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### 3 E's Enterprise Architecture Framework (that encompasses Business Process, Information Systems, and Information Technology)

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### *3 E's Enterprise Architecture Framework (that encompasses Business Process, Information Systems, and Information Technology)*

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We have discussed and reviewed in detail throughout this EA 873 course several key points which has been the analysis and design of an Enterprise Architecture (EA) framework based on understanding the current and future states from three key perspectives: strategy, business and technology. The adjustment I made to these three key perspectives has been to extrapolate, delineate and state that the Organizational Business Strategic Strategy referred to as a Business Model contains goals which are strategic and drive the basis for the development of a Tactical Strategy which contains objectives that are executable and measureable. These objectives help to drive changes in the Business Strategic Strategy and to formulate the development of a Business Process Architecture framework that drives the development of Business Process Models that are managed by a Quality Management System (QMS). These models provide governance, management, oversight, applied knowledge, and guidance by example as based on how business functional activities are conducted across the organization and within each functional business unit. The Business Process Architecture framework is the first of three frameworks that make-up the Enterprise Architecture Model with the second being Information Systems, and third being Information Technology.

Based on this we have covered how one would align Information Systems to an Organizational Business Strategic Strategy and Tactical Strategy. The key to alignment is how well existing and/or future Information Systems would support these strategies through enablement of efficiencies in support of the effectiveness of Business Process Models. In other words, as I have discussed many times, Business Process provides an organization with effectiveness in terms of conducting their business functional activities correctly as opposed to Information Systems which provides efficiencies to these processes, a level of automation, for example, expediting customer deliveries and payments to an organization or expediting payments to a supplier for goods received by an organization. Based on this alignment of Business Process Models to Information Systems is the enablement of these Information Systems through Information Technology, for example, *financial based system that addresses these examples in the previous sentence; therefore, I refer to this mindset as the three E's of an Enterprise Architecture Model that works only if Senior Management demonstrates the leadership and vision required and works with all levels of an organization through active collaboration.*

# 3 E's Model (Agile Mindset)

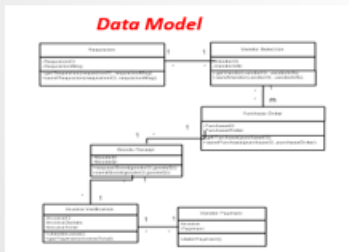
**Note: This is an Iterative Process that changes as an Organization's basis of competition in the marketplace changes**

**Enablement**

**Information Technology Strategies**

**Information Technology Architecture**

*(e.g., ERP Relational Applications Database)*



**UML State Transition Model**

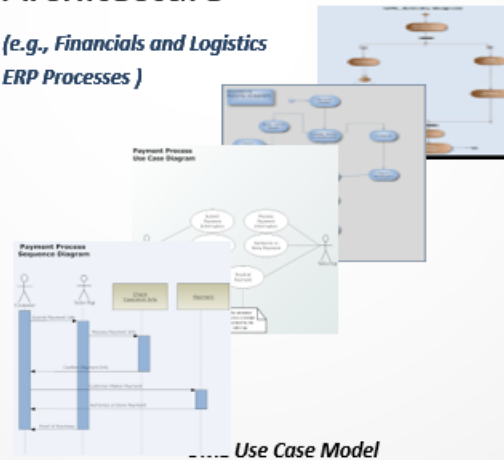
**Note: used to define the Technology to support the Business System**

**Efficiency**

**Information Systems Strategies**

**Information Systems Architecture**

*(e.g., Financials and Logistics ERP Processes)*



**Use Case Model**

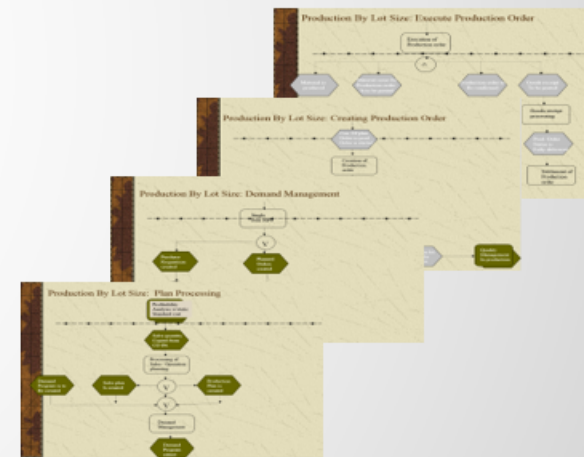
**Note: used to define the Business System to support the Business Process**

**Effectiveness**

**Business Strategies**

**Business Process Architecture**

*(e.g., Logistics ERP Processes)*



**BPMN Models**

**Note: used to define the Business Process**

I would very much like to now address in further detail how one proposes a framework and strategy for aligning Information Systems to Business Processes through the development of a Business Process Architecture framework, and enabling the Information Systems through the deployment of Information Technology. The approach involves addressing in this order the Value of Business Architecture, Designing a Business Architecture, and Business Process Management.

Value of Business Architecture is how one provides Senior Management with a confidence level that value is derived by the elimination and mitigation of well-defined Business Challenges that Senior Management have noted, for example, Global Business Competition, Rapid Innovation through increased changes of business requirements, Disruptive Technologies, Regulatory Compliance Challenges, and Increasing Cost Pressures, etc. Based on the degree of confidence achieved, the next steps are to explain what we expect to achieve from this alignment and how will we measure it, what alignment means from an Information Systems, and Information Technology perspective, and what strategy we will use to achieve the realignment. These decisions will be made at the Senior Management level so there needs to be a Business Process Architecture framework, Information Systems Architecture framework, and Information Technology Architecture framework context for this realignment from the basis of an overarching Enterprise Architecture framework. The primary goal of a Business Process Architecture framework is to support an agile approach that supports decentralized development and business evolution in the future in order to achieve this we need a set of Business Process Models that can be readily changed, decoupled, and reassembled when the business needs arises based on market trends and/or basis of competition changes.

Designing a Business Architecture is based on deploying the Enterprise Architecture framework and method referred to as Lean-Value Stream Mapping. If you remember three weeks ago, I reviewed a detailed step-by-step process for using this framework to document the Current State, the Future State, and the specific work needed to cross this cashism from the Current State to the Future State

Business Process Management recommends that you must define internal best practices and guidelines to ensure that business process models are consistently developed, develop business models for processes, and inventory, register and publish existing business models, recommend standards-based modeling and execution languages to be used by Software Engineers for implementing and integrating business process models, build a business architecture layer as part of enterprise architecture, and establish an enterprise governance process for Business Process Management. A business process should be represented as models that address the policies, procedures, and work instructions as managed by your QMS. The policy level defines the requirements by functional business unit and group while a procedure defines the key attributes of the what, where, why, and to some degree the how as it pertains to a specific process, for example, Purchase Price Variance and/or integration with one or more processes, for example, Perpetual Inventory, etc. The work-instruction defines the specific “how-to tasks” set of steps that must be executed and the description of the inputs and outputs required per step in order to execute the business process.

The value proposition for a Business Process Architecture framework and structured Business Process Models centers around the need for a level of business process description which allows us to connect any system associated with the process, identify the people who support it, link financial resources, acknowledge but also cross organizational boundaries, identify compliance (financial, records) points, identify data and information quality control points, identify common steps and sub-processes to simplify and reuse applications, and provide managers with the capability to monitor the process for improvement and planning purposes. Current status of Business Process Modeling is that Business Process Models exist for some business processes but they are represented at varying levels of detail, quality and focus. In other cases, business processes are described as documentation, for example, processes that address business policies, procedures, work-instructions, administrative and technical documentation, etc. Business Process Architects need to work closely with the business functional groups, and conduct a systematic inventory, assessment, and audit of business process models to identify current state and what is for initial and continuous improvement to achieve a future state that aligns to an organization’s business model and their strategic strategies. These improvements can also trace back to a needed increase into specific core competencies, for example, training and mentoring as well as the core capabilities, for example, Information Technologies for integration, interoperability, and orchestrated workflow of specific Information Systems with the deployment of a Services Oriented Architecture framework, supported by middleware technologies that shall enable these specific Information Systems that provide efficiencies to these business processes.

The next steps that a Business Process Architect should proceed with is the design and implementation of several Enterprise Level Repositories for Business Process Models consistent with Enterprise Architecture Best-Practices and the need to ensure that the Information Systems and Information Technology

Architecture frameworks and models have traceability to those Business Process Models. Additional steps that need to be taken by the Business Process Architect is to establish and integrate a review process for all Business Process Models which is consistent with the Business Architecture Governance Model and the Quality Management System. This review process addresses a very comprehensive peer and management assessment of initial new models and subsequent revisions, and to keep current configuration management of these models. In addition, the assessment reviews shall address and identify redundancies and variations in these models relative to requirements, process steps, inputs/outputs, and integration across an organization as defined by their Quality Management System.

Business Process Architecture is the “grey-matter” that drives the value that an organization needs to achieve in order to be successful in the execution of their business model that will allow them to be competitive relative to their basis of competition in the marketplace. On a secondary note but just as important is the catalyst that this architecture becomes relative to the Information Systems deployed and the Information Technology that enables this deployment. The following graphic provides insight into the importance of Business Process Architecture and the development of a set of integrated business models:

## Understanding BPA w/the context of EA

- Acquire an applied knowledge of BPMN models relative to the knowledge in this course specific to Business Process Modeling,
  - The development of these BPMN models would be enabled through the application of one or more BPMN technologies
- Acquire a thorough understanding of how these models fit into an organization's Business Process Architecture (BPA) framework/models, and how these models drive the business requirements for the type of Information Systems needed to support these models and the Information Technologies needed to enable them these Information Systems.

