Enterprise Architecture to Enterprise Excellence

Improving performance through technology
What’s in store……

• Introduction
• Business Complexities in mining and manufacturing
• Key Drivers for Success
• EA to EE implementation model
• What do companies gain?
• A Case Study of Indian Mining Major…
• Q&A
Introduction
What’s an IT architecture?

1. “A common framework for systematically planning, aligning and understanding the relationships between business needs, business information, and IT”

2. By “IT”, we mean in its widest sense – systems, data, technology, IT delivery, organization / people, costs, standards et al.
Components of architecture..
Why companies need an Enterprise architecture?

• Integration of business functions
• Real-time reporting and analysis
• High Availability
• Flexibility and Scalability…..
• To increase the reach and spread of the business
Business Complexities
Manufacturing and Mining Business Complexities -

• Variance production plan based on constraints,
• Uncontrolled spares inventory,
• Distribution supply chain complexities including logistics and warehouse management,
• Vendor management
• Customer management
• People management
• Equipment downtime and maintenance management
### Addressing complexities through EA

<table>
<thead>
<tr>
<th>Key Business Issue</th>
<th>IT Enablement</th>
<th>Benefits of EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Plan Variance</td>
<td></td>
<td>Business and Data architecture</td>
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<tr>
<td>Inventory management</td>
<td></td>
<td>Business, Data and Application</td>
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<tr>
<td>Supply Chain</td>
<td></td>
<td>Technology, Data and Integration</td>
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<td>Vendor Management</td>
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<td>Business and Technology</td>
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<td>People Management</td>
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<td>Business, Technology and Data</td>
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<tr>
<td>Customer Management</td>
<td></td>
<td>Business and Technology with integration modeler</td>
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Drivers for Success
## Key drivers for success

<table>
<thead>
<tr>
<th>Key Business Issue</th>
<th>Priority</th>
<th>Business Challenge</th>
<th>IT Challenge</th>
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<tbody>
<tr>
<td>Rapid Response</td>
<td></td>
<td>Increase business agility</td>
<td>Increase IT agility</td>
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<tr>
<td>Differentiated Products</td>
<td></td>
<td>Enhance innovation</td>
<td>Improved data &amp; process transparency &amp; adaptability</td>
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<tr>
<td>Business Models</td>
<td></td>
<td>Customer centricity</td>
<td>Overcome siloed systems and data</td>
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<tr>
<td>Operational Efficiency</td>
<td></td>
<td>Focus on priorities and simplify processes</td>
<td>Rationalize infrastructure and improve architecture</td>
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<tr>
<td>New Products / Services</td>
<td></td>
<td>Speed innovation</td>
<td>Enhance cycle times</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td>Focus on ‘core’ services</td>
<td>Separate ‘core’ &amp; ‘context’ services</td>
</tr>
<tr>
<td>IT Performance</td>
<td></td>
<td>Manage IT as a business</td>
<td>Implement portfolio mgmt and Readdress 80/20 problem</td>
</tr>
<tr>
<td>Employee Needs</td>
<td></td>
<td>Institutionalize knowledge</td>
<td>Implement business process &amp; business rules mgmt</td>
</tr>
<tr>
<td>Strategic Partners</td>
<td></td>
<td>Outsource ‘context’ services</td>
<td>Separate ‘core’ &amp; ‘context’ services</td>
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<tr>
<td>Sourcing</td>
<td></td>
<td>Access distinctive skills</td>
<td>Expose &amp; extend core processes</td>
</tr>
<tr>
<td>Disaster Management</td>
<td></td>
<td>Institutionalize knowledge</td>
<td>Implement business process &amp; business rules mgmt</td>
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</tbody>
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Continued…

We should work with our clients to help them apply technology to address their key business issues:

- manage risk & regulation
- capture value from deals
- grow revenue
- source globally
- manage business performance
- manage people and change
EAEE MODEL
EA made Easy…

The overall architecture framework, e.g. TOGAF can be used to model various different aspects of architecture:

- Different development paths through the framework give us different architectures

![Diagram of architecture components]

- **Business Models**
  - Overall business functions (sales, etc.)
  - Detailed business procedures (purchase-to-pay, etc.)
  - Actual business (people, roles, locations, etc.)

- **Information Models**
  - Main information types (customer, etc.)
  - Entity relationship / dataflow models
  - Physical databases / documents, etc.

- **Application Models**
  - Main application functions (general ledger, etc.)
  - Application modules (SAP FI/CO, etc.)
  - Application code / instances

- **Technology Models**
  - Main technology functions (security, storage, etc.)
  - Technology services (CPU, firewall, disk, etc.)
  - Physical servers, networks, etc.
The implementation model

**Project phases**

- **Industry Assessment**
  - Understand client industry & industry trends
  - Identify IT assessment areas
  - Define client requirements
  - Benchmark the requirements

- **Architecture scoping study**
  - Conduct EA scoping workshop
  - Define architecture scope
  - Set up project plan
  - Ensuring executive sponsorship

- **Architecture Blueprinting**
  - Collect data
  - Analyze existing architecture
  - Perform BITA
  - Conduct workshops
  - Determine TO-BE state
  - Validate and freeze TO-BE.

- **Architecture Deployment**
  - Interact with vendors
  - Conduct GAP analysis / benchmarking
  - Build and deploy architecture with application, data, technology etc.
  - Test the architecture

- **Measuring the benefits**
  - Prepare report of findings & recommendations
  - Prepare a benefits charter
  - Measure the benefits in a continuous process

**Assessment dimensions**

- ITSM
- BITA
- Landscape management
- ITRM and GRC
- IT PMP

**Way to enterprise excellence**
What do companies gain...?
Benefits from EAEE

**Assessment dimensions**
- ITSM
- BITA
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**Way to enterprise excellence**
Benefits Measurement

The Benefits Stage builds on the work completed in the previous stages and manages the strategy as it evolves:

- Project portfolio
- Investment case
- Risk management
- Benefits realisation
- Governance
- Change program

It ensures IT initiatives are integrated with other business initiatives through the transformation agenda.

Financial Benefits of IS/IT Investments

- **Factory**
  - Know risk
  - Financial and business benefits
  - £ £

- **Strategic**
  - High risk
  - Financial and business benefits
  - £ £

- **Support**
  - Low risk
  - Mainly financial benefits
  - £ £

- **Turnaround**
  - Even higher risk
  - Mainly financial benefits
  - £ £

£ = tangible/quantifiable financial benefits

£ = intangible/unquantifiable business benefits
Case Study
The Client

• One of the largest mining companies in India
• Geographic spread over 8 locations
• Manpower in excess of 5000
• Plans to implement SAP solution
No plan survives the first contact with the enemy…!!!

- Standalone systems with discrete application portfolio
- Ageing equipments requiring pro-active maintenance
- Remote location connectivity issues
- Change management
- Multiple instances of master data
The Solution..

• Change/Re-engineer the business architecture for centralized org management,
• Centralized data management with data configuration assistant
• Hybrid application and system architecture with central deployment and local roll-outs.
• EAI based integration architecture within the systems and also with third party service providers…
What’s the Gain…

• Based on investment portfolio management the returns can be around 22-26% per annum (quantifiable)
• Disaster management operation centre
Q & A
Thank You

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