

# BUSINESS-DRIVEN IT ARCHITECTURE TRANSFORMATION

May 2017

William Ulrich

---

[wmmulrich@businessarchitectureguild.org](mailto:wmmulrich@businessarchitectureguild.org)

[wmmulrich@tsgconsultinginc.com](mailto:wmmulrich@tsgconsultinginc.com)

# TODAY'S TOPICS

---



- Defining business and IT alignment and transformation
- Business risks, challenges and technical debt
- Shifting perspective – the Rainbow Model
- Leveraging the business architecture / IT architecture framework
- Continuous alignment, formal business / IT architecture mapping
- Shifting to a business-driven, IT transformation approach

# DEFINING BUSINESS / IT ARCHITECTURE ALIGNMENT & TRANSFORMATION



## Recently Adopted Business Architecture Definition

- Business architecture represents holistic, multidimensional business views of: capabilities, end-to-end value delivery, information, and organizational structure; and the relationships among these business views and strategies, products, policies, initiatives, and stakeholders.<sup>1</sup>

## IT Architecture:

- “Blueprints of the technologies, data structures and applications that collectively comprise the information technology (IT) environment of an enterprise.”

*Source: “Business Architecture: The Art & Practice of Business Transformation”, MK Press, 2010*

## Business / IT Architecture Alignment:

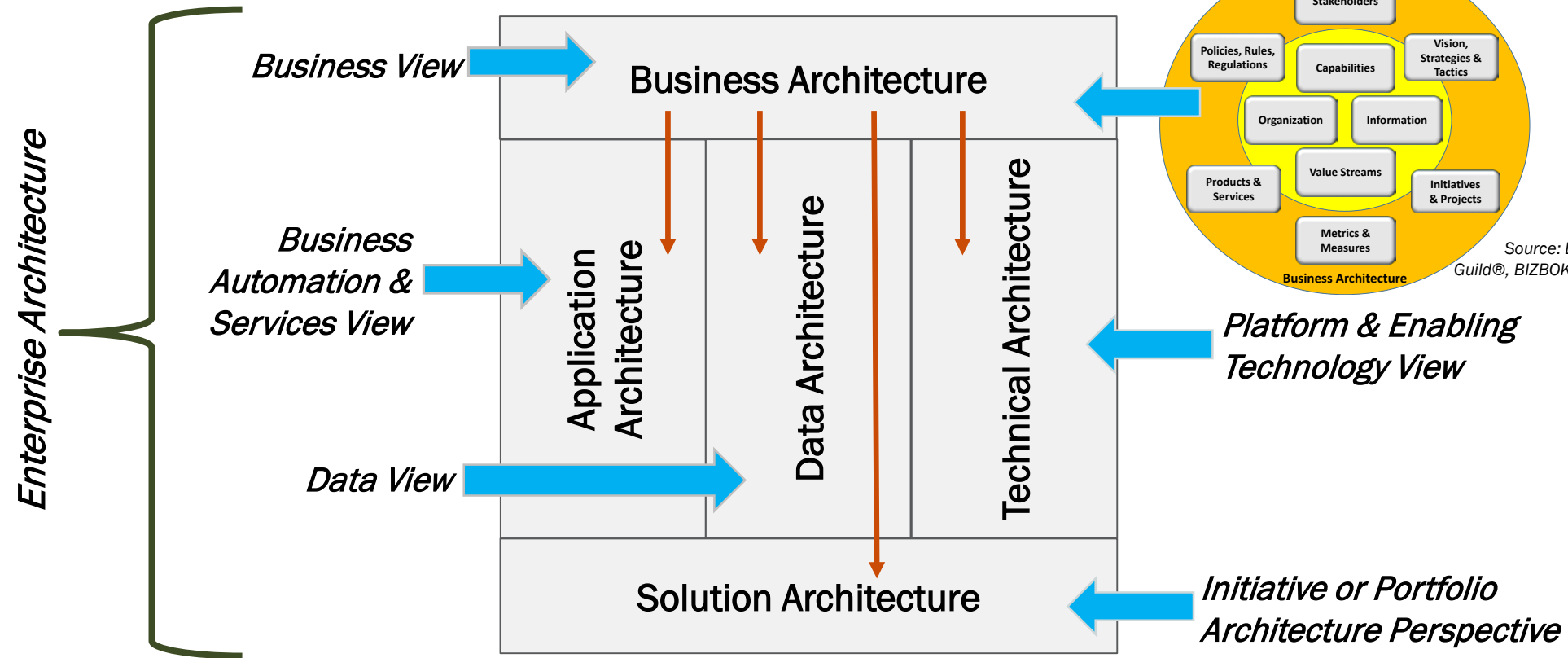
- State in which automated systems and data architectures fully enable business strategy, business capabilities and stakeholder value

## Business / IT architecture transformation is means of achieving “alignment”

(1) Source: Federation of Enterprise Architecture Professional Organizations, adopted on January 14, 2017, after passing a vote by FEAPO Member Organizations.



# SORTING THROUGH THE ARCHITECTURE JARGON: WHY IT MATTERS



Ability to deliver real business value is realized and enhanced through the formal integration of business and IT at the architecture level

*\*Source: "Business Architecture: Putting "Business" into Enterprise Architecture", Ulrich, W. & Soley, R., May 2016, CIO Review*

# HOW A BUSINESS ACCRUES TECHNICAL DEBT



## Technical Debt

- Results from applying IT architecture changes that degrade data and application architectures over an increasingly elongated timeframe
- Each set of changes increases time and cost of applying future changes, curtailing a business's ability to accommodate strategic objectives and business vision

## Technical debt is driven by:

- IT architectures that have grown increasingly misaligned to business model
- Continuous pressure to apply more changes to IT architectures never meant to support today's business model
- Lack of executive understanding that technical debt is being incurred and that it presents a significant and growing risk to the business

# TECHNICAL DEBT RESULTS IN:



- Inability to address customer discontinuity across business units and product lines
- Diminished capacity to manage risk, regulatory compliance, change management and crises\*
- Business costs escalate as the business works around core IT systems
- IT solutions result in more business disruptions than they resolve
- Essential requirements are applied inconsistently or missed altogether
- Ongoing IT investments appear fully disconnected from priority business challenges and objectives, creating significant business risks

*\* Business Architecture Now, Not Later? A Lesson from Crisis Management*

BrightTALK Recorded 13 April 2017

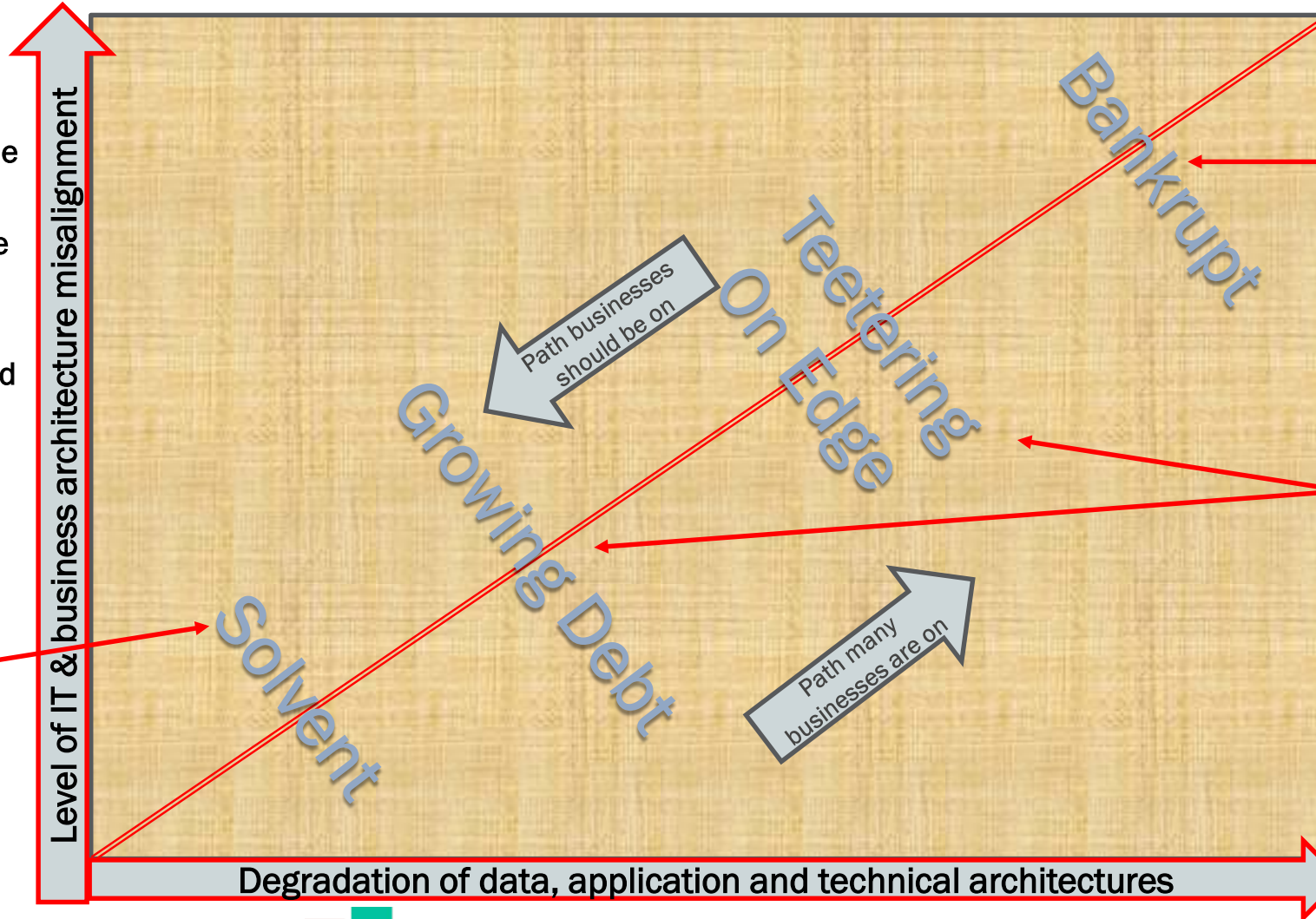
<https://www.brighttalk.com/webcast/12231/253795>

# EVALUATING TECHNICAL DEBT FROM A BUSINESS PERSPECTIVE



- Matrix represents IT architectures as a whole or portions thereof
- Application systems are plotted on this matrix
- Initiatives may use this plotting approach based on the applications impacted

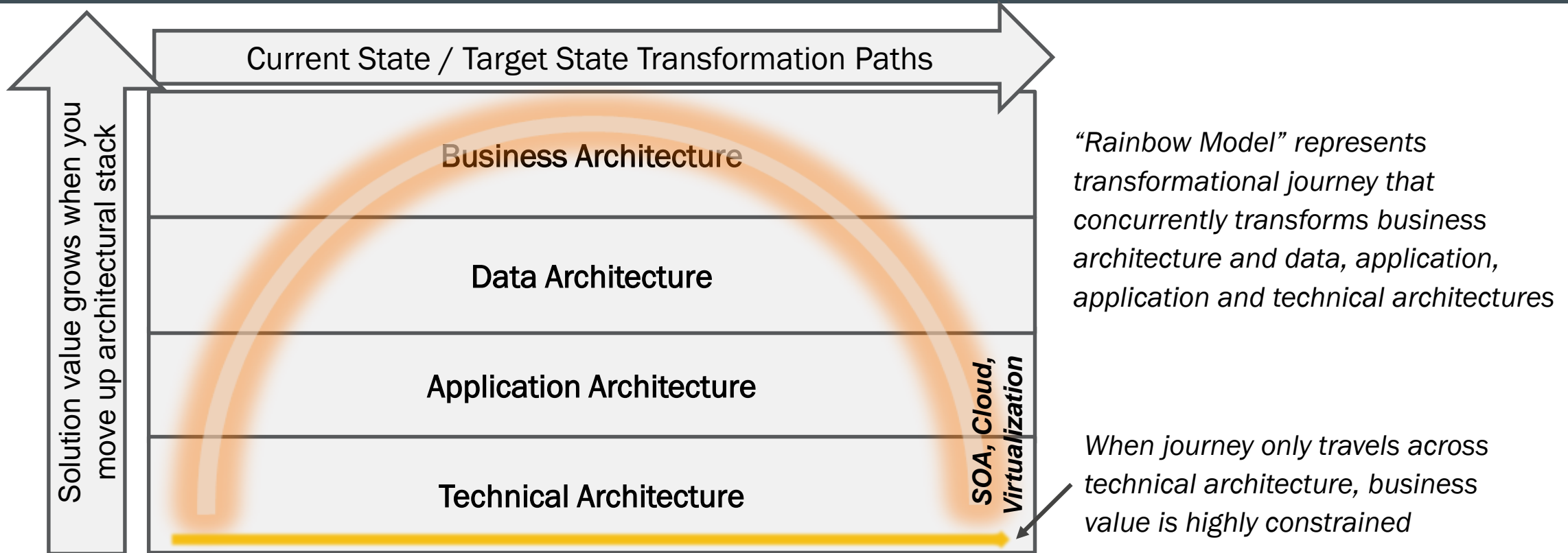
*Continuous business / IT architecture alignment, with minimal disruption and capital investment*



*Complete IT architecture replacement required, which triggers major, highly disruptive capital investment*

*Major IT portfolio investment needed to align business & IT architectures & address IT architecture degradation*

# IT INVESTMENTS MUST LOOK BEYOND TECHNICAL ARCHITECTURE TO ADDRESS TECHNICAL DEBT, BUSINESS CHALLENGES



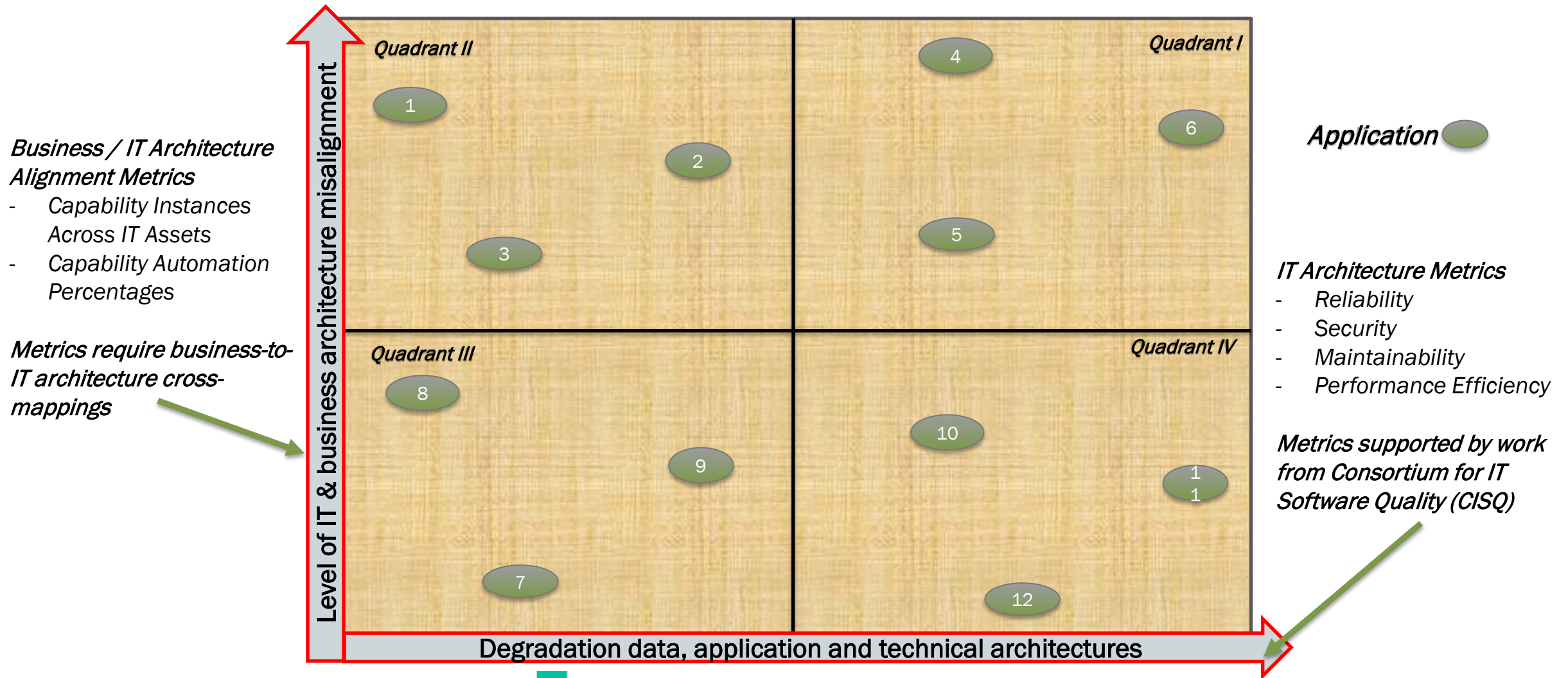
- Current-to-target state transformation comprises many individual initiatives moving towards common business objectives, in cohesive fashion, over extended period of time
- IT investments and related initiatives must incorporate business perspective or technical debt grows while business capacity degrades

# IMPLICATIONS OF RAINBOW MODEL ON IT BUDGET ALLOCATION & BUSINESS FUNDING



- At many organizations, IT will spend 10's or 100's of millions of dollars annually, whether those investments are business-driven or not
- It is incumbent upon the business to ensure that these investments are business-driven and deliver business value by:
  - Framing investments in business terms that clearly articulate and reconcile business objectives and investment focal points within the business, before the discussion shifts to IT
  - Ensuring that all IT investments have traceability back to business objectives and impacted business focal points
  - Questioning and challenging major investments that only impact technical architecture
- IT will spend this money anyway; but will IT spend it for the betterment or to the detriment of the business community and external customers as a whole?

# TRANSFORMATION PLANNING LEVERAGES BUSINESS ARCHITECTURE BASED TECHNICAL DEBT METRICS

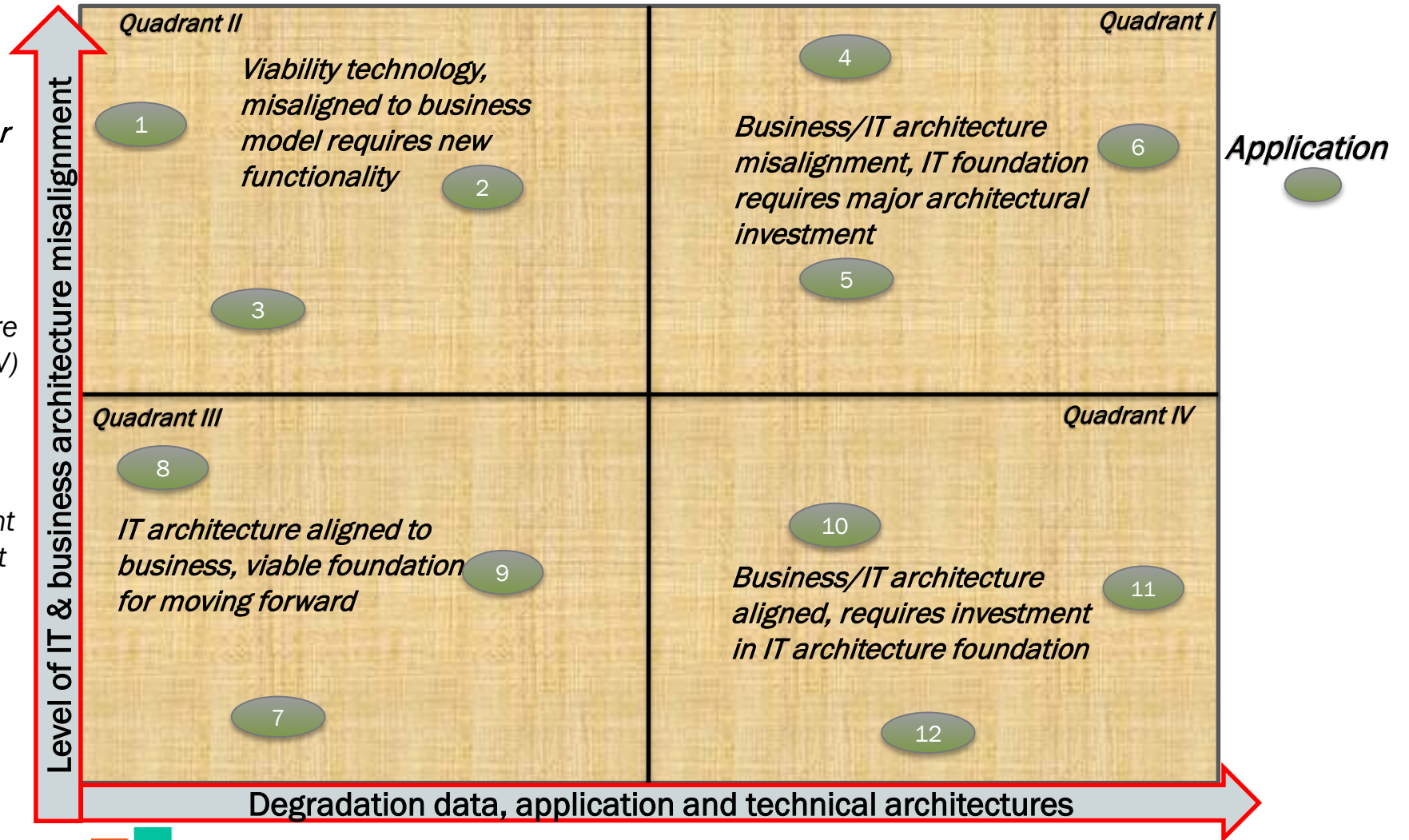


# USING TECHNICAL DEBT MATRIX TO ESTABLISH BUSINESS-DRIVEN IT TRANSFORMATION & INVESTMENT STRATEGY



Decision matrix provides rapid analysis for executives to:

- Invest wisely in business-aligned IT solutions (Q II / Q III)
- Determine when technical architecture upgrade satisfies business needs (Q IV)
- Avoid reinvesting in fully bankrupt IT assets (Q I)
- Evaluate among business/IT alignment scenarios, such as cross-business unit system consolidation, transform in place, migrate to new IT architecture

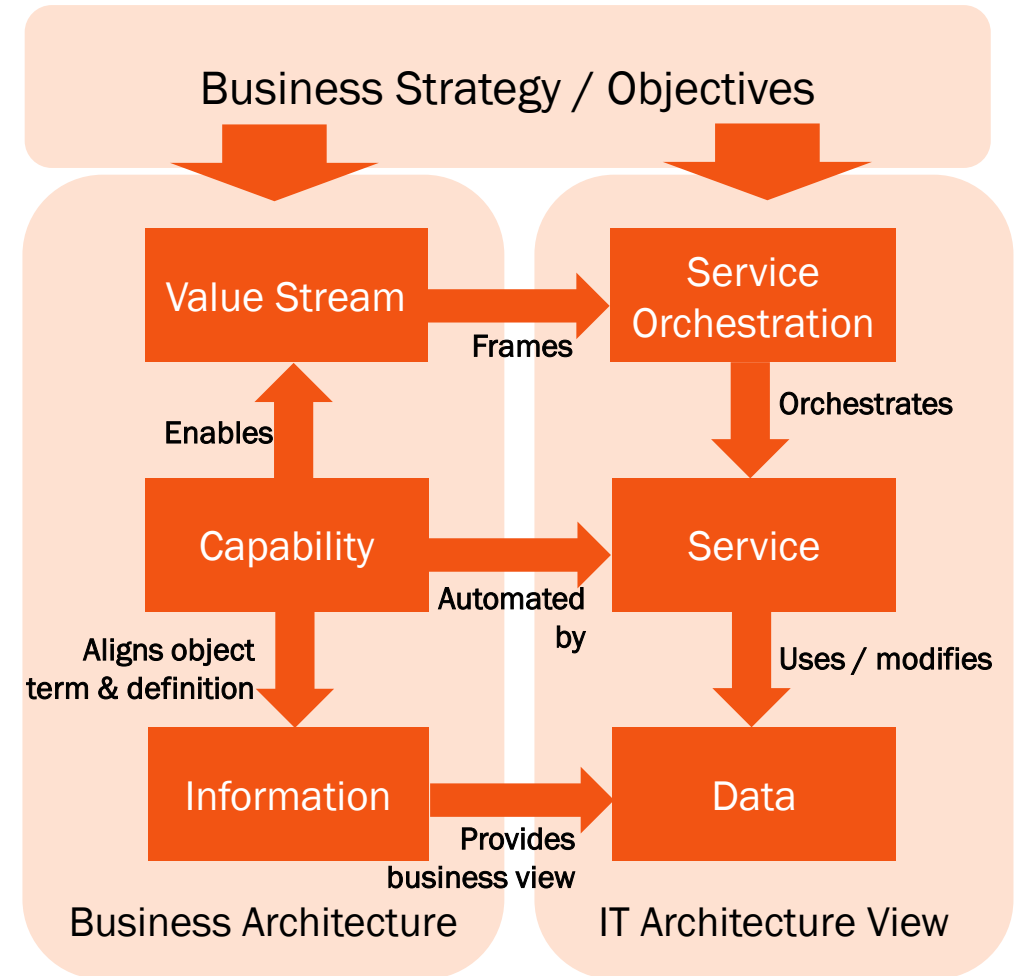


# TO MAXIMIZE VALUE, IT INVESTMENTS MUST BE DIRECTLY TRACEABLE TO CLEARLY DEFINED BUSINESS OBJECTIVES

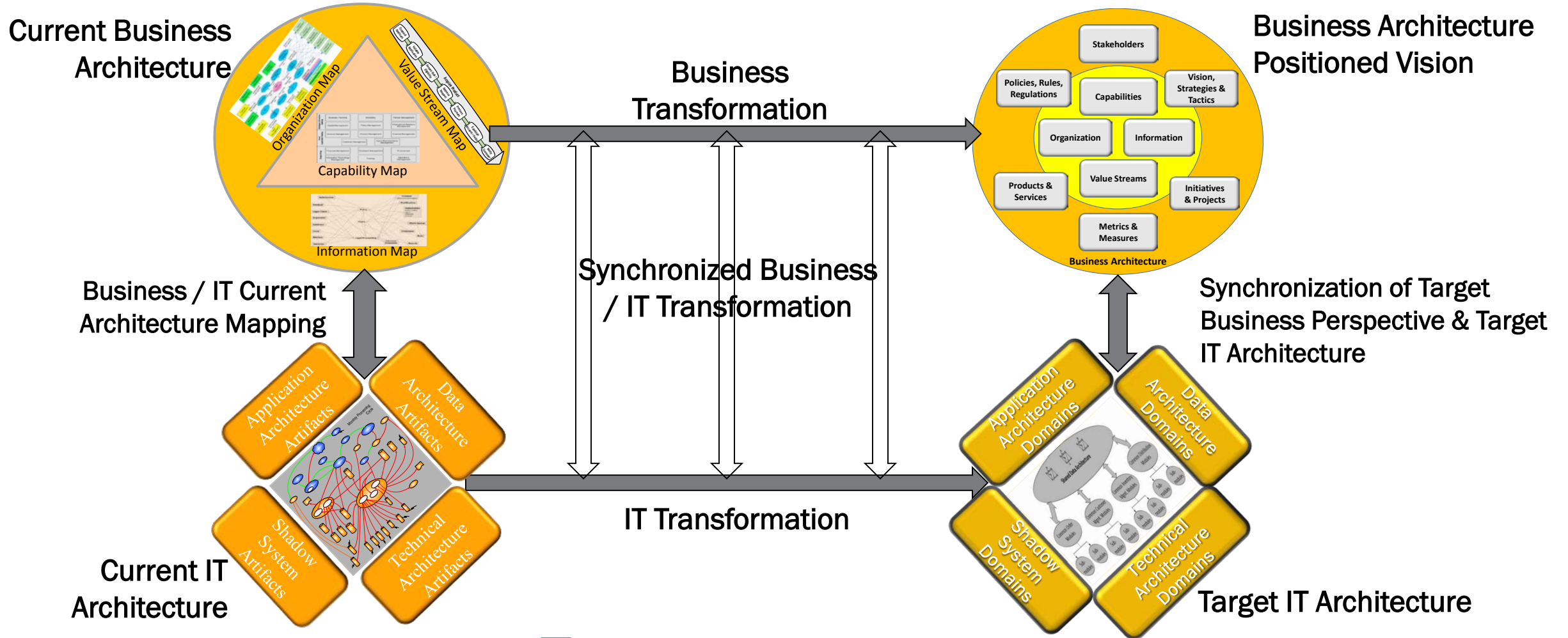


Steps to ensuring that IT investments are driven by business objectives:

- Set clear, measureable, attainable business objectives
- Frame objectives through capability, value stream, information and stakeholder perspectives
- Frame IT architecture impacts through business architecture lens
- Highlight current state IT architecture constraints to the delivery of business objectives
- Align IT transformation plans with corresponding business transformation plans



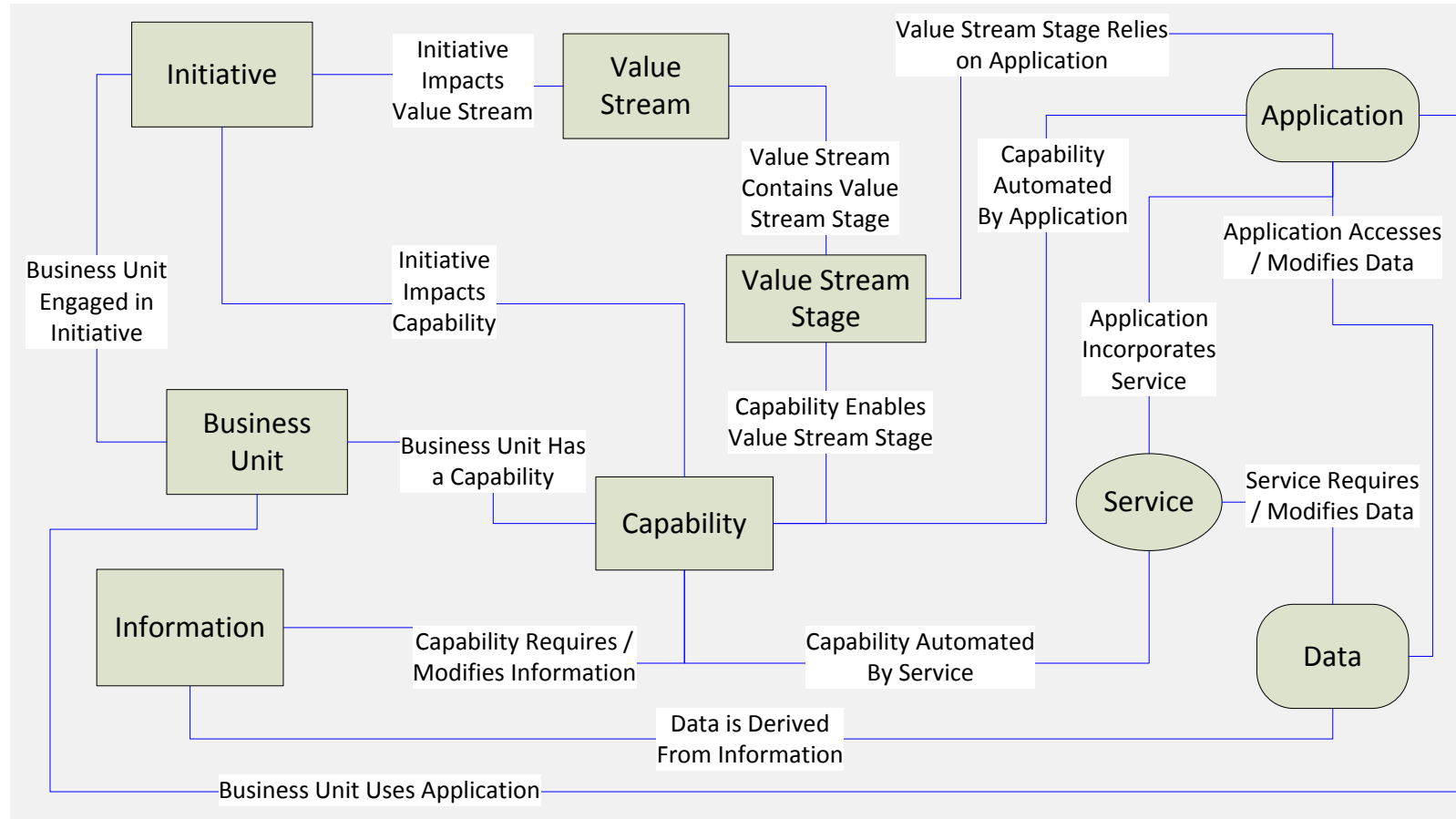
# LEVERAGING THE BUSINESS ARCHITECTURE / IT ARCHITECTURE TRANSFORMATION FRAMEWORK™



# BUSINESS-DRIVEN, IT ARCHITECTURE ALIGNMENT & TRANSFORMATION REQUIRES A ROBUST KNOWLEDGEBASE

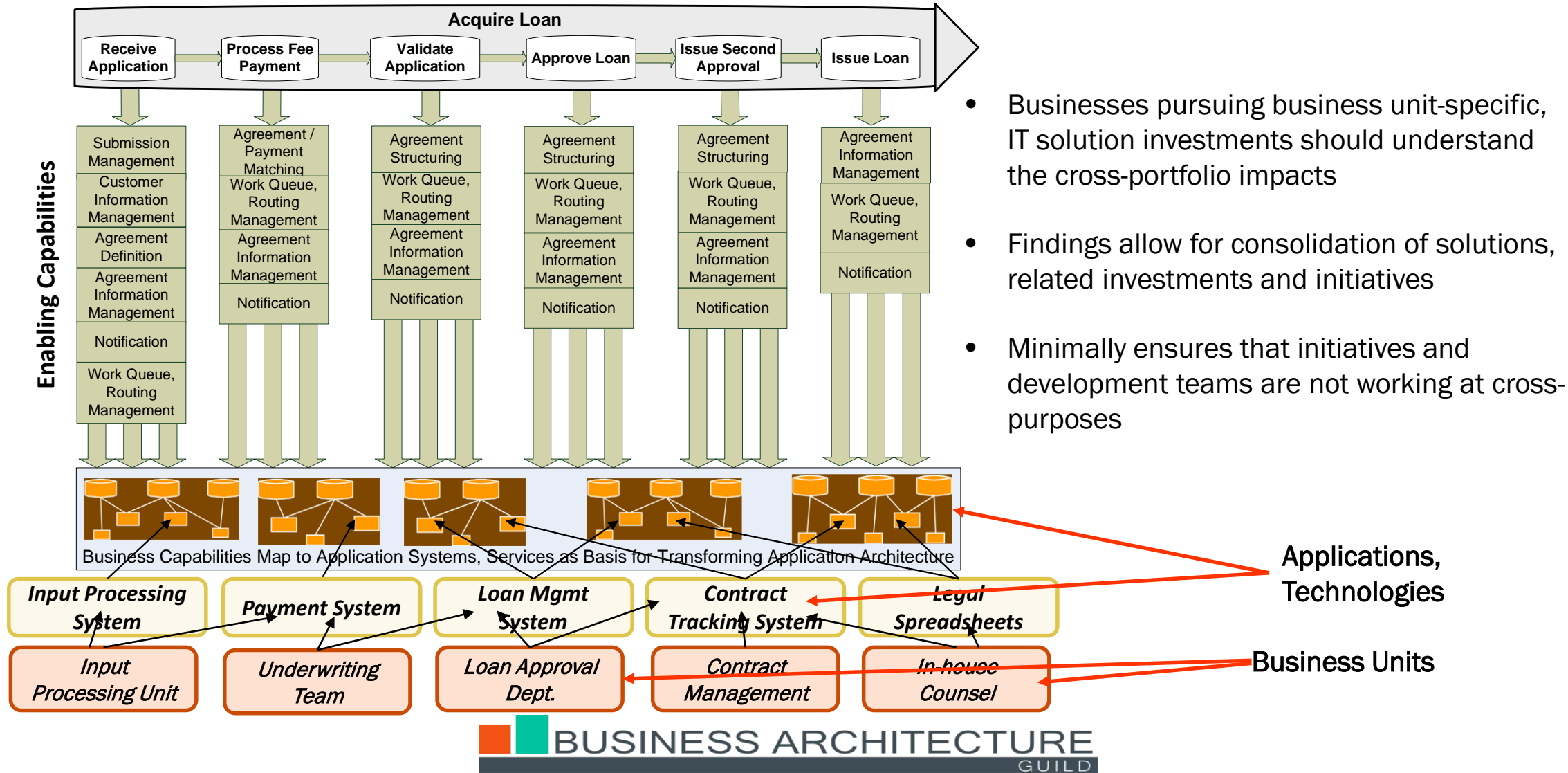


Business / IT  
Architecture  
Knowledgebase



Clearly defined relationships among business and IT architecture domains within business architecture knowledgebase

# CAPABILITY & VALUE STREAM BASED, CURRENT STATE BUSINESS-TO-IT ARCHITECTURE MAPPING EXAMPLE

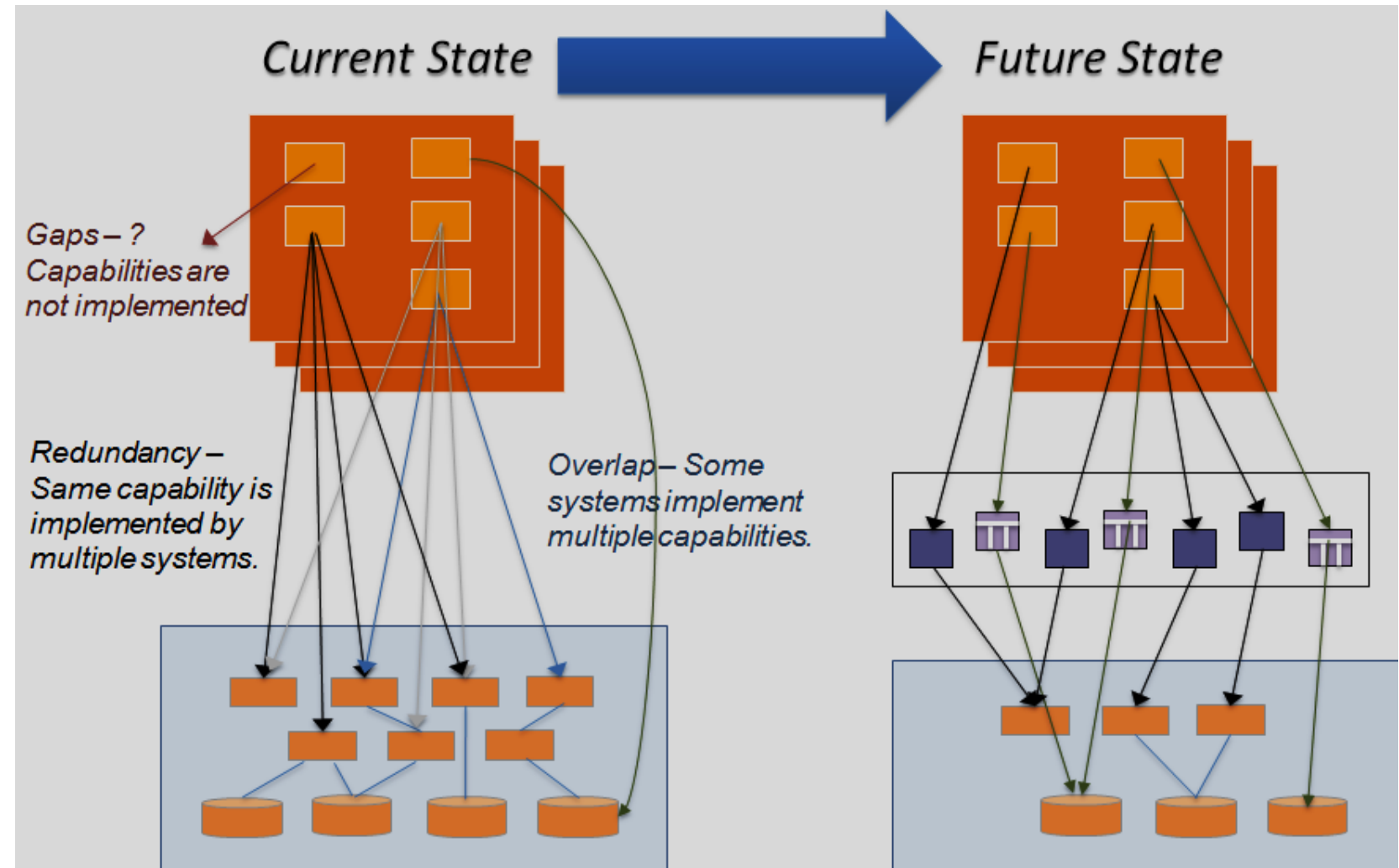


- Businesses pursuing business unit-specific, IT solution investments should understand the cross-portfolio impacts
- Findings allow for consolidation of solutions, related investments and initiatives
- Minimally ensures that initiatives and development teams are not working at cross-purposes

# CAPABILITY-BASED, APPLICATION ARCHITECTURE & SERVICES-ORIENTED ARCHITECTURE PLANNING



- ◆ Leveraging capabilities to plan business / IT architecture transformation
- ◆ Capabilities define the current state/target state IT architecture perspectives link to capabilities

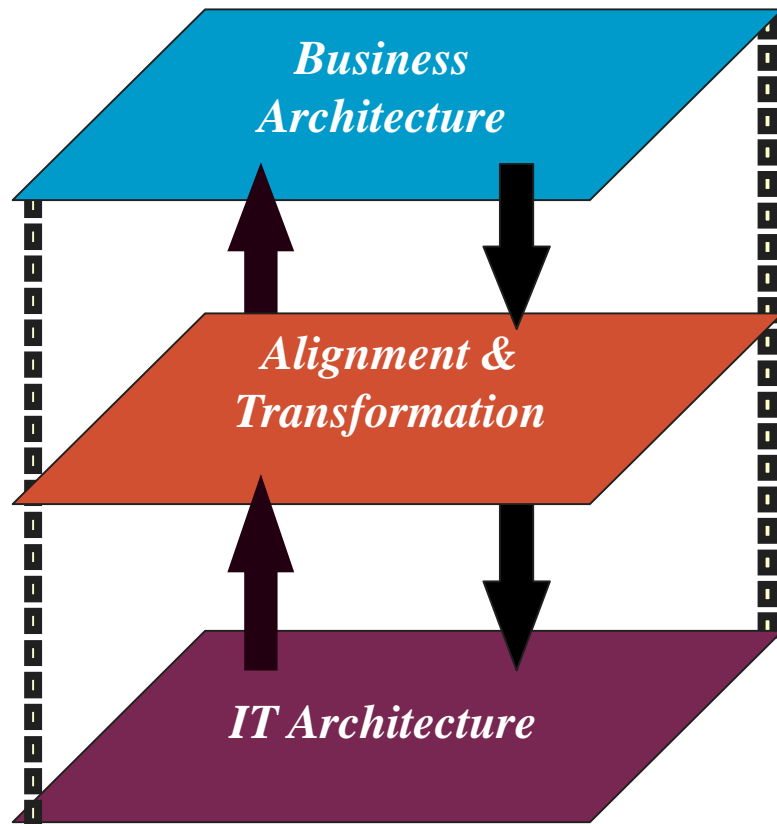


Source: “The Business Capability Map: The “Rosetta Stone” of Business/IT Alignment”, William Ulrich & Michael Rosen, Executive Report, Cutter Consortium, EA Vol.14, No. 2

# BUSINESSES SHOULD SEEK CONTINUOUS, NON-DISRUPTIVE BUSINESS / IT ALIGNMENT



Business / IT Architecture  
Continuous Alignment Model



- Today, most businesses undergo disruptive, large-scale, very expensive IT transformations
- These transformations are characterized by many individual business unit investments in siloed IT systems
- This pattern of disruption will continue until businesses shift to a business-driven IT transformation and investment approach
- Businesses should seek to achieve continuous, non-disruptive transformative alignment, driven by business objectives from a holistic approach

# SHIFTING TO A BUSINESS-DRIVEN, IT TRANSFORMATION PERSPECTIVE



- Frame every IT investment by business impacts
- Where IT programs, projects and investments are not traceable to business objectives, stop the investment
- Highlight overlap of initiatives based on capability and value related impacts
- Take stock of failed IT investments
- Find out what the business really thinks of IT spending \$1 billion on a platform migration over the next 5 years, with no discernible business value
- *Sometimes a business must reach a low point before it realizes that it needs to shift its approach to IT investment and deployment*

# BUSINESS-DRIVEN IT ARCHITECTURE TRANSFORMATION

---

## QUESTIONS?



May 2017

William Ulrich

---

[wmmulrich@businessarchitectureguild.org](mailto:wmmulrich@businessarchitectureguild.org)

[wmmulrich@tsgconsultinginc.com](mailto:wmmulrich@tsgconsultinginc.com)