





### Managing the Extended Enterprise: An Enterprise Architecture Approach

Thomas Gulledge Professor Emeritus, George Mason University, USA President, Enterprise Integration, Inc., USA



## **Presentation Overview**

- Objective Present the critical components for planning and managing complex programs, and relate these components to new supply chain management concepts
- Outline
  - Enterprise Integration
  - Extended Enterprise Integration
  - Enterprise Business Architecture
  - Supply Chain Control Towers
  - R&D and Implementation Challenges
  - Summary and Conclusions



## **Enterprise Integration**

- Enterprise Integration is the vertical and horizontal alignment of plans, business processes, data, and information systems across organizational and functional boundaries to provide competitive advantage.
- The process of achieving Enterprise Integration includes all managerial and technological factors that enable end-toend business process integration.
- The end result is a customer oriented management structure with information systems that are formally aligned with business processes, providing near real-time access to relevant information.



# **Extended Enterprise Integration**

**JECHNOLOGY EVENT** 

## The extended enterprise is a loosely coupled and self-organizing network of firms that combine their economic output to provide products and services offerings to the market



Extended Enterprise Integration is inter-enterprise integration. Intra-enterprise integration is extended to incorporate other entities into the integration domain. These other entities include customers, suppliers, partners, and other organizational claimants.

### **Enterprise Business Architecture**

- Enterprise business architecture is a detailed extension of the strategic planning process.
- The EBA translates an enterprise's business vision, strategy and objectives into a structure that can be used to support the implementation of effective enterprise change by aligning business processes and priorities with IT solutions.
- The IT governance process defines a collaborative, shared planning process where EBA teams work with business and IT stakeholders to define a future-state vision in terms of planning objectives, requirements, principles, constraints, and models.



IT TECHNOLOGY EVENT

#### **Ell Solution Framework**

Gartner estimates that by year-end 2014, 50% of Global 1000 organizations will support EBA as a collaborative business & IT effort



## Why Enterprise Business Architecture?

- Executive expectations are different than the expectations of the IT organization
  - Executives expect efficiencies in the IT organization (e.g. Interface cost minimization is a requirement, not a competitive advantage)
- Permanent and increasing changes in business requirements
  - As customer requirements change, executives want the ability to quickly and efficiently realign IT to meet the requirements, which is a tremendous effort for IT departments to keep up with the changes
  - Business aims at flexibility and agility as a source of competitive advantage; IT organizations strive for efficiency and stability and not flexibility and agility
- Increasing revenue and profitability are critical objectives that must receive a high priority from both the Business and IT
- The only solution is to identify and implement IT investments that meet the agility and flexibility requirements of the Business, but can also be delivered at a lower cost
  - EBA is a powerful tool for planning and solving problems to meet the objectives of both the Business and IT
- The Enterprise Business Architecture is the plan for ensuring that investments are focused on aligning IT with business.



### What is the Content of an Enterprise Business Architecture?

T TECHNOLOGY EVENT





## The Role of End-to-End Business Processes



# A Complete Architectural Solution



## Governance

AIT TECHNOLOGY EVENT

- Governance is the establishment of a structure to manage an initiative
  - Managing is used in its broadest sense, and it includes monitoring and controlling
  - Compliance is the execution of a sequence of procedures underneath the governance model
- For Extended Enterprise Integration, the following governance categories are critical:
  - Program Governance
  - Project Governance
  - IT Governance
  - Business Process Governance
  - Data Governance



# A Complete Governance Model



## **The Control Tower**

- Enterprise Business Architecture, Extended Enterprise Integration, and Governance are the critical components for defining the "Control Tower"
- The Aberdeen Group defines the Control Tower as a solution having a centralized view with the ability to "drill down" to the root cause of a problem and resolve the problem from that view
- The objective is to remove as much latency as possible from the supply chain, because latency results in inventory buffers that result in delays in shipments that drive up costs.

### The Control Tower

AIT TECHNOLOGY EVENT



## Control Tower R&D Implementation Challenges

- The technologies required to implement a Control Tower solution already exist
- Enterprise Business Architecture and Governance provide the planning mechanisms
- Participation from suppliers and customers is a barrier that requires careful consideration
- Research Focus
  - Why should suppliers participate? Especially smalland medium-sized enterprises?
  - What are the incentives that drive participation?
- There is an analogy from 2000 Trading Exchanges!
- Those lessons learned are the focus of our R&D efforts in building and deploying Control Tower solutions

## Summary

IT TECHNOLOGY EVENT

- The presentation reviewed three topics
  - Enterprise Business Architecture
  - Extended Enterprise Integration
  - Governance
- The argument was made that the three topics are critical for Enterprise Planning & Management
- The presentation introduced the concept of a Supply Chain Control Tower
- The argument was made that the three topics are critical for Control Tower Planning & Management
- Control Tower implementation challenges were discussed





# Thank You



#### **Prof. Thomas Gulledge**

Professor Emeritus, George Mason University USA President, Enterprise Integration, Inc. USA