

BUSINESS ARCHITECTURE AND BPM ALIGNMENT

Austin, Texas, USA - September 17, 2014

INNOVATION WORKSHOP

Lloyd Dugan, Business Process Management, Inc.
Neal McWhorter, Strategic Value Partners

TEAM OVERVIEW



PROBLEM STATEMENT AND GOAL

One of the key issues facing practitioners that are attempting to establish a Business Architecture (BA) practice is how to reconcile some of its concepts with those of other related analytic practices. This issue is perhaps most frequently encountered when organizations attempt to reconcile Business Architecture with existing practices in their Business Process Management (BPM) areas.

The BPM-BA Alignment Group is striving to provide a foundation for organizations to use to begin building linkages between these two analytic areas by defining and illuminating the differences and touch points between these two related disciplines and associated practice areas. This foundation will recognize that many BPM practitioners, particularly with respect to process modeling, are already doing what is described here.

BPM ALIGNMENT COLLABORATIVE TEAM



DELIVERABLES

COMPLETE

- Updated Section 3.4 of *BIZBOK® Guide* (Version 4.0), “Business Architecture and Business Process Modeling & Management”
- Delivered webinar June 2014

PLANNED

- Forthcoming Position Papers on relationship between BA and BPM
 - First version of “Business Architecture and BPM - Differentiation and Reconciliation” whitepaper is released on website, but is currently under review by BPM Community and subject to change
- Related Clarification in Business Architecture Framework and Metamodel
- Other *BIZBOK® Guide* Section 3.4 changes TBD
- Other priorities TBD based on community feedback today



BPM ALIGNMENT COLLABORATIVE TEAM



TEAM MEMBERS

Member	Company	Role
William Ulrich	TSG, Inc.	Collaborative Team Mentor
Whynde Melaragno	STA Group	Collaborative Team Lead
Neil Bazely	SMS Management and Technology	Collaborative Team Co-Lead
Lloyd Dugan	Business Process Management, Inc.	Primary Contributor
Tom Dwyer	Salient Process	Content Reviewer
Yojana Ganduri	Aetna	Content Reviewer
Neal McWhorter	Strategic Value Partners	Primary Contributor
Jim Rhyne	Thematrix	Content Reviewer
Mike Rosen	Wilton Consulting Group	Content Reviewer
Elaine Wong	Health Care Service Corporation	Content Reviewer



BPM AND BUSINESS ARCHITECTURE ALIGNMENT OVERVIEW

DEFINITIONS

BUSINESS MODEL VS. OPERATING MODEL



Business Model: A Business Model describes the rationale of how an organization creates, delivers, and captures value.

Source: Alexander Osterwalder and Yves Pigneur, *Business Model Generation*, Self-Published, 2010, Page 14; incorporated into Section 3.3 of the BIZBOK v3.5

BA concepts of Value Stream and Capability should emerge from this context.

Operating Model: An Operating Model is an abstract representation of how an organization operates across process, organization and technology domains in order to accomplish its function.

Source: Wikipedia (http://en.wikipedia.org/wiki/Operating_model#cite_note-1), cited as coming from Marne de Vries, Alta van der Merwe, Paula Kotze and Aurna Gerber. (2011) A Method for Identifying Process Reuse Opportunities to Enhance the Operating Model. 2011 IEEE International Conference on Industrial Engineering and Engineering Management; will be incorporated into the BIZBOK v4.0.

BA and BPM concept of Business Process should emerge from this context.



DEFINING BUSINESS ARCHITECTURE (BA)

The most fundamental aspect of Business Architecture is that it represents a business. Business Architecture is defined as:

“A blueprint of the enterprise that provides a common understanding of the organization and is used to align strategic objectives and tactical demands.”

– see BIZBOK 3.5, Section 2.4, p. 115

The practice of Business Architecture separates the concerns of:

- What we do (capabilities), from...
- Who does it (organization), from...
- How it's done (process), from...
- The information that's needed, from ...
- The systems that are used, and so on.

These individual concepts and relationships are stored and managed in a knowledge base, which is built on incrementally.

DEFINING BUSINESS PROCESS MANAGEMENT (BPM)



Business Process Management (BPM) is a term that has regrettably come to mean too many different things to too many different but related communities (process automation, process modeling, process improvement, enterprise architecture, etc.), with no one community fully and consistently defining BPM as something that unifies and integrates its interdisciplinary nature but rather all communities balkanizing it instead.

Discussions on [Linked-In's BPM Guru](#), [BPM.COM Forum](#), [Workflow Management Coalition \(WfMC\) members](#), and [Association of BPM Professionals \(ABPMP\) Forum](#) was used to produce a consensus among many long-time practitioners and thought leaders:

“Business Process Management (BPM) is a discipline involving any combination of modeling, automation, execution, control, measurement and optimization of business activity flows, in support of enterprise goals, spanning systems, employees, customers and partners within and beyond the enterprise boundaries.”

– see <http://social-biz.org/2014/01/27/one-common-definition-for-bpm/>





DEFINING A BUSINESS PROCESS

A Value-Output One: *“Process is a technical term with a precise definition: an organized group of related activities that together create a result of value to the customer.” – From Hammer & Champy, Reengineering the Corporation: A Manifesto for Business Revolution, 1993*

A Functional One: *“In definitional terms, a process is simply a structured, measured set of activities designed to produce a specific output for a particular customer or market.” – From Thomas H. Davenport, Process Innovation: Reengineering Work Through Information Technology, 1993*

An Operational One: *“A set of one or more linked procedures or activities, which collectively realize a business objective or policy goal, normally within the context of an organizational structure defining functional roles and relationships.” – From the Workflow Management Coalition (www.wfmc.org) and cited by “In OMG’s OCEB Certification Program, What Is the Definition of a Business Process?” about the OMG Certified Expert in BPMN (OCEB) Program on the Object Management Group (OMG) website (<http://www.omg.org/oceb/defbusinessprocess.htm>)*

COMMON CHARACTERISTICS OF A PROCESS ACROSS MODELING LANGUAGES



Common Characteristics that Define Process Boundaries

- **Span of Control** – A process will have a span of control that defines the controlling context that governs or enforces its flow, its application of business logic, the assignment of performers, etc.
- **Decomposition** – Decomposition of a process is essentially a decomposition of a span of control, where a higher-level expression of execution passes to/receives from a lower-level one.
- **Trigger and End States** – A process when instantiated has a specific set of circumstances that constitutes a definitive beginning, and another set that constitutes a definitive end or ends.
- **Exchange Interfaces** – A process will have interfaces through which exchanges occurs between the span of control of a specific process and that of other processes.

Other characteristics could be considered, but these provide a sound basis for evaluating and differentiating the degree of appropriateness for designating an observed concept as a Business Process and using a Process Modeling Language to describe it in a Process Model



Modeler's Credo:

**"All models are wrong, though some may be useful."
– George Box, famous statistician**

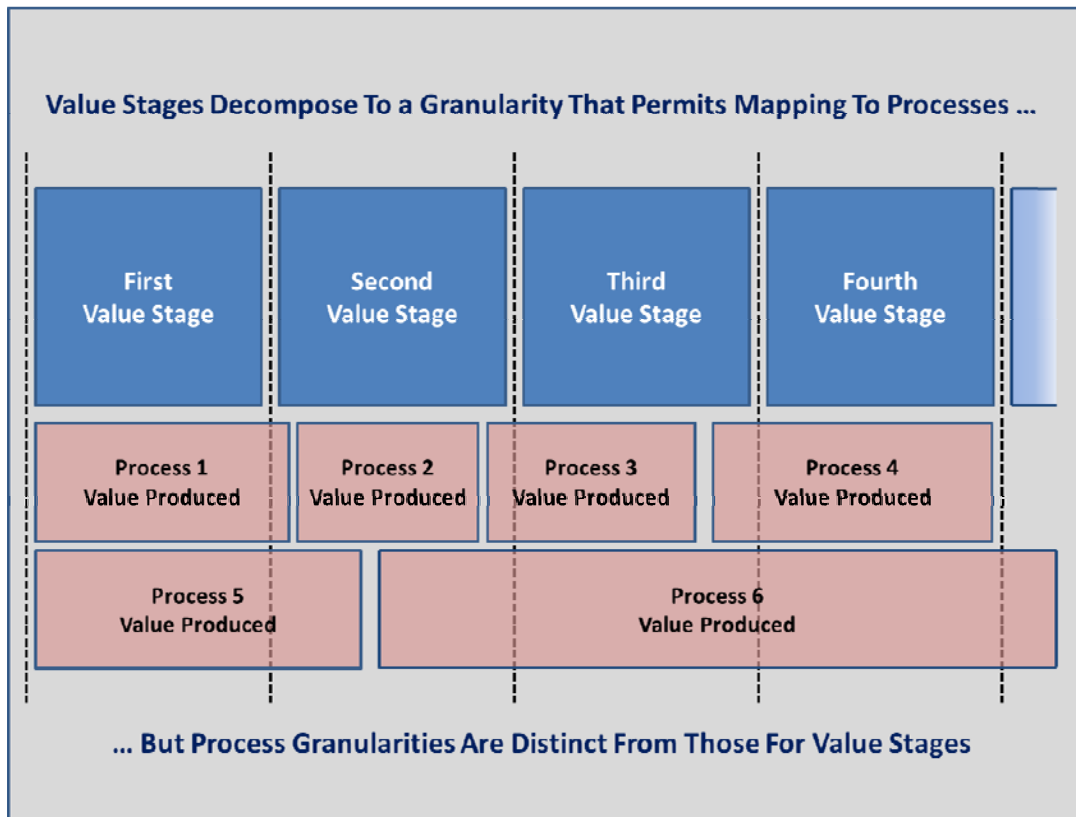
TREATMENT OF VALUE STREAMS & BUSINESS PROCESSES

VALUE STREAM AS A BUSINESS PROCESS?



Process Boundary Characteristics	Degree of Appropriateness for Process Modeling
Span of Control	Low – Value Stream may have more than one span of control
Decomposition	High – Value Stream is composed of Value Stages, which can decompose
Trigger and End States	Low – Value Stages have entry/exit criteria, but these are not really the same
Exchange Interfaces	Low – Value Stages do not exchange information with other Value Stages

RELATIONSHIP BETWEEN VALUE STREAM & BUSINESS PROCESSES

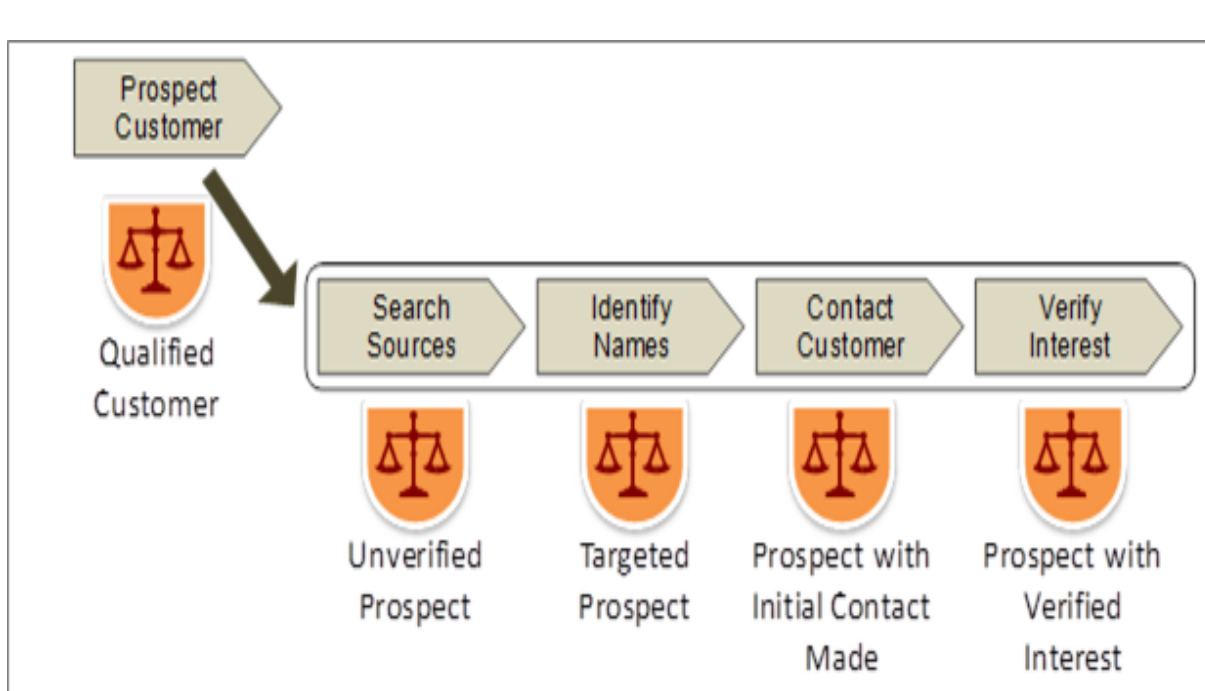


A Value Stream breaks down into related but not necessarily sequential Value Stages with separate entry/exit criteria, while a Process describes an operational view of activities and events that execute per defined semantics.

The value output from a Process contributes to a Value Stream via one or (typically) more Value Stages that are supported by the operations of one or more Processes. Aspects of one may map to another, e.g., a Value Streams Heat Map may point to Processes, and vice-versa.

Respective granularities are different, which require a mapping between the two but not a new way of Process Modeling!!!

VALUE STREAM IN BUSINESS ARCHITECTURE



In the Business Architecture Framework proposed by the BA Guild, a Value Stream consists of Value Stages, all of which are associated with a Value Item that is the realized value

DEFINITIONAL GRANULARITIES – VALUE STREAM VS. BUSINESS PROCESSES



Example Mapping of Operational-Level Business Processes and Activities To Related Value Stream and Value Stages		Prospect Customer Value Stream and Value Stages			
		Search Quotes	Identify names	Contact Customer	Verify Interest
Conduct Mailing Campaign Process and Activities	• Prepare mailing lists of prospective customers	Blocked Out for Group Exercise At End of Presentation			
	• Produce items to mail to prospective customers				
	• Mail items to prospective customers				
	• Record received customer responses				
	• Perform response follow-up to customers				
Mine Customer Purchases Process and Activities	• Perform periodic queries of recent purchases	X			
	• Determine potential new purchases by customers		X		
	• Update customer purchase profiles		X		
Provide Customer Quote Process and Activities	• Record customer quote request			X	
	• Prepare customer quote response				X
	• Deliver customer quote response				

Processes have operational elements that cross over one or more Value Streams

Value Streams are achieved through the execution of operational elements from one or more Processes

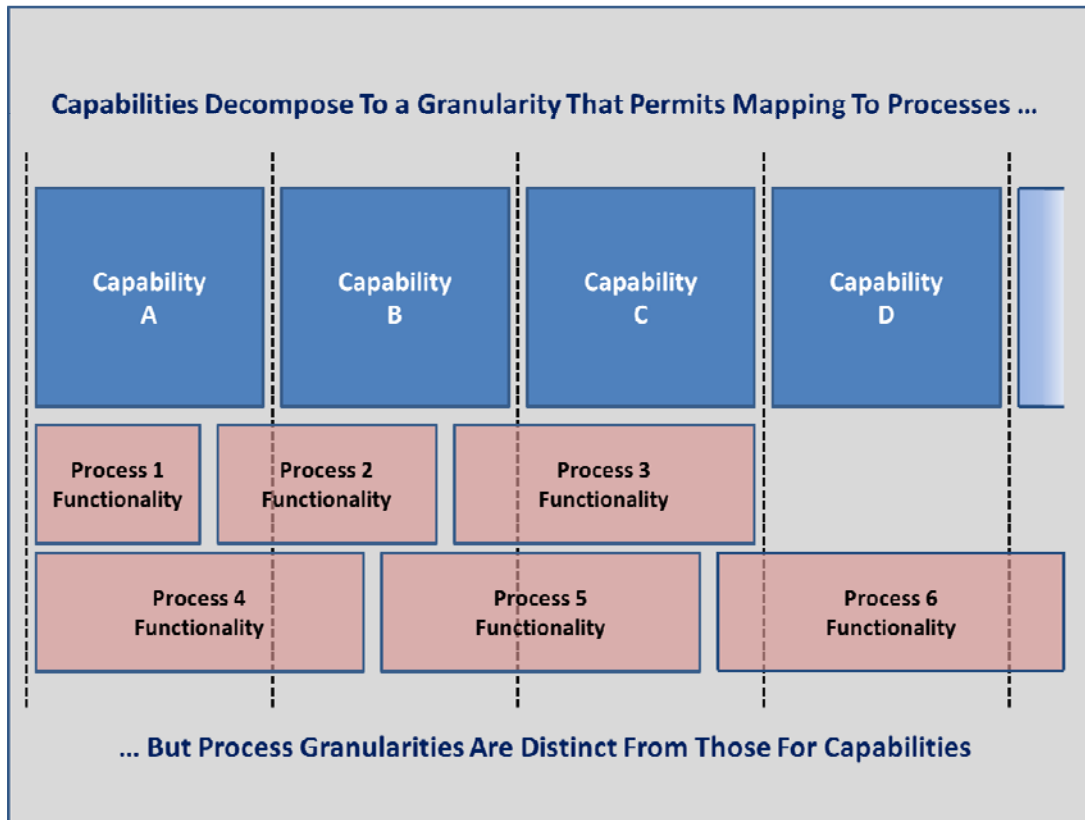
TREATMENT OF CAPABILITIES & BUSINESS PROCESSES



CAPABILITIES AS A BUSINESS PROCESS?

Process Boundary Characteristics	Degree of Appropriateness for Process Modeling
Span of Control	Low – Capability may have more than one span of control
Decomposition	High – Capability may be decomposed of increasingly finer-grained Capabilities
Trigger and End States	Low – Capability has no concept of flow internally or across other Capabilities
Exchange Interfaces	Low – Capability exists in a context of Information, Organization , Value Stream, and Resources, but these are not the same as exchanges of data

RELATIONSHIP BETWEEN PROCESS AND CAPABILITIES



A Capability may decompose into smaller Capabilities that are related but not necessarily sequential, while a Process describes an operational view of activities and events that execute per defined semantics.

The functionality from a Process enables one or (typically) more decomposed Capabilities through execution of operations for one or more Processes. Aspects of one may map to another, e.g., a Capabilities Heat Map may point to Processes, and vice-versa.

Respective granularities are different, which require a mapping but not a new way of process modeling!!!

CAPABILITY MAP IN BUSINESS ARCHITECTURE



Account Management

Account Structuring

Basic Eligibility Determination

Background Eligibility Determination

Geographic Eligibility Determination

Financial Eligibility Determination

Customer / Product Matching

Account Needs Determination

Account Needs Quantification

Account Request Attribute Determination

Account Needs Viability Determination

Candidate Product Identification

Request / Product Attribute Matching

Account / Product Triage

Product / Service Balancing

Account / Product Synchronization

Account Product / Service Attachment

Initial Account Terms Identification

Initial Account Terms Structuring

Account Risk Determination

Customer Risk Rating

Financial History Risk Determination

Location / Affiliation Risk Determination

Partner Risk Determination

Account Structure Risk Rating

Account Payment Default Risk Determination

Account Default Recourse Risk Determination

Aggregate Risk Finalization

Account Price Determination

Standard Pricing Determination

Account Custom Pricing Determination

Account Offer Finalization

Final Account Structuring

Terms & Conditions Finalization

Account Offer Structuring

Account Offer Creation

Offer Issuance

Offer Communication

Account Activation

Source: TSG, Inc.

In the Business Architecture Framework proposed by the BA Guild, a Capability may decompose into increasingly finer-grained Capabilities

DEFINITIONAL GRANULARITIES – CAPABILITIES VS. BUSINESS PROCESSES



Example Mapping of Operational-Level Business Processes and Activities To Related Capabilities and Sub-capabilities		Account Restructuring Capability and Sub-capabilities				
		Basic Eligibility Determination	Customer Product / Matching	Account Risk Determination	Account Price Determination	Account Offer Finalization
Conduct Mailing Campaign Process and Activities	• Prepare mailing lists of prospective customers	Blocked Out For Group Exercise At End of Presentation				
	• Produce items to mail to prospective customers					
	• Mail items to prospective customers					
	• Record received customer responses					
	• Perform response follow-up to customers					
Mine Customer Purchases Process and Activities	• Perform periodic queries of recent purchases	X				
	• Determine potential new purchases by customers		X			
	• Update customer purchase profiles		X	X		
Provide Customer Quote Process and Activities	• Record customer quote request				X	
	• Prepare customer quote response				X	
	• Deliver customer quote response					X

Processes have operational elements that cross over one or more Capabilities

Capabilities are implemented by operational elements from one or more Processes

PRACTICE GUIDANCE FOR BPM-BA ALIGNMENT IN MODELING BUSINESS PROCESSES

MODELING GUIDANCE



- A Value Stream should not be modeled as an E2E high-level process as an artifact of the Business Architecture (though as a standalone visualization it may have value), but map Business Processes (understood as operational flow descriptions) to Value Streams, and vice-versa.
- A Capability should not be modeled as an E2E high-level process as an artifact of the Business Architecture (though as a standalone visualization it may have value), but map Business Processes (understood as operational flow descriptions) to Capabilities, and vice-versa.
- A Business Process should be modeled as an operational flow description, using a formal modeling language that can support mapping at the model data level to other concepts in a Business Architecture (e.g., with Heat Maps), which will give BPM better business alignment and a BA greater depth of operational understanding.



USAGE OF MODELS IN PRACTICE

Identification of potential process redundancies (unwarranted multiple processes for doing or realizing the same thing), as evidenced by seemingly unnecessary multiple mappings.

Discovery of poorly understood competitive variations (previously unknown multiple processes to support business variations), as evidenced by presumably necessary multiple mappings.

Identification of organic inconsistencies across processes (relationships that should be present across all process variants not being present), as evidenced by missing mappings.

Support for process improvement through better targeting of BPM-driven efforts (via mappings among Business Processes, Value Streams and Capabilities, as well as other concepts).

TEAM INTERACTION



LET'S DO SOME MAPPING TOGETHER.

WHY:

TO GIVE YOU AN APPRECIATION FOR THE EFFORT INVOLVED IN MAPPING PROCESS TO ARCHITECTURE.

HOW:

- 1. Reference Example Slides #17 and #22 of Presentation.**
- 2. Reference Process Description and BPMN Model Provided.**
- 3. Map Processes to Identified Value Stream (Value Stages).**
- 4. Map Processes to Identified Capabilities.**

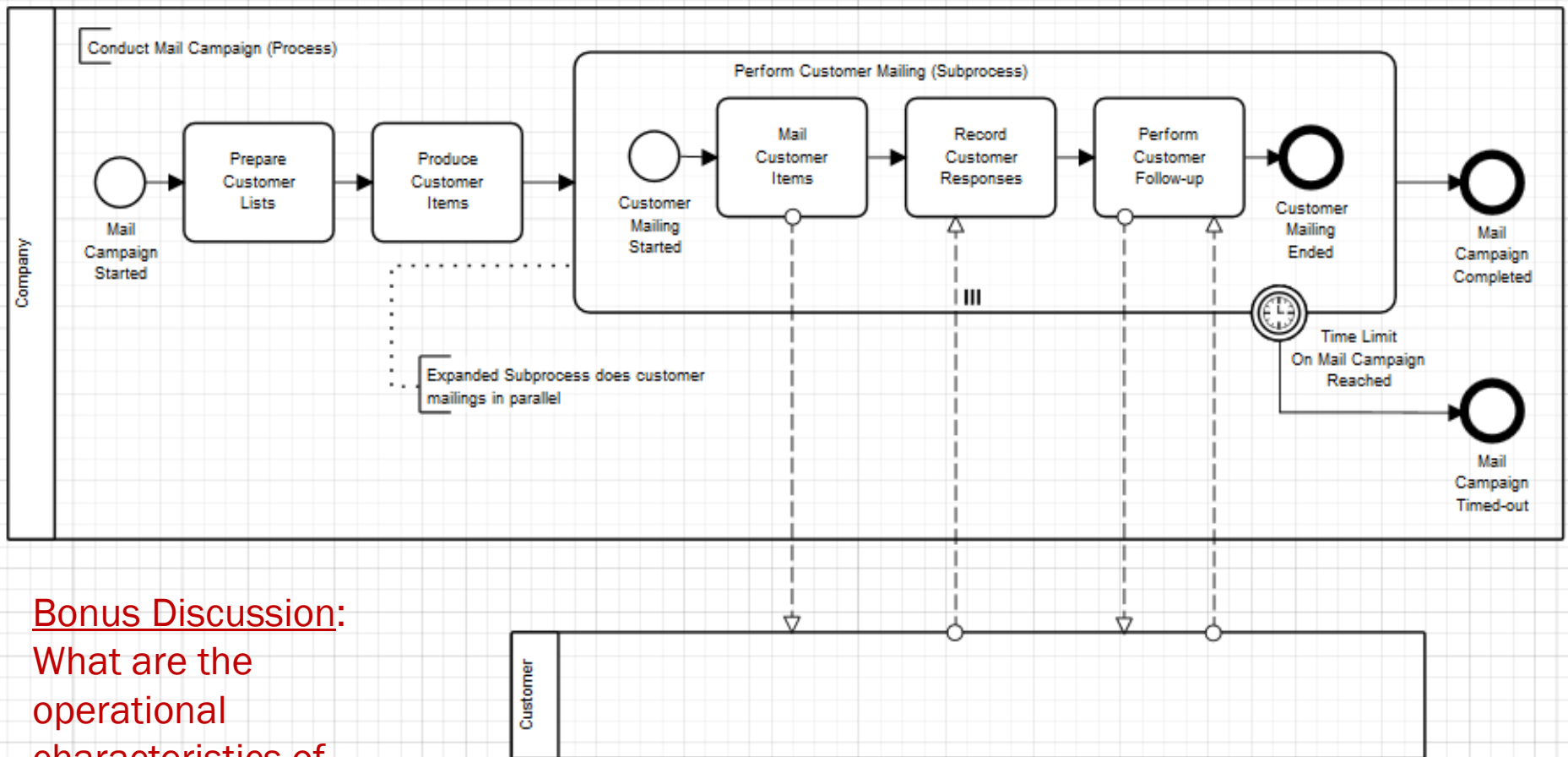
PROCESS DESCRIPTION



Once the Conduct Mail Campaign process is started, the Prepare Customer Lists task pulls customer lists from the applicable databases to provide addressees for the mailing campaign. Based on this information, the Produce Customer Items task assembles the requisite items for the customers targeted in the mailing campaign. For each identified customer, the Mail Customer Items task mails the items to the customer, the Record Customer Response task records any response received from the customer, and the Perform Customer Follow-up task performs interactive follow-up with the customer. These three tasks occur in parallel collectively as part of the customer mailing, which has a time limit on how long the company will hold open any follow-up.



BPMN MODEL



Bonus Discussion:
What are the operational characteristics of this process?



MAP PROCESS TO CAPABILITIES

PROCESS TO CAPABILITY MAPPING

Example Mapping of Operational-Level Business Processes and Activities To Related Capabilities		Account Restructuring Capabilities				
		Basic Eligibility Determination	Customer Product / Matching	Account Risk Determination	Account Price Determination	Account Offer Finalization
Conduct Mailing Campaign Process and Activities	<ul style="list-style-type: none"> Prepare mailing lists of prospective customers 					
	<ul style="list-style-type: none"> Produce items to mail to prospective customers 					
	<ul style="list-style-type: none"> Mail items to prospective customers 					
	<ul style="list-style-type: none"> Record received customer responses 					
	<ul style="list-style-type: none"> Perform response follow-up to customers 					



MAP PROCESS TO VALUE STAGES

PROCESS TO VALUE STREAM MAPPING



Example Mapping of Operational-Level Business Processes and Activities To Related Value Stream and Value Stages		Prospect Customer Value Stream and Value Stages			
		Search Quotes	Identify names	Contact Customer	Verify Interest
Conduct Mailing Campaign Process and Activities	• Prepare mailing lists of prospective customers				
	• Produce items to mail to prospective customers				
	• Mail items to prospective customers				
	• Record received customer responses				
	• Perform response follow-up to customers				



BRING US YOUR PROBLEMS.

WHY:

TO MAKE THE CONCEPTS WE'VE DISCUSSED REAL.

HOW:

**SHARE A SITUATION OR CHALLENGE
RELATED TO PROCESS AND BUSINESS
ARCHITECTURE FOR US TO SOLVE TOGETHER.**

TELL US YOUR NEEDS.



WHY:

HELP US SET PRIORITIES FOR THE NEXT HORIZON.

HOW:

TELL US:

- 1. Who are the key audiences we need to target?**
- 2. What BPM / Business Architecture Alignment topics does each key audience need clarity on?**
- 3. What audiences and topics are highest priority?**