Enterprise Architecture and Process Management

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Agenda

Take Aways for the Session

• Quick review of EA and BPM
• 3 Case Studies
• Lessons learnt
What is Enterprise Architecture
A definition

- Enterprise Architecture is a rigorous discipline for architecting all aspects of an enterprise at the current state as well as the future state with the objective of transitioning to the future state in an optimal manner.
Top of the Pyramid

- What is the overall business strategy?
- Where do we want to excel?
- What are the mission, vision statements?
- What are the enterprise goals?
- Where do we want to innovate?

- What are the business functions and business processes that make up my Operations?
- How do I optimize my operations to achieve current & future business strategy?
- How can I introduce agility in to my operations?

- How do I implement IT systems to support business processes?
- How can I leverage my existing assets?
- How do I align IT architecture with business strategy?
What is an Enterprise Model?

Business Strategy
- Mission, Vision Statements
- Business Goals, Objectives
- Key Performance Indicators (KPIs), Business Metrics
- IT Direction & Policies
- Enterprise Standards
- Architecture Roadmaps
- Business Requirements
- Compliance Regulations

Process
Services
People
Applications
Data
IT Infrastructure
Common Business Processes

Process Impact
- Revenue
- Cost
- Customer Service
- Cycle Time

Process Complexity
- No. of Process Steps
- No. of Process Participants
- No. of Integration Points
- No. of Process Exceptions
- No. of Transactions
- No. of Organizations

Process Items:
- Claims Eligibility
- Customer Support/Help Desk
- Sarbanes-Oxley
- Inventory Management
- HR Management
- Transportation Management
- Claims Repricing
- Employee On Boarding
- Automated Expense
- Report Management
- Service Billing
- Revenue Recovery
- Procurement & Sourcing
- Loan Origination
- Benefits Administration
- Claims Adjudication
- Field Service Management
- Order Management
- Product Lifecycle Management
- Customer Credit Management
- Order-to-Cash
- Revenue Recovery
- Procurement & Sourcing
- Field Service Management
- Order Management
- Claims Adjudication
- Field Service Management
- Order Management
- Product Lifecycle Management
- Customer Credit Management
- Order-to-Cash
Key Roles for Iteration

- **Business Leadership**: Set business goals, objectives, & priorities
- **Operations**: Handle deployments & technical OA&M
- **Quality Assurance**: Directs acceptance testing & validation
- **Process Owner**: Manage process flow, task assignments, policies, rules, objectives, & performance
- **Process Analyst**: Explain task execution details, perform acceptance testing
- **Process Architect**: Captures process and represents it in a process model. Captures related business/process requirements. Drives process optimization
- **Process Developer**: Configures inputs, outputs, data mappings, etc.
- **Process Participants**: Develops any required functional capabilities
- **Process Developer**: Configures inputs, outputs, data mappings, etc.
- **Service / Software / UI Developers**: Performs analysis and design of technical aspects of the process. Specifies technical software requirements
- **Data Architect**: Provide security, data, & enterprise architecture assistance
- **Architect**: Provide security, data, & enterprise architecture assistance
- **Security Architect**: Provide security, data, & enterprise architecture assistance
- **Architect**: Provide security, data, & enterprise architecture assistance
Shared Services Infrastructure for Applications and Data

- SFA
- Marketing
- SVC
- Call Center
- Order Mgmt
- Partner
- ECommerce
- A/R
- Website
- A/P
- G/L
- SCM
- Financial Planning
- Procur
- Billing
- HFM
- HR
Self Service and Engagement in the Cloud

Speed New Loan Generation with Process, SOA and Document Cloud Services

“Board is demanding a greater level of innovation”

“Key to AFG is its engagement with its brokers and the brokers customers”

10K
New Business Submissions per year

2,300
Members nationally, over 30 financial institutions
## Competency management and HR process management

### KEY CAPABILITIES
- Competency management, Learning, Budgeting. Single solution for all HR processes

### KEY BENEFITS
- Simple cost effective solution for 15,000 employees
- Simple, adaptable, agile
- Aligns with the company’s move to SaaS

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### Technical assessment, advisory, and risk management

#### Expansion Strategy
- Talent Management, Talent Review and Succession Management, Workforce Comp, Recruiting, On-Boarding, Social Search

#### Other Proof Points
- **HSBC, Technip**: leverage PCS for HR processes and employee self-service
Pace of Innovation Never Slows ...

Conversational AI
- Easy.
- Intuitive.

Connected Devices
- Continuous Innovation

Trusted Transactions
- Faster.
- More Secure.

Pervasive AI and Robotics
- Remarkable Inventions

... the latest process innovations.
Automation Elevates Business Conversations
Eliminating Mechanical Activities Accelerates Innovation
Integration and Automation Innovations
Process automation for digital transformation

Robotic Process Automation
Record, play, execute!

Case Management
Adaptive work streams

Best Next Action
Guided decision making
Case Study 1
Sinclair
Only Broadcaster with Economies of Scale, National Reach, and Diversified Asset Base:

- 173 TV stations
- 483 channels
- 81 markets
- 50 multi-station markets
- 77 news markets
- 44M TV households
- No market more than 5% of revenue
- Largest ABC, CBS, FOX, CW, MNT affiliate groups; 3rd largest NBC group; affiliations with Spanish-language networks
Sinclair successfully completed almost $4 billion of acquisitions since 2012 and generated ~$200 million of synergies (over 20% of 2016 EBITDA)
BECOMING A FRICTIONLESS ENTERPRISE
Sales Channels and Processes

- National Sales
- eCommerce

Back Office Services – Oracle PaaS

- Billing Service
- Spot Pricing
- Customer Service
- Program MGMT
- Contract Approval
- Customer Invoicing
- Customer MDM

- Legacy Billing
- Customer Service
- Program MGMT
- Contract Approval
- Customer Invoicing

Sales Channels Analytics

Sinclair Technology Platform
Data, App, and Process Automation
Digital Business Impact to Date

12X faster process

45% lower total cost
Frictionless Enterprise

• Single, Engaging User Experience
  – CRM
  – GL / Financial Apps
  – Data & Analytics Tools
  – Order Entry
  – Legacy Business Apps
  – Payment Portal

• Tablet-Ready Self-Service Guidance for
  – Marketing Consultants
  – Ad Agencies
  – Direct Advertisers
  – Collections Staff
DEMONSTRATION:
Sinclair back office automation using Oracle Integration Cloud and Robotic Process Automation (RPA)
New Customer Onboarding

• Automate new customer onboarding experience
• Coordinate across multiple departments and hybrid apps
• Improve operational efficiency and customer engagement
Case Study 1
Credit Suisse
Message

- To improve BPM value proposition transformation from project based BPM to Enterprise BPM is necessary
- Enterprise BPM cant be achieved by autocratic leadership style
- To achieve Enterprise BPM collaborative culture driven approach is needed
ARIS process repository

- Level 0: ca 100 business processes
- Level 1: ca 800 business processes
- Level 2: ca 3000 business processes
- Level 3: > 10 000 business processes
- Level 4: > 30 000 business processes

- Strategic KPI-s
- Tactic KPI-s
- Operation KPI-s
- Operation KPI-s
- Operation KPI-s
Process control cockpit

- **Monitoring, Controlling and Managing of running processes**
  - Strategic level
  - Tactical level
  - Operational level

- **Business Benefit:**
  - Measurement
  - Understand your processes
  - React to process changes
  - Benefit comparison
  - Base for process improvement
BPM organization

- **Many different stakeholders**
  - Operational Excellence
  - Process Management PB
  - Process management IB
  - PPM (Process performance monitoring)
  - ARIS CC (ARIS Competence Centre)
  - WFCC (Workflow Competence Centre)
  - EA (Enterprise Architecture)

- **Information sharing**
  - Objectives
  - Initiatives
  - Services

- **Shared vision**
Process execution engines

- **Human workflow**
  - WFI (Workflow Infrastructure)
  - IBM MQ WebSphere Workflow 3.6, end of support 2010/2012

- **Process Orchestration**
  - Auftragsmanager, mainframe based, limited capabilities

- **Ad-hoc Workflow**
  - NPS (Pega outdated version, not supported)
  - ServiceNet (ActionWorks outdated version, not supported)
  - FlowMail

- **Number of processes automated by process engines overall ca 400**
Does diffusion of innovation work?

- **Project based BPM**
  - Process execution engines islands
  - Local optimization
  - Inappropriate usage of process execution engines
  - Silos
  - Uncertainties in governance
  - Functional IT organization

![Diffusion of Innovation Diagram](image-url)
Vision enterprise BPM

- BPM maturity model
- BPM platform requirements
- Process maturity model
- Managed evolution
Maturity models, BPM

Gartner
Platform based approach, overview

- To start with platform approach we need:
  - BPM platform
  - SOA platform
  - Runtime platform

- We don't need only technology

- We need also
  - structuring of landscape
  - governance processes
  - skills
  - organisational support
WFInG – Gartner BPM Excellence Award

The Best BPM Journey

Winner
Toyota Motor Sales

Honorable Mention
Credit Suisse

Finalist
Nokia Siemens Networks
Motorola
Entergy
Transformation to Enterprise BPM

- Operation maturity model
- MIT 90 framework for technology driven change
- BPM culture
- Managed evolution, the core principle
Operation management maturity model

- Ad hoc operation
- Operation as service delivery
- Operation as partner
- Operation as strategy

Heros  |  Project PBM  |  Enterprise BPM

maturity  |  time
BPM culture

- **Many different stakeholders**
  - Operational Excellence
  - Process Management PB
  - Process management IB
  - PPM (Process performance monitoring)
  - ARIS CC (ARIS CC)
  - WFCC (Workflow CC)
  - EA (Enterprise Architecture)

- **Information sharing**
  - Objectives
  - Initiatives
  - Services

- **Shared vision**
Q&A?
Case Study 2

Mærsk Line
Delivering results with Agile BPM using Lean, Kanban and Cost of Delay

BPM Case Study from Maersk Line

Mads Clausager, Programme Manager, Business Process Management
Maersk Line is the leading liner shipping company in the world, with 25,000 employees serving customers from our 125 offices all over the globe.

Maersk Line operates over 600 vessels with 3.8 million TEU (Twenty-foot Equivalent Units) of container capacity.

Maersk Line is dedicated to delivering the highest level of customer-focused and reliable ocean transportation services.

Maersk Line is part of the A.P. Moller-Maersk Group, which employs over 120,000 people across a varied range of industries including container services, energy, offshore & shipping and retail.
Context of Case Study

How can we ensure we deliver results from our BPM projects?

Focus on the framework developed and implemented in Maersk Line based on agile principles and with a focus on business value throughout the BPM projects.

And Maersk Line’s approach which helps the business to prioritize and recognize the business value delivered in each of the projects and their releases.

Outline

• BPM in Maersk Line
• Main challenges & reasons
• The Framework & models
• Delivering results
• Questions
BPM in Maersk Line

- In the last five years since we initiated our BPM program the main focus has been to support the standardisation and optimisation of our global processes as outlined in our strategy.

- Our BPM projects are typically larger initiatives focusing on one of our core processes, and including process orchestration on our strategic BPM platform to gradually achieve a higher level of automation.

  - Ease of Business
  - Lowest cost
  - Standardization
  - IT Simplification
  - Offshoring & Outsourcing
Main challenges in BPM

Practical example of a challenged BPM Project

**Project**
- Project scope is defined as standardizing, optimizing and automating one of the core processes in ML
- Benefits identified: ~8 M USD / year based on overall assessment in business case
- Delivery time estimated to 6-9 months from start to end
- Business case approved

**Project initiated**

**Situation 15 months later**
- Project scope has grown as the process turned out to be very complex
- Stakeholders believe all parts must be ready before any value can be realised
- Cost is over budget
- Benefits have significantly decreased during project lifetime (not known to the project)
- Benefits now reduced to 1.5 M USD / year
- Communication between stakeholders is based on subjective view on performance

Based on delays, no value delivered and deflated benefits the project is closed prematurely
Main challenges in BPM

Typical challenges we have experienced in our BPM projects

**Challenge #1**
Scope increases without prioritising, causing delays in implementation and benefit realisation.

**Challenge #2**
Benefits outlined in the Business Case are deflated due to external factors during project execution.

**Challenge #3**
Management runs out of patience waiting for value to be realised leading to the project being terminated.
Challenges to actions

Challenge #1
Scope increases without prioritising, causing delays in implementation and benefit realisation.

Reason #1
Need to continuously manage the scope and prioritise to ensure timely delivery of business value.

Challenge #2
Benefits outlined in the Business Case are deflated due to external factors during project execution.

Reason #2
Need to clearly define, communicate and govern the business value during the project.

Challenge #3
Management runs out of patience waiting for value to be realised leading to the project being terminated.

Action #1
Implement a Framework based on Agile principles and with a focus on Business Value throughout the Projects.
3 Core Models in the Framework

The combination of the models form a framework supporting a business value based approach to BPM projects in Maersk Line. The models and techniques will help create and maintain a link between the business cases, the features defining the scope and the actual functionality delivered to the process owner, enabling him to realise the value defined.

**Business Value Model**
A simple and pragmatic model for articulating and managing business value throughout the project

**Decomposition Model**
A model for decomposition of the project scope into smaller and manageable pieces

**Delivery Model**
A model based on agile principles to support the focus on business value throughout the project
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**Business Value Model**
A simple and pragmatic model for articulating and managing business value throughout the project
- Model is to be used from value planning to value realisation
- Model should support a culture with focus on Business Value
- A model linking business value to the lifecycle of the process, and the lifecycle of application development

**Decomposition Model**
A model for decomposition of the project scope into smaller and manageable pieces

**Delivery Model**
A model based on agile principles to support the focus on business value throughout the project
Introducing Cost of Delay (CoD)

Introducing the Cost of Delay Business Value Model

- What is the cost of waiting, postponing or just simply the cost of not yet having the benefits we are planning to deliver?
- The concept is trying to “put a price tag on time”
- We typically calculate CoD in $ per week.
- Cost is not only cost in the strict sense, but more a representation of “lost benefits”
Introducing Cost of Delay (CoD)

Different calculation methods depending on type of benefits

For ideas with a very long-life, with peak unaffected by delay
3 Core Models in the Framework

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**Business Value Model**
A simple and pragmatic model for articulating and managing business value throughout the project

**Decomposition Model**
A model for decomposition of the project scope into smaller and manageable pieces
- Pieces which are still independent and can be implemented in smaller batches to deliver value earlier
- A model supporting the link to the business value defined for each piece
- A model supporting prioritisation and dependencies

**Delivery Model**
A model based on agile principles to support the focus on business value throughout the project
Decomposition Model

A model for decomposing the scope of the project into smaller and manageable pieces

The model defines three different levels of a hierarchy.

**Concept** is typically a full BPM project and is often described on a high-level and will not be very concrete.

**Feature Set** is representing a part of the concept, or in other words a natural grouping of deliverables related to the same area of the concept.

**Feature** is the smallest change or piece of functionality, which will deliver business value by itself.
3 Core Models in the Framework

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**Business Value Model**
A simple and pragmatic model for articulating and managing business value throughout the project.

**Decomposition Model**
A model for decomposition of the project scope into smaller and manageable pieces.

**Delivery Model**
A model based on agile principles to support the focus on business value throughout the project.
- Based on Lean Product Development (LPD)
- A model giving insight into progress and supporting incremental delivery of business value
- A model supporting communication within the team and with sponsors
Delivery Model

Introducing Lean Product Development & KanBan boards

With Lean Product Development we aim at driving the behavior of doing the right thing (most value), doing it faster and doing it right (quality).

We have introduced the concept of visual boards based on a Kanban principle. A Kanban board is a scheduling system that helps determine what to work on, when to work on it, and how much to work on.

A Kanban board is a visualisation system, showing the dynamic priority lists and all the overall phases a feature goes through in the project.

Dynamic Priority Lists help the business prioritise the work in the project according to business value. The aim is also to drive the behavior of people “picking” the next task from a list of things to do, instead of the manager assigning (pushing) tasks to people without considering their current workload,
Delivery Model

Introducing Lean Product Development & KanBan boards

The individual features are represented by small pieces of paper or post-it notes showing the key details of the feature including the Cost of Delay, and can easily be moved around on the board to track it through the projects lifecycle or show the latest status.
Delivering results

Achievements

• We have turned the discussions away from scope, requirements and delivery dates to a conversation focused on delivering business value

• Using cost of delay, CD3 and the visual boards to support discussions gives us a powerful communication tool with the process owner and other stakeholders

• We are also seeing significant increases in the benefits assigned to the features leading to much higher overall business cases

• The direct link between the value of each feature and the overall business case gives the steering committee a way of constantly evaluating the success and future feasibility of the BPM project

• All our projects can now demonstrate delivery of benefits based on delivering part of their solutions with named features
Delivering results - Example

An example of a successful BPM project in Maersk Line

**Before**
- One big scope
- Benefits: ~3 M USD / year in business case
- 9+ months without a realizing any value
- Prioritisation done based on BPO opinion
- Difficult to estimate cost
- Business getting impatient

**After**
- 26 individual features defined
- Benefits: ~14M USD / year based on CoD for each feature
- 3 releases in last 6 months with specific business value released based on named features with attached benefits
- Prioritisation done based on CoD / CD3
- Cost is estimated based on each feature
- Business actively participate in defining / refining features and identifying benefits.
- Communication between business, management and IT people based on business value
Lessons learned

**Be pragmatic**
There is no easy solution to the question of “Framework first” or “Project first”. It is very important to address these challenges in a pragmatic way.

**Be patient when introducing new terms**
We should have spent more time on discussing and elaborating on the new terms with all or at least the key stakeholders to ensure understanding.

**Define, develop and implement models one by one**
we found it valuable to start with one of the models, and then implement only that model. Once this was stable, we focused on the next challenge, and how we could develop a model to address it.

**Keep an eye on the external environment**
A BPM initiative is most likely not the only initiative affecting the process in scope for the project. Organisational changes, outsourcing initiatives, as well as other IT projects can have a severe impact on the project.
Questions?

Contact

If you have additional questions, you are welcome to catch me after the session or reach out to me on email or phone.

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