

# BUSINESS ARCHITECTURE COMMON REFERENCE MODEL WORKSHOP

23 March 2017

Common Business Architecture Reference Model Workshop

[www.businessarchitectureguild.org](http://www.businessarchitectureguild.org)

# COMMON REFERENCE MODEL WORKSHOP LEADS



## Co-chairs

- **Whynde Kuehn** –
  - Principal at S2E Consulting Inc.; Partner, Business Architecture Associates; Cutter Sr. Consultant
  - Founder, Director, Editorial Board Co-chair, Business Architecture Guild
- **William Ulrich** –
  - President, TSG, Inc.; Partner, Business Architecture Associates; Cutter Fellow
  - Founder, President, Editorial Advisor Business Architecture Guild
- **David Wilson** –
  - Business Architect, CMS Energy
  - Common Reference Model Team Lead, Business Architecture Guild

## Breakout Team Leads



# DAY ONE OPENING DISCUSSION

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- Workshop objectives and background
- What is a reference model
- Common reference model team background
- Pre-workshop and post-workshop activities
- Business architecture
  - Capability mapping overview
  - Value stream mapping overview
- Workshop agenda
- Workshop breakout plan and walkthrough
- Capability and value stream mapping starting points

# WORKSHOP OBJECTIVES

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- Gain hands on experience in business architecture capability and value mapping
- Produce reference content for the global business architecture community
- Provide a foundation for synchronizing existing industry reference models
- Jumpstart in-house efforts for your business architecture
- Become a thought leader and contributor to the business architecture profession
- Network with fellow business architects
- Share best and avoid worst practices in business architecture mapping

# BACKGROUND



- **Business Architecture Guild has found**
  - Community demand for industry specific reference models
  - Need to learn through hands on and peer experience
  - Need for consistency in capability and value mapping and deployable results from an industry-specific and cross-industry perspective
- **Progress to date**
  - Guild reference model teams formed for healthcare, insurance, financial services and manufacturing
  - Early stage industry reference models established for these verticals published in BIZBOK® Guide
  - Each team delivered Guild webinar, currently working on next generation of content
  - Transportation reference model team is preparing to kickoff at Brussels Summit in June
- **Next stage of work required**
  - Other member resources

# WHAT IS A BUSINESS ARCHITECTURE, INDUSTRY REFERENCE MODEL?



- **Industry reference models**
  - Establish a principle-based, best practice-driven business architecture orientation for a given industry
  - Help jump start a company beginning a business architecture mapping effort or retrofitting existing model
  - Transfer knowledge on what constitutes a robust, principle-based business architecture reference model
- **What form do they take?**
  - BIZBOK® Guide summary level representations in Part 8
  - Packaged files available for member access and download – internal use only
  - Tool-based views providing examples of what the reference models look like once imported to a tool
- **Long-term goal**
  - Ensure consistency across industry sectors in relation to terminology, common capabilities and value streams, decomposition structure for certain capabilities
  - Deliver a plug-and-play set of reference model components that would enable organizations with hybrid business models to construct a reference model

# BUSINESS ARCHITECTURE GUILD'S COMMON REFERENCE MODEL TEAM



- Formed early-2017
- Members represent cross-section of industry sectors and business roles along with other reference model team leads
- Work to date focused on supporting and strategic capabilities and cross-industry value streams
- BIZBOK® Guide standard template was used
- Early content is being shared as input to this workshop
- Team will assimilate results back into its work going forward
- Focus longer term is on synchronizing cross-industry common capabilities, value streams, information concepts and other views
- Ultimate goal: serve as basis for reconciling and rationalizing cross-industry reference model content

# PRE-WORKSHOP / POST-WORKSHOP ACTIVITIES



- **Pre-workshop preparation – Common Reference Model Team**
  - Identify topics, tracks and track leaders
  - Prepare a starter of mapping domain results (capability objects and value stream value propositions)
  - Organize format and capture approach
- **Workshop**
  - Build out reference models
  - Critique, refine and align
- **Post-workshop next steps**
  - Continue work with Guild collaborative team focused on cross-industry, common reference model
  - Finalize and incorporate workshop results into existing reference models
  - Distribute results via Guild content including future versions of BIZBOK® Guide
  - Continue maturing reference models going forward, making them available to Guild members

*All mapping work and results are governed by the Business Architecture Guild and BIZBOK® Guide principles and guidelines*



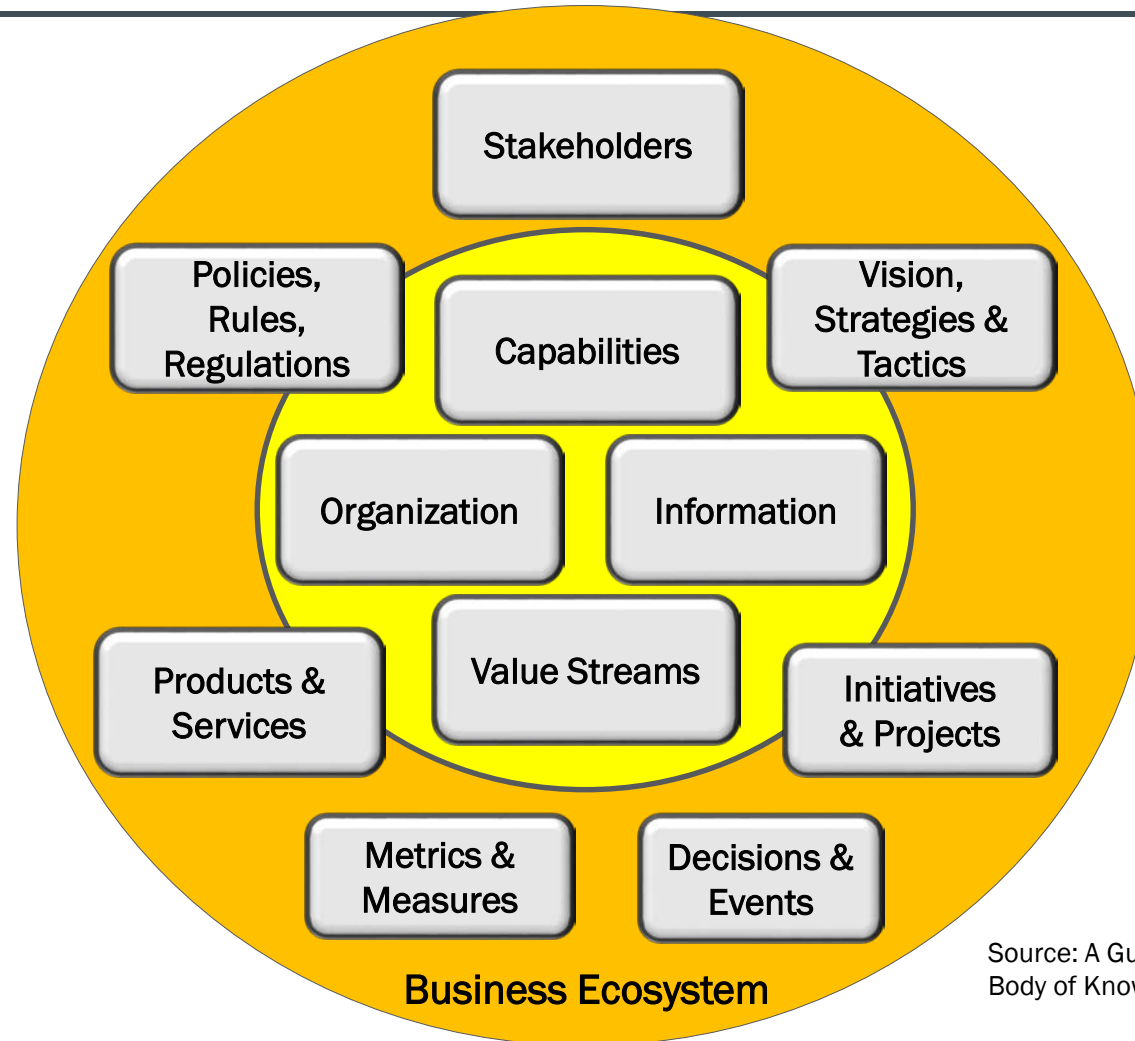
# BUSINESS ARCHITECTURE MAPPING CRASH COURSE

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- Business Architecture Overview
- Capability Mapping
- Value Stream Mapping

# BUSINESS ARCHITECTURE: MAPPING THE BUSINESS ECOSYSTEM



Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK®) Guide)

# BUSINESS ARCHITECTURE SCOPE IS DEFINED BY SCOPE OF BUSINESS ECOSYSTEM



- **“Business Ecosystem” defined:**
  - “One or more legal entities, in whole or in part, that exist as an integrated community of individuals and assets, or aggregations thereof, interacting as a cohesive whole towards a common mission or purpose”\*
- **Business architecture provides holistically focused, horizontal and vertical transparency of business ecosystems from a wide range of perspectives**
- **Prior to articulating a capability map, value streams and other aspects of a business architecture, a business must define scope in relation to their business ecosystem**

\*Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK®) Guide)

# DEFINING BUSINESS CAPABILITY

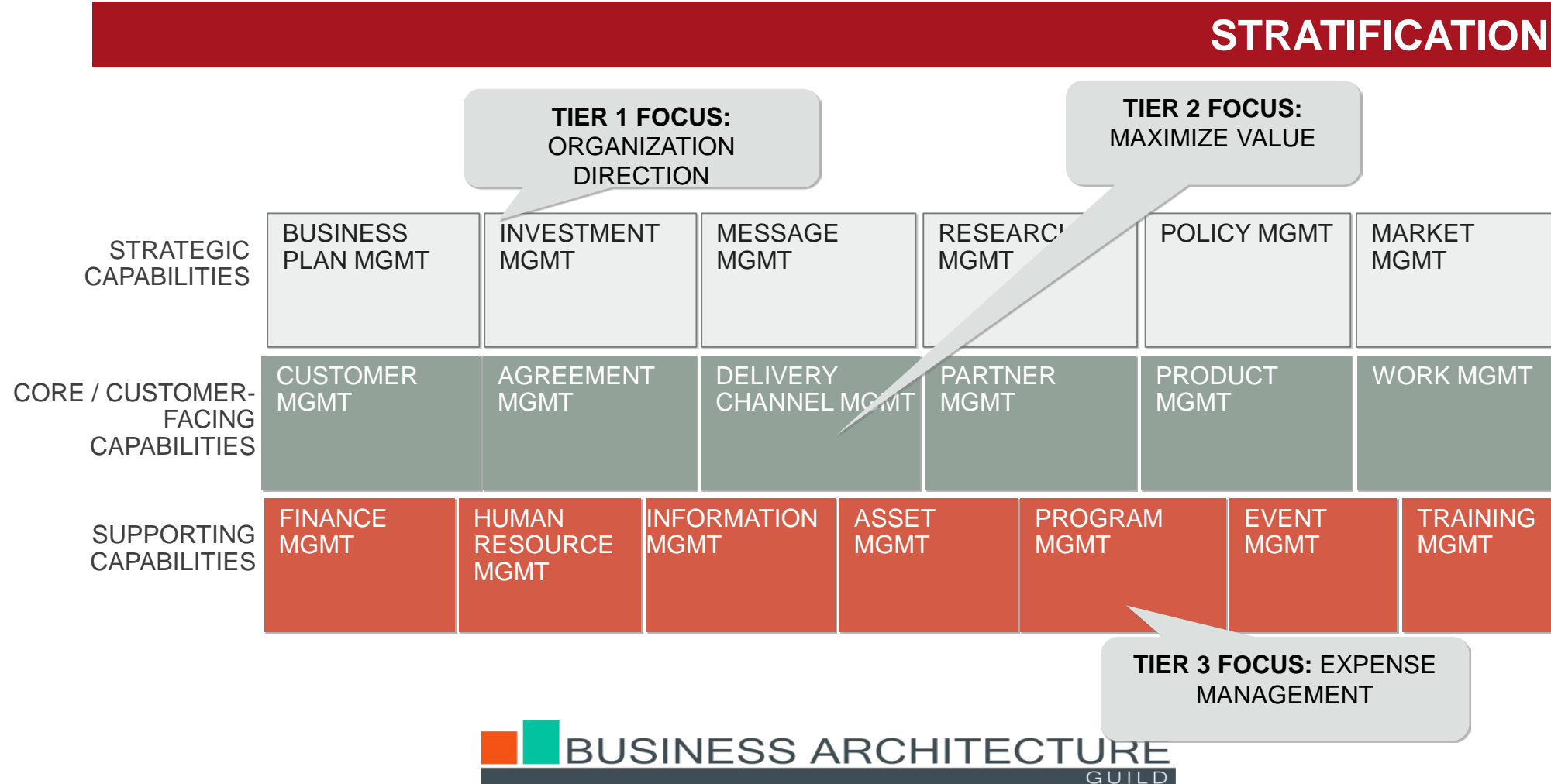


- Business Capability – “a particular ability or capacity that a business may possess or exchange to achieve a specific purpose or outcome” \*
- Capability is the core of the business architecture because it defines “what” the business does
  - “What” *NOT* “How” delivers stability, robust foundation
- Homann’s 2006 paper put context around capability and capability mapping

\* “A Business-Oriented Foundation for Service Orientation”, Ulrich Homann, 2006, [www.msn.com](http://www.msn.com)

Definition has been adopted by Business Architecture Guild, Business Architecture Special Interest Group (OMG) and Business Architecture Institute

# A REVIEW OF CAPABILITY MAP BASICS – STRATIFICATION STRUCTURE

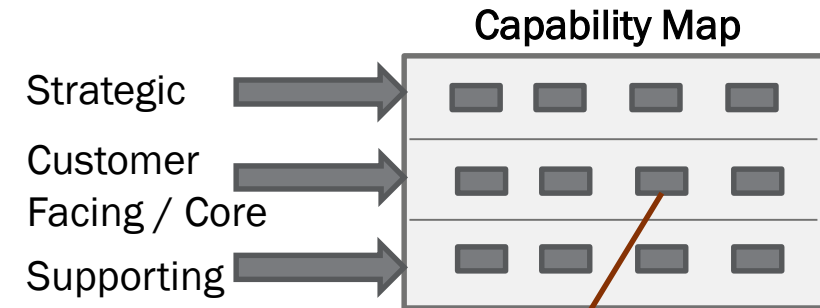


# STRATIFICATION VS. DECOMPOSITION



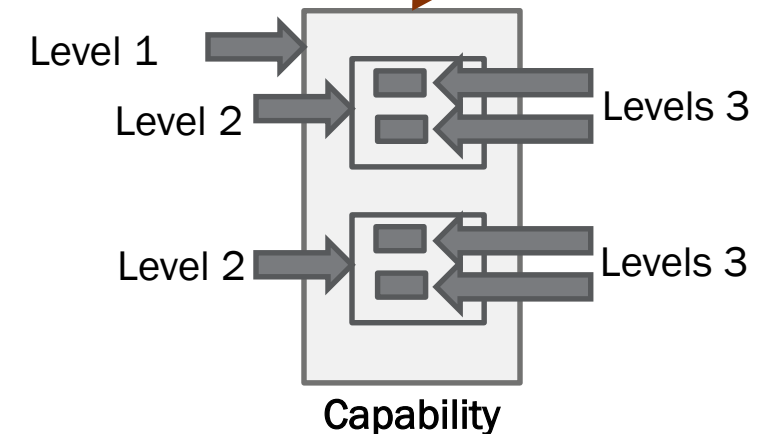
## Stratification applies to the capability map

- Capability map to right shows all level 1 capabilities across three tiers
- Stratification is done once for a set of level 1 of capabilities



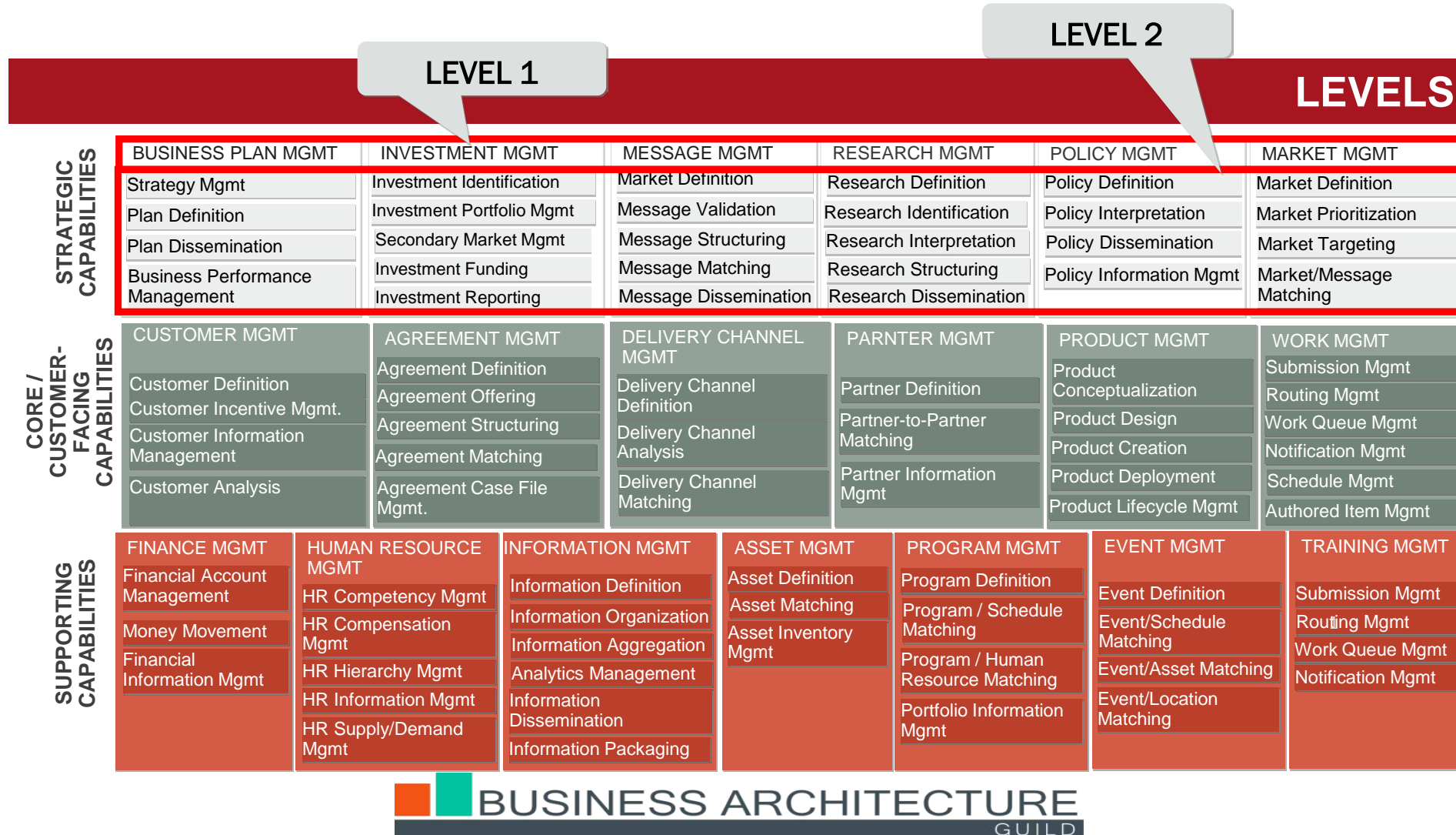
## Decomposition applies to the capability, not the map

- Level 1 capability to right is decomposed to two, level 2 capabilities
- Level 2 capabilities are each decomposed to two, level 3 capabilities



Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)

# A REVIEW OF CAPABILITY MAP BASICS – LEVELING STRUCTURE



# A REVIEW OF CAPABILITY MAP BASICS – PRINCIPLES



1. Capabilities provide business-centric views of an organization
2. Capabilities are defined in business terms
3. Capabilities are nouns, not verbs
4. Capabilities define what a business does
5. Capabilities are stable
6. Capabilities are defined once for an enterprise
7. Capabilities decompose into more capabilities
8. There is one capability map for a business
9. Capabilities map to other views of the business
10. An automated capability is still a business capability, not an IT capability
11. If you cannot define a capability, it is probably not a capability
12. Individuals who name and define a capability have that capability

Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)





# CUTTING THROUGH THE CONFUSION: DEFINING CAPABILITIES BASED ON BUSINESS OBJECTS



- **“Business object”**: Abstract representation of a concrete actor within the business
- **Business object names** – derived from your business vocabulary
  - Common vocabulary is required and must come from the business!
- **Terms for business objects, such as...**
  - Customer, Product, Agent, Account, Location, Event
- **Serve as basis for capability names, such as...**
  - Customer Management, Product Management, Agent Management, Account Management and Event Management

# BUILDING THE CAPABILITY MAP: SUMMARY APPROACH

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- Begin with robust team, principles and validation guidelines
- Leverage templates and reference models where possible
- Establish a level 1 capability map
- Decompose level 1 map based on priorities and need
- Iteratively socialize, validate and refine the map
- Package and publish the map

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# COMMON CAPABILITY MAPPING MISSTEPS



- Thinking that business unit and capability are interchangeable
  - Business unit names may or may not be capabilities
  - For example, Sales is a business unit and not a capability name
- Applying process centric bundling approaches to capability segregation and decomposition
- Number one mistake that dooms many capability mapping efforts – Ignoring Principle #12:
  - *Individuals who name and define a capability have that capability*

# COMMON APPROACH TO CAPABILITY WHITE BOARD & CONCEPTUALIZATION SESSIONS



- **Goal:** Establish baseline level 1 and 2 capability map in 48 hours
- **Approach:** Gather myriad representatives from a cross-section of business areas over a 1-2 day window
- **Session 1:** Business object and concept free form drafting session
  - Have the business list all terms that come to mind in conjunction with the business
  - Strive to specify business objects (vs. conceptual) terms – be concrete
- **Session 2:** Rationalization and consolidation
  - Reduces the list to a working subset of business objects
  - Involves consolidation into a common vocabulary to establish a rationalized business perspective
- **Session 3:** Capability naming and leveling
  - Establishes the capability names and candidate level 1 and level 2 capabilities
  - Creates draft definitions for all level 1 and most level 2 capabilities
  - In some cases, level 3 candidate capabilities emerge

# CAPABILITY MAPPING SPREADSHEET TEMPLATE



Tier	Level	Capability	Definition

- Tier
- 1=Strategic, 2=Core, 3=Supporting
- Level
- 1, 2, 3, 4, 5, 6
- Capability Name
- Definition of Capability

# CAPABILITY MAPPING SPREADSHEET EXAMPLE



Tier	Level	Capability	Definition
1	1	Strategy Management	Ability to establish, evolve, communicate and administer the objectives and related action items the organization will perform in order to be successful.
1	2	Vision Definition	Ability to describe and agree on the purpose and goals of the organization.
1	2	Strategy Definition	Ability to set forth the objectives and related action items the organization will perform in order to be successful.
1	3	Goal Definition	Ability to define and communicate an end toward which effort is or should be directed.
1	3	Objective Definition	Ability to articulate a quantitative, measurable result that defines strategy.
1	3	Action Item Definition	Ability to articulate a specific course to be taken to achieve an objective.
1	2	Strategy Matching	Ability to tie or relate various aspects of a strategy to other aspects of a strategy or to related business objects.
1	3	Vision / Goal Matching	Ability to define and communicate the goals needed to enact a given vision.
1	3	Goal / Objective Matching	Ability to ensure that goals are associated with quantitative, measurable results.
1	3	Objective / Action Item Matching	Ability to ensure that quantifiable, measurable results are associated with actions to be taken to achieve those results.
1	3	Action Item Dependency Management	Ability to identify and represent the sequence of action items required to achieve a given quantitative, measurable result.
1	2	Strategy Dissemination	Ability to communicate strategy to the appropriate stakeholders.

# BREAKING DOWN THE CONFUSION



When we say value stream, we mean business architecture value streams as defined in industry best practices and body of knowledge\*

- A value stream is an “end-to-end” perspective
- “The value stream has a clear goal: to satisfy or to delight the customer”\*\*
- When we say value chain, we mean the Porter “value chain”\*\*\*
- Value streams in this context are not Lean Six Sigma or “lean value streams” – which are essentially processes

\* “A Guide to the Business Architecture Body of Knowledge®” (BIZBOK® Guide), Source: Business Architecture Guild (also see Glossary of Terms at [www.businessarchitectureguild.org](http://www.businessarchitectureguild.org) – public resources page) 2011-2017

\*\* As cited in “The Great Transition”, by James Martin, 1995

\*\*\* Competitive Advantage, Michael Porter, 1985

# VALUE STREAM, VALUE FOCUSED FOCAL POINTS



## Value

- *“The benefit that is derived by an organization’s stakeholder while interacting with that organization”.*

## Value proposition

- *“An innovation, service, or feature intended to make a company, product, or service attractive to customers or related stakeholders”.*

## Value item

- *“The judgment of worth, made by an individual or organization, attached to something tangible or intangible and attained in the course of a particular interaction with one or more other parties”.*

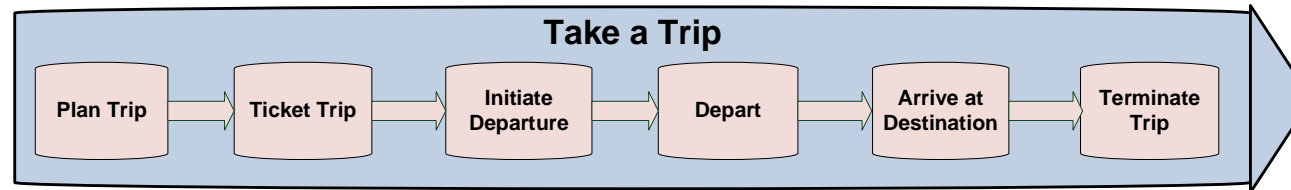


# VALUE STREAM DEFINED

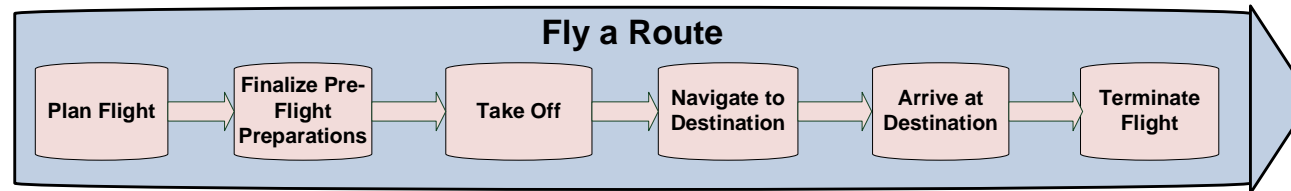


Value stream is “an end-to-end view of how value is achieved for a given stakeholder”

- Stakeholders may be external, such as a customer taking a trip on an airline:



- Or stakeholders may be internal, such as a scheduler initiating a plane to fly to a destination:



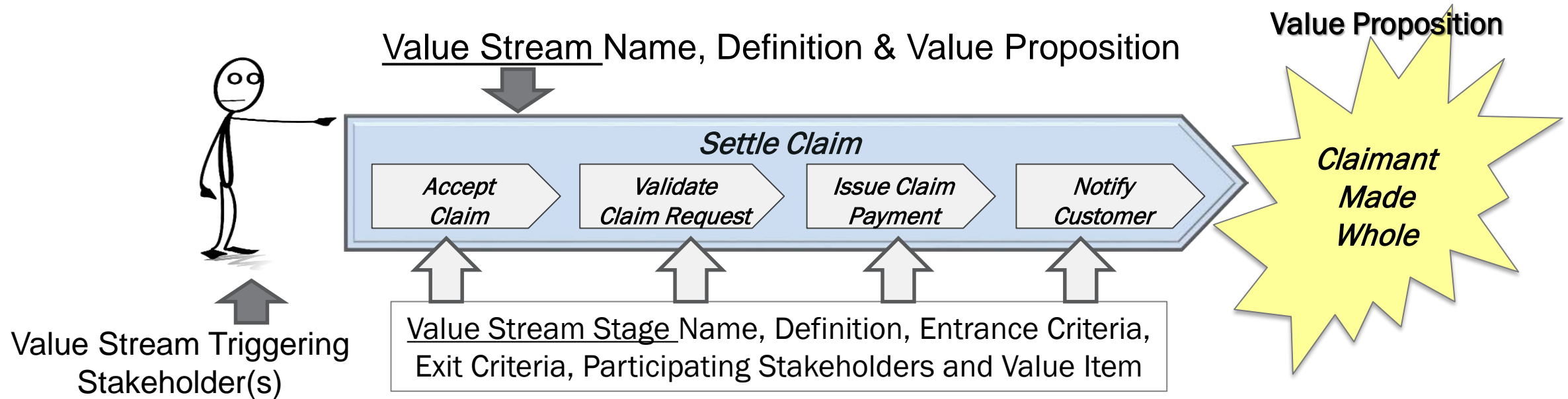
- Value streams strive to achieve value proposition stated in its name for the “triggering” stakeholder

*Why are the above two value streams unique and independent of one another?*

Capability vs. Value Stream:

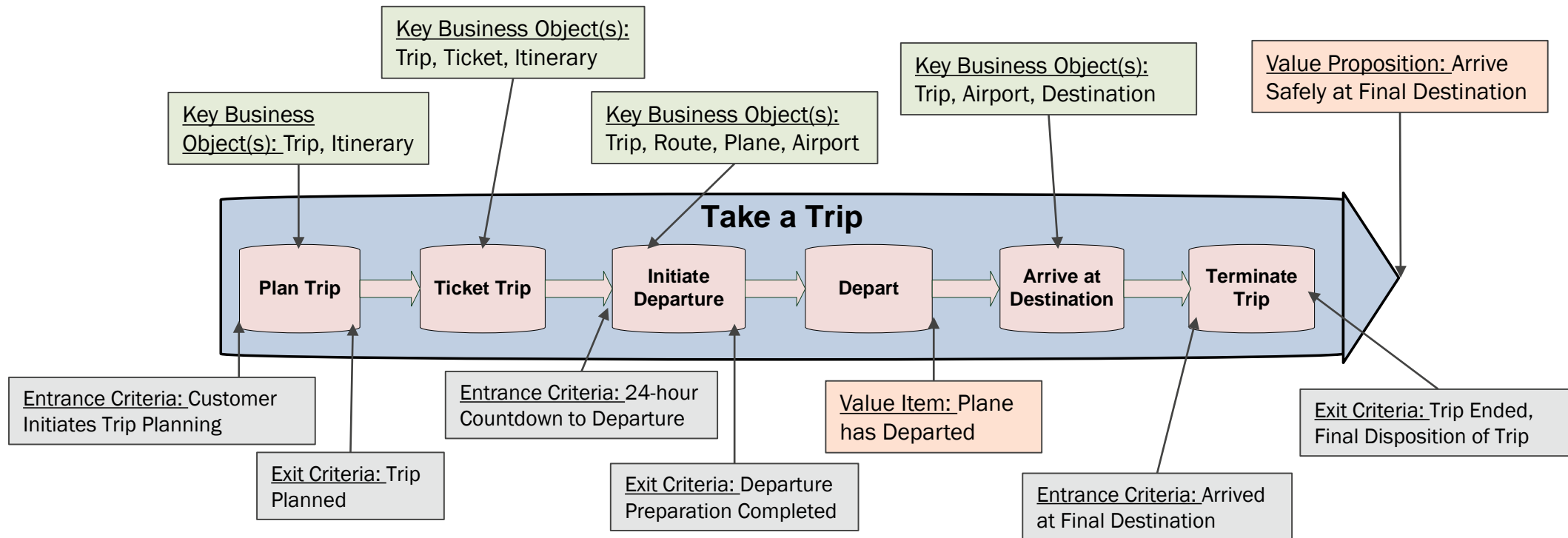
- Capability views the business “at rest”, value stream views the business “in motion”

# ANATOMY OF A VALUE STREAM



Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)

# NAVIGATING VALUE STREAMS: ENTRANCE / EXIT CRITERIA, OBJECT STATE TRANSITIONS, VALUE PERSPECTIVES



- Navigation dictated by object state transitions, controlled by capabilities, meeting certain entrance and exit criteria
- Value items are achieved through an aggregation of capability outcomes within a stage
- Value proposition is achieved through an aggregation of value items

# VALUE STREAM MAPPING PRINCIPLES



1. Value maps are stakeholder focused
2. Value maps are value centric
3. Value maps provide a business centric representation of how stakeholders derive value
4. Value maps provide a holistic view of how value is achieved
5. Value maps represent an aggregation of views
6. Value maps facilitate a decomposition of views of how value is achieved
7. Value maps define how to leverage business capabilities to achieve stakeholder value

Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)

# VALUE STREAM MAPPING GUIDELINES



1. Ensure that each value stream has a clearly identified triggering stakeholder or set of stakeholders
2. Ensure that there is a clearly stated value proposition
3. Focus on customer or externally facing value streams as a priority
4. Do not confuse value streams with lower level processes
5. Use value streams to test and refine capabilities
6. Use capabilities to test and refine value streams

Source: A Guide to the Business Architecture Body of Knowledge® (BIZBOK® Guide)



# EXAMPLE VALUE STREAM STAGE ARTICULATION

- Each stage of a value stream requires definition, entrance criteria, exit criteria and participating stakeholder

Determine Applicant  
Eligibility

*Value Item: Eligibility Determined*

- Definition:
  - Confirms that applicant contact information is complete and is of an age and location that enables applicant to move on to risk rating stage.
- Entrance Criteria:
  - Availability of a completed application
- Exit Criteria:
  - Confirmation of contact, location, age qualifications
- Participating Stakeholder(s):
  - External: Applicant
  - Internal: Input Processor

# VALUE STREAM MAPPING TEMPLATE



Value Stream	Value Stream Stage	Description	Value Proposition	Entrance Criteria	Exit Criteria	Value Item	Stakeholder(s)

Templates enable mapping teams to articulate a value stream and related stages

In this template, value stream is listed on first row, with value stream stages listed below

Where information is not applicable, it is blocked out

For example, value streams have value propositions but not value items, and vice versa

Stakeholder column represents triggering stakeholder(s) for the value stream and participating stakeholders for value stream stages

# VALUE STREAM MAPPING SPREADSHEET EXAMPLE



Value Stream	Value Stream Stage	Description	Value Proposition	Entrance Criteria	Exit Criteria	Value Item	Stakeholder(s)
Establish Account		The end-to-end perspectives involved in establishing a customer account	Account Established				Customer
	Receive Application	The act of receiving an application for a new customer account		Application Initiated	Application Received	Application in Progress	Customer, Help Desk
	Validate Application	Verification that the individual establishing the account is qualified to have an account		Completed Application	Application Validated	Credit Check Completed	Customer, Reviewer
	Activate Account	The activation of an account for a fixed period of time		Validated Application	Account Activated	Account Ready to Use	Customer, Approver
	Notify Customer	The act of notifying the individual applying for an account that the account has been established or denied		Activated Account	All Parties Notified	Customer Notification Received	Customer, Approver



# VALUE STREAM / CAPABILITY CROSS-MAPPING TEMPLATE



Value Stream: Name			
<i>Value Stream Stages</i>			
<b><i>Stage #1</i></b>	<b><i>Stage #2</i></b>	<b><i>Stage #3</i></b>	<b><i>Stage #4</i></b>
Capability	Capability	Capability	Capability
Capability	Capability	Capability	Capability
Capability	Capability	Capability	Capability
Capability	Capability	Capability	Capability
Capability	Capability	Capability	Capability
Capability	Capability	Capability	Capability

- Value stream runs along top of worksheet
- Each value stream stage is shown in in bold, italic font
- Capabilities enabling each stage are listed in each column

# WORKSHOP SCHEDULE: MORNING WALKTHROUGH & CAPABILITY MAPPING



9:00 am - 9:15 am	<b>Reference Model Workshop: Goals, Background &amp; Agenda</b>	
	Co-Chair: William Ulrich, President, Business Architecture Guild	
9:15 am - 9:35 am	<b>Reference Model Mapping Principles &amp; Guidelines - Crash Review</b>	
	Co-Chair: Whynde Kuehn, Director & Cofounder, Business Architecture Guild Co-Chair: William Ulrich, President, Business Architecture Guild	
09:35 am - 10:00 am	<b>Reference Model Logistics &amp; Breakout Team Objectives &amp; Plan</b>	
	Co-Chair: David Wilson, Business Architect, CMS Energy, BA Guild Common Ref Team Lead	
10:00 am - 10:15 am	<b>Morning Refreshment Break</b>	
10:15 am - Noon	<b>Capability Mapping Breakout Session</b>	<b>Capability Mapping Breakout Session</b>
	Teams and Leads Pending	Teams and Leads Pending
Noon - 1:00 pm	<b>Lunch</b>	



# WORKSHOP SCHEDULE: AFTERNOON CAPABILITY MAPPING WALKTHROUGH & VALUE STREAM MAPPING



1:00 pm - 1:45 pm	Capability Mapping Results Presentations		
	Teams and Leads Pending		
1:45 pm - 2:30 pm	Value Stream Mapping Breakout Sessions	Value Stream Mapping Breakout Sessions	
	Teams and Leads Pending	Teams and Leads Pending	
2:30 pm - 2:50 pm	Afternoon Refreshment Break		
2:50 pm - 4:15 pm	Value Stream Mapping Breakout Sessions	Value Stream Mapping Breakout Sessions	
	Teams and Leads Pending	Teams and Leads Pending	
4:15 pm - 5:15 pm	Value Stream Mapping Results Walkthrough		
	Teams and Leads Pending		
5:15 pm - 5:30 pm	Review Lessons Learned & Discuss Post-Workshop Next Steps		
	Co-Chair: Whynde Kuehn, Director & Cofounder, Business Architecture Guild Co-Chair: William Ulrich, President, Business Architecture Guild		



# CAPABILITY MAPPING WORKSHOP: NEXT STEPS



1. Break into teams based on functional focal points
2. Take assigned business objects to work on draft capabilities
3. Define capabilities
4. Drill down to level 2 capabilities (begin level 3 if time)
5. Add selected definitions
6. Refine
7. Incorporate into capability mapping template
8. Present to full workshop audience

# VALUE STREAM MAPPING WORKSHOP NEXT STEPS



1. Break into teams based on functional focal points
2. Take assigned value propositions to work on draft value streams
3. Define value streams
4. Complete value stream template
5. Refine
6. Present to full workshop audience

# CAPABILITY STARTING BUSINESS OBJECTS



Object	Team	Lead
Investment	Investment	Andrew Semple
Market	Marketing	Amy Bachman
Policy	Policy & Compliance	Michele Flakes
Strategy	Strategy	
Plan	Strategy	
Research		
Message	Marketing	Amy Bachman
Business Entity	Business & Location	
Governmental Body		
Regulatory Body	Policy & Compliance	Michele Flakes
Intellectual Property	Legal	Chalon Mullins
Campaign	Marketing	Amy Bachman

Object	Team	Lead
Human Resource	HR	Jeff Crites
Schedule	Program Management	
Work	Program Management	
Program	Program Management	
Event	Marketing	Amy Bachman
Training	HR	Jeff Crites
Finance	Finance & Accounting	Matthew Edwards
Asset	Asset	David Wilson
Location	Business & Location	
Partner		
Information	Information Management	
Submission	Submission Management	
Legal Proceeding	Legal	Chalon Mullins

# VALUE STREAM STARTING VALUE PROPOSITIONS, STAKEHOLDERS



Potential Triggering Stakeholders	Value Proposition	Team	Lead
Customer	Issue Resolved		
Marketing Manager	Campaign Executed	Marketing	Amy Bachman
Executives	Strategy Executed	Business & Strategy	
Hiring Manager	Human Resource Onboarded	HR	Jeff Crites
Hiring Manager	Human Resource Offboarded	HR	Jeff Crites
Compliance Manager / External Regulator	Determination of Compliance	Policy & Compliance	Michele Flakes
Legal Consul	Legal Dispute Resolved	Legal	Chalon Mullins
Procurement Manager	Asset Acquired	Asset	David Wilson
Asset Owner	Asset Enhanced	Asset	David Wilson
Customer / Partner	Account Settled	Finance & Accounting	Matthew Edwards
CFO	Finances Reported	Finance & Accounting	Matthew Edwards
Product Manager	Product Deployed / Created		
Compliance Manager	Compliance Controls Established	Policy & Compliance	Michele Flakes
Executives	Investments Optimized	Investment	Andrew Semple
	Information Disseminated	Information Mangement	
Event Manager	Event Executed	Marketing	Amy Bachman
Training Manager	Training Delivered	HR	Jeff Crites
	Ideas Generated		
	Program Delivered	Program Management	

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