be first.**
  - **Very limited T&D experience**
  - **Did not demonstrate significant functional advantage to overcome the limited implementations in Nuclear**
- **Functional Fit: Finance, HR, Customer & Supply Chain**
  - **Oracle does have sufficient deployed experience in utilities and demonstrated sufficient functional fit and experience**

Combinations with Ventyx Passport

- **Functional Assessment**
  - **Ventyx presents a significant strategic product upgrade agenda that would negatively impact Xcel Energy**
  - **Current underlying technology is many generations old forcing the upgrade approach**
  - **Ventyx did not demonstrate any significant functional advantage to overcome the risks of the upgrade agenda.**
  - **Inability to deliver against their strategic roadmap – e.g. Service Suite and Long Duration work**

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Enterprise Solutions Overview

Enterprise Architecture Observations - Strategic Technical Direction of Vendors

- **SAP**
  - *Continued strong investment in technology*
  - *Architectural foundation in place. No significant architectural changes expected over the next 8 – 10 years.*
  - *Primary technical areas of investment and growth will be in the HANA databases platform, mobility, and analytics.*
  - *Anticipating more cloud-based opportunities*

- **Oracle**
  - *Continued acquisition strategy*
  - *Continued strategy of integrating multiple separate applications to provide an enterprise system*
  - *Unclear strategic direction between their individual applications (Ebusiness Suite, Peoplesoft, JDE, etc) and Fusion Applications. This concern is supported by Forrester.*
  - *Significant drive towards 'Oracle Engineered Systems' which include Oracle software as well as hardware.*
  - *Strategic mobile platform does not currently exist. Anticipating additional acquisitions near-term to fill out and establish their strategic mobile architecture.*

Enterprise Solutions Overview

Enterprise Architecture Observations - Strategic Technical Direction of Vendors

- **IBM / Maximo**
  - *Continued investment in the Maximo platform*
  - *Strategic mobile platform communicated as being deployed in 2014. Expecting continued variability due to the rate of change in the mobile technology industry domain.*
  - *Anticipating that IBM will continue to extend Maximo into more non-utility industry areas.*
  - *Asset management will remain a primary component*
- **Ventyx / PassPort**
  - *Currently running extremely aged and variable technology. Communicated movement towards a common architectural platform based upon recent technology and methods.*
  - *Investment commitment to the underlying technology (current or future) is unclear. Architecture resources communicated that key components of the future architecture are not funded.*
  - *Expecting continued reliance on industry position and experience as opposed to integrity of the technical architecture.*
  - *No consistent vision for strategic mobile technology direction currently. Expecting that Ventyx will have to address this soon.*
  - *Continued product acquisition strategy. The Mincom product appears to be a preferred direction from a technical standpoint.*

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Enterprise Solutions Architecture Executive Summary

Enterprise Architecture Observations

SAP	Oracle	IBM	ABB/Ventyx
Heavy track-record of investment in their product line	Unclear long-term investment in legacy applications	Continued investment expected in Maximo and mobile capability	Investment in their technology is required to remain viable
Consistent technology with no fundamental changes planned for the next 8-10 years	Continued acquisition strategy	Strong commitment to Maximo	Continued strong commitment to the utility industry is expected
Performance focus on their database technology (HANA)	Unclear direction between legacy applications vs strategic 'Fusion Applications' platform	Aged mobile technology moving to current architectures next year	Recognition of significantly aged technology for current applications
Focus on managing change, system integrity, and data quality	Forrester research projects Oracle pushing customers away from their legacy applications	Partner approach to integrations with ERP systems	Reasonable stated direction toward a consistent platform across their products. At least 5 years out.
Continue to build upon their centralized Enterprise Information Model	Continued strategy of integrating multiple applications to provide an enterprise system		Level of commitment to their products is significantly higher than their commitment to the underlying technology
Comprehensive mobile platform	Evolving mobile technology. No clear direction at this time		Unmanaged approach to integrations and data
	Moving their solutions toward requiring customers to use all Oracle technology products		Exhibit the largest technical disparity across their solutions