

Business Architecture: Strategy Execution's Secret Weapon

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Today's Discussion

- Strategy Alignment & Execution
- The Role of Business Architecture
- Portfolio Management Integration
- Business Architecture as a Facilitator for Innovation
- Importance of a Value Measurement Program



Strategy Alignment & Execution



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Strategy Execution: Beyond IT/Business Alignment



Enterprise Transformation: Beyond IT/Business Alignment

- According to Michael Porter, more than 80% of corporations do not successfully execute their business strategies.
- He estimates that in 70% of these cases, the reason was not the strategy itself, but bad execution.
- According to Porter and others, this failure to execute is the most significant management challenge facing public and private organizations in the 21st century.



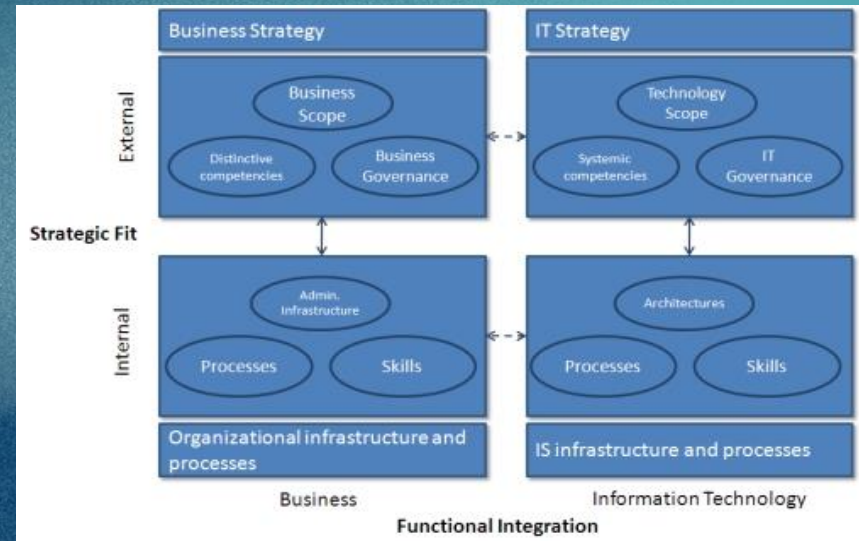
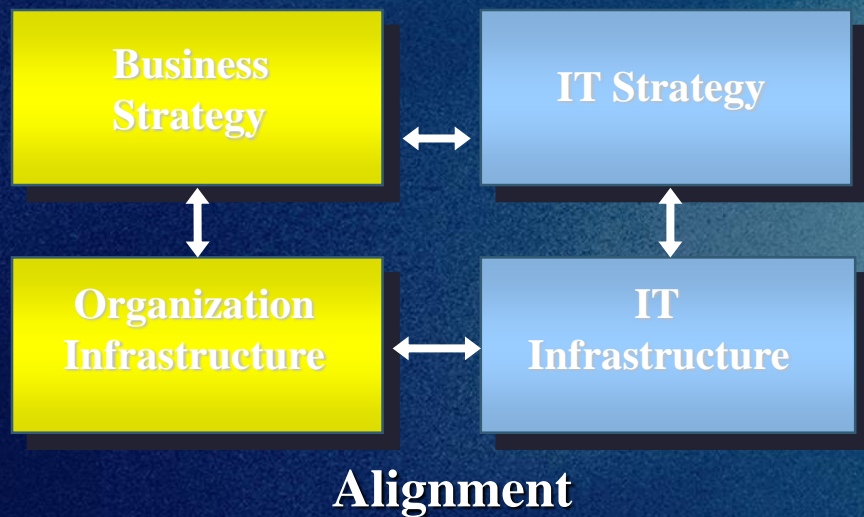
Enterprise Transformation: Beyond IT/Business Alignment

- Approximately 70-75% of IT projects fail outright or fail to achieve the desired business objectives.
- It's not surprising that lack of Business/IT alignment is often cited as a major contributing factor in poor strategy execution.
- Is Business/IT alignment the real “holy grail”?



What is Alignment?

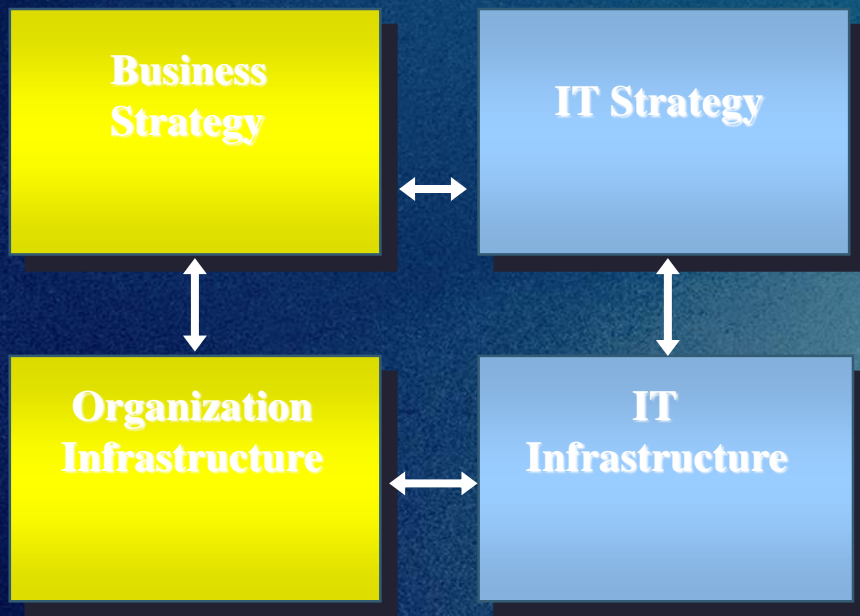
- A Google search for the phrase “business aligned” recently and got more than 78,000,000 page matches
- But what is Business-IT Alignment? Is it possible? What would it look like? How do you measure it? Are there different types?



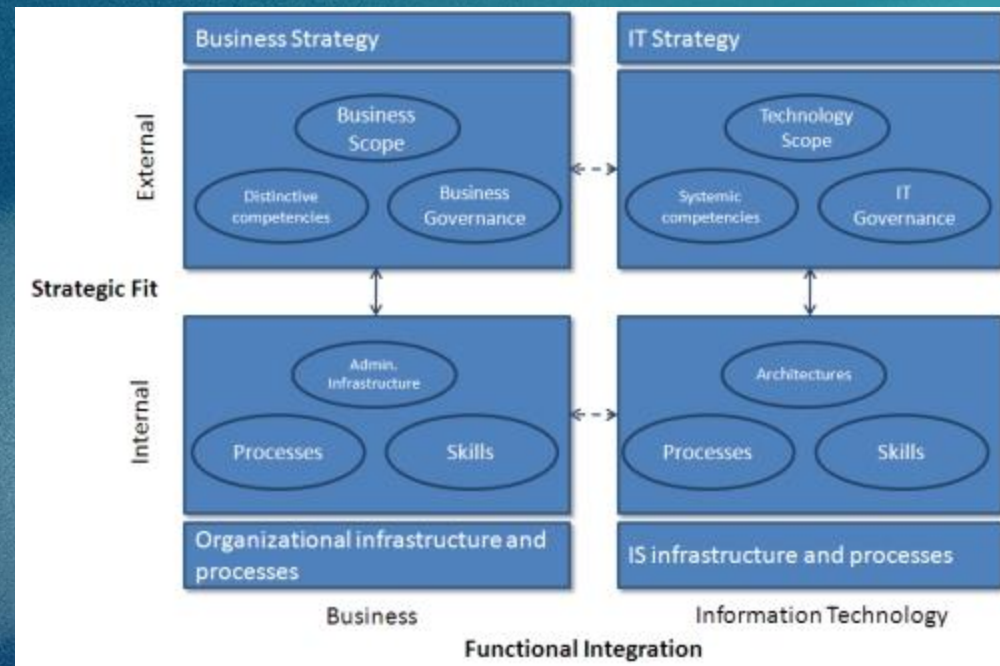
Strategic Alignment Model by Henderson and Venkatraman (1993).

The Strategic Alignment Model (SAM)

Henderson and Venkatraman (1993)

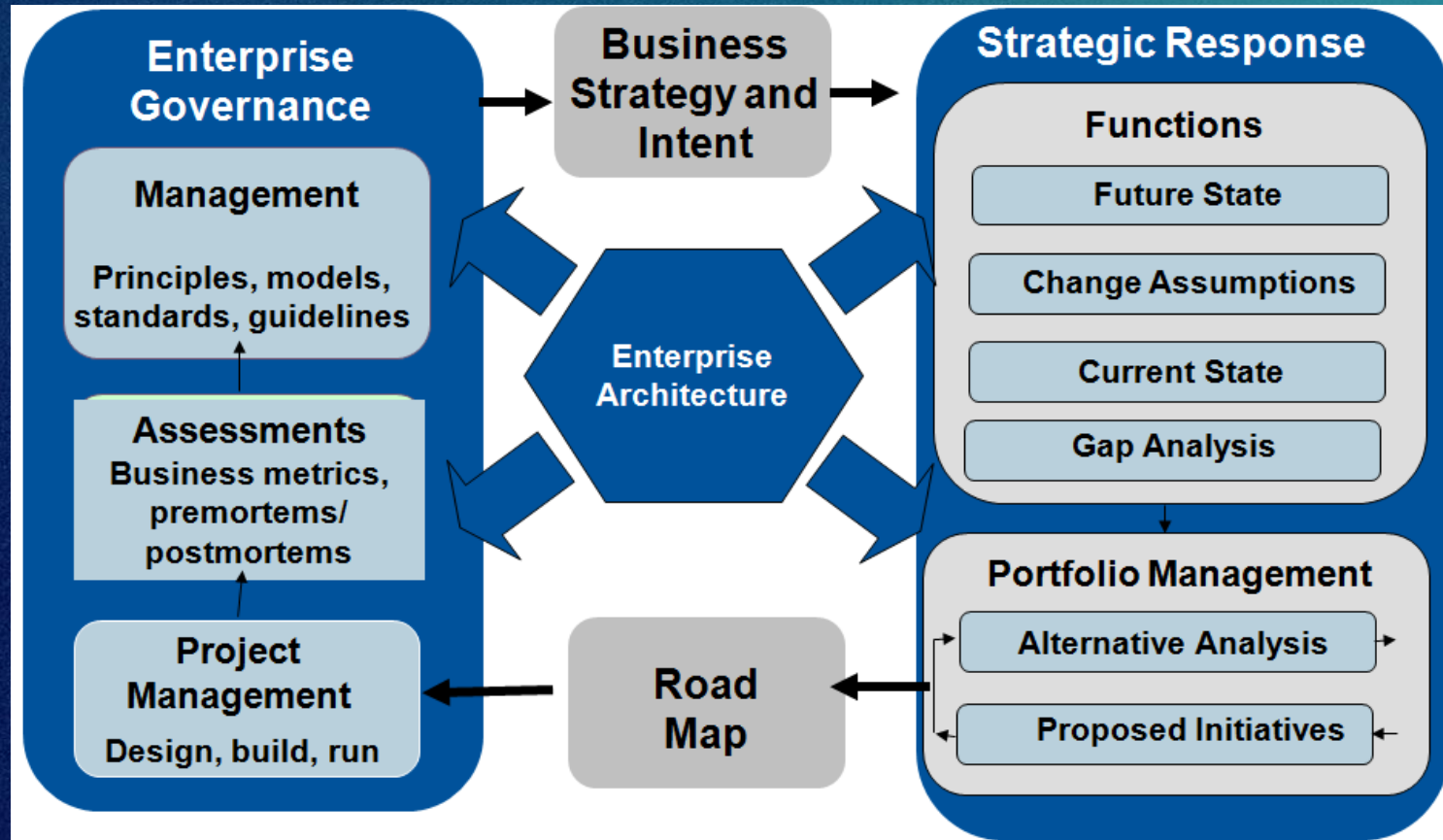


Alignment

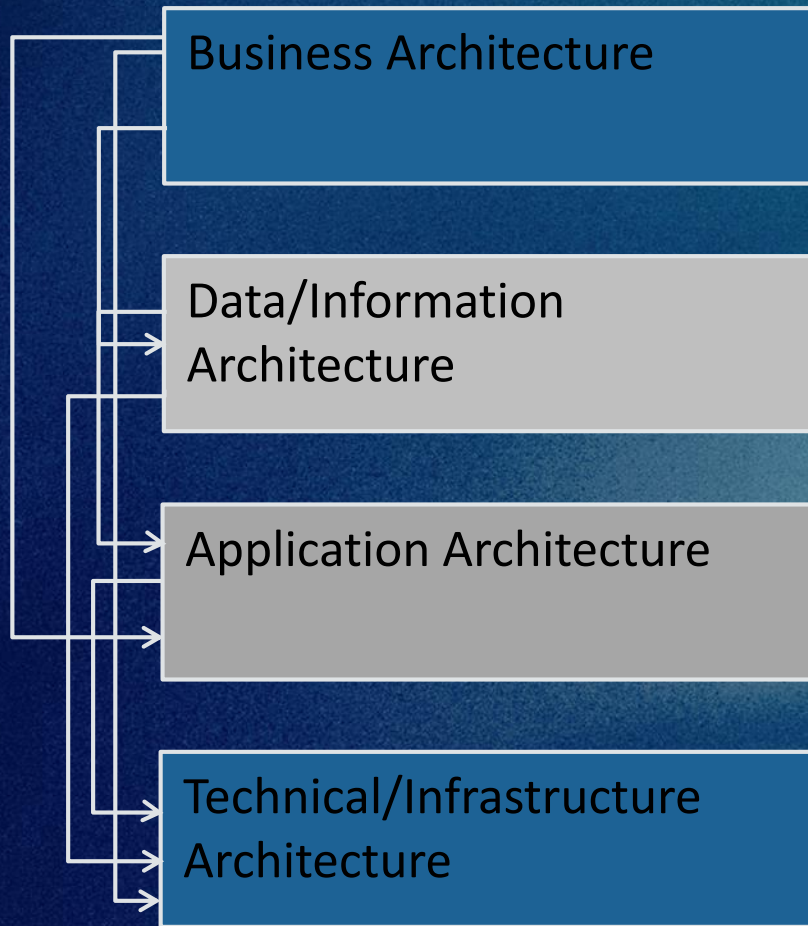


The inability to realize value from IT investments is due to the lack of alignment between business and IT strategies of organizations.

EA Can Be the Linchpin to Bridge the Strategy to Execution



A Traditional View of Enterprise Architecture Domains



- Business goals and objectives
- Business systems, organization units, functions, processes, events
- Business domains, business entities, data elements, relationships
- Data requirements
- Application portfolios, subsystems
- Interfaces, integration
- Hardware and software platforms
- Network and communications infrastructure



Define Architecture
Process & Approach

**Business
Strategy**

Current State

Future State



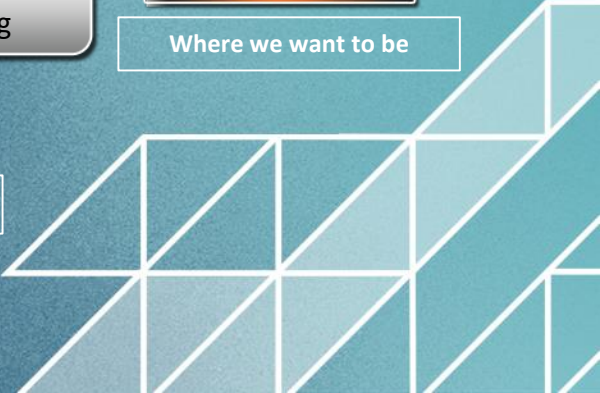
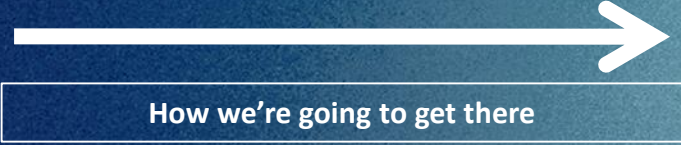
- Business Architecture
- Data/Information Architecture
- Application Architecture
- Technical/Infrastructure Architecture

Obtain & Maintain Buy In & Support	Governance	Project Management
Change Management	Risk Management	Understanding of Organizations
Enterprise Analysis	Enterprise Modeling	Enterprise Information Technology Acumen
Communications Strategy	Value Measurement & Management	Leadership & Decision Making
Enterprise Integration	Portfolio Management	Migration / Implementation Planning

- Business Architecture
- Data/Information Architecture
- Application Architecture
- Technical/Infrastructure Architecture

Where we are

Where we want to be



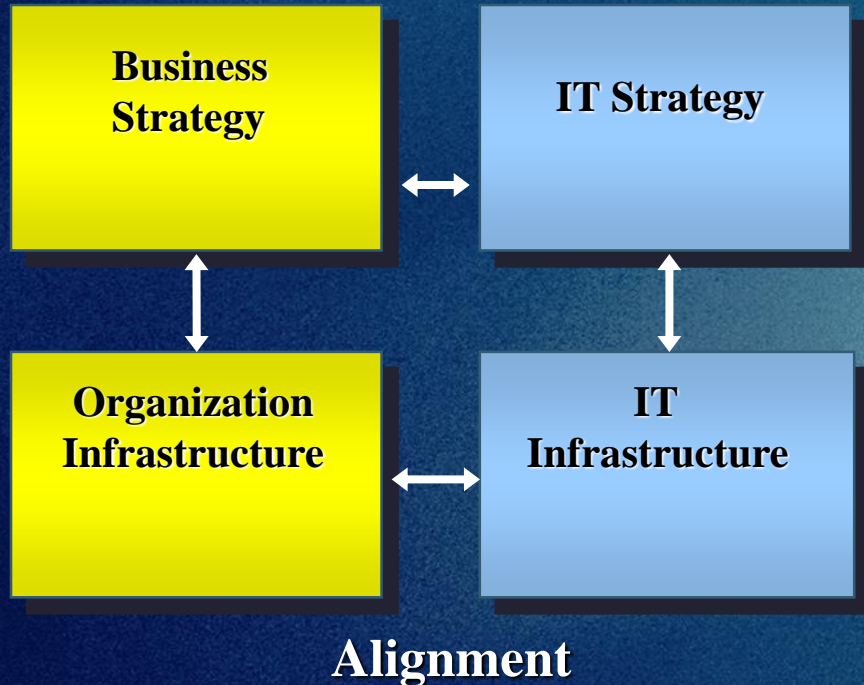
Alignment

- Does alignment lie with strategy? There is, hopefully, a business strategy. It might be to double the focus on core markets, or expand into new product areas, buy up smaller widget makers, or just improve customer service. The business vision translates into a strategy¹ (the plan) to achieve it, and eventually all the way down to a daily mission for staff to get behind.
- If the business strategy is clear enough, it will help decide between two competing projects. Given Option A and Option B to assess, it should be possible to refer to the business strategy and say “People, we must go with Option B, because it better supports our XYZ strategy.”

¹<http://www.julianbrowne.com/article/viewer/pragmatic-strategy>



Alignment with Strategy



- The IT strategy, and all it entails, has to align to the Business Strategy. Doesn't it? Or else why have one?
- It's hard to write a strategy that dictates the direction of things that are expensive and hard to change, like tools, platforms, applications, and architecture, based on the business telling IT "next year we're going to leverage key-learnings in our core competencies and maximize customer value by augmenting synergy in the value chain." An IT Strategy is a seriously weighty thing to put together.



Other factors that make direct business strategy/IT alignment very difficult

- In most industries, strategy is not static and is tweaked as conditions on the ground change – no plan survives contact with the enemy.
- Furthermore, Porter and others estimate that less than five percent of people in a given organization have a good understanding of the business strategy.
- How can we directly align IT with something that is changing and that a very low percentage of people fully understand?

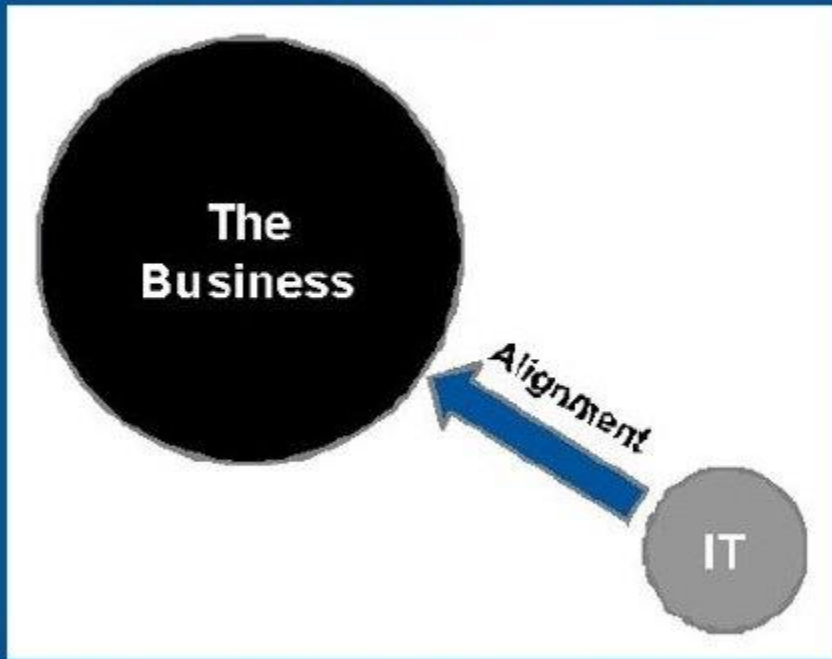


So what's the frame of reference for the IT strategy, if it's not the business strategy?



IT is an Integral Part of the Business

The IT "Alignment" Worldview



A Better Worldview



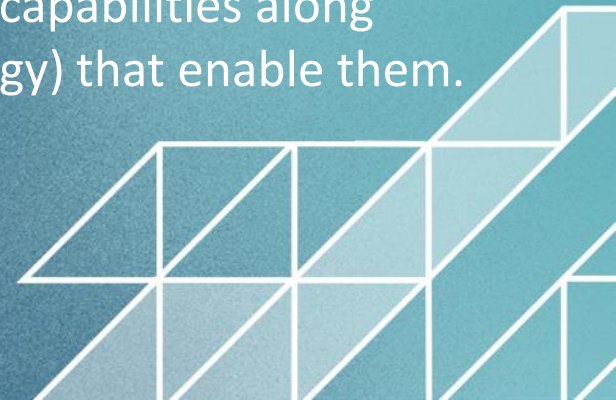
IT Strategy

- The job of the IT Strategy isn't to *align* to the business strategy. It's to give the business people who create it as many options to change tack as possible. It's a provider of IT *capability in support of strategic business capabilities*.
- Supporting/enabling business capabilities equals competitive advantage when the business strategy is a good one. IT alone cannot save any business but, if it makes those reactive changes just a bit easier and quicker to do, it can have a serious impact on the competitive advantage of the organization.

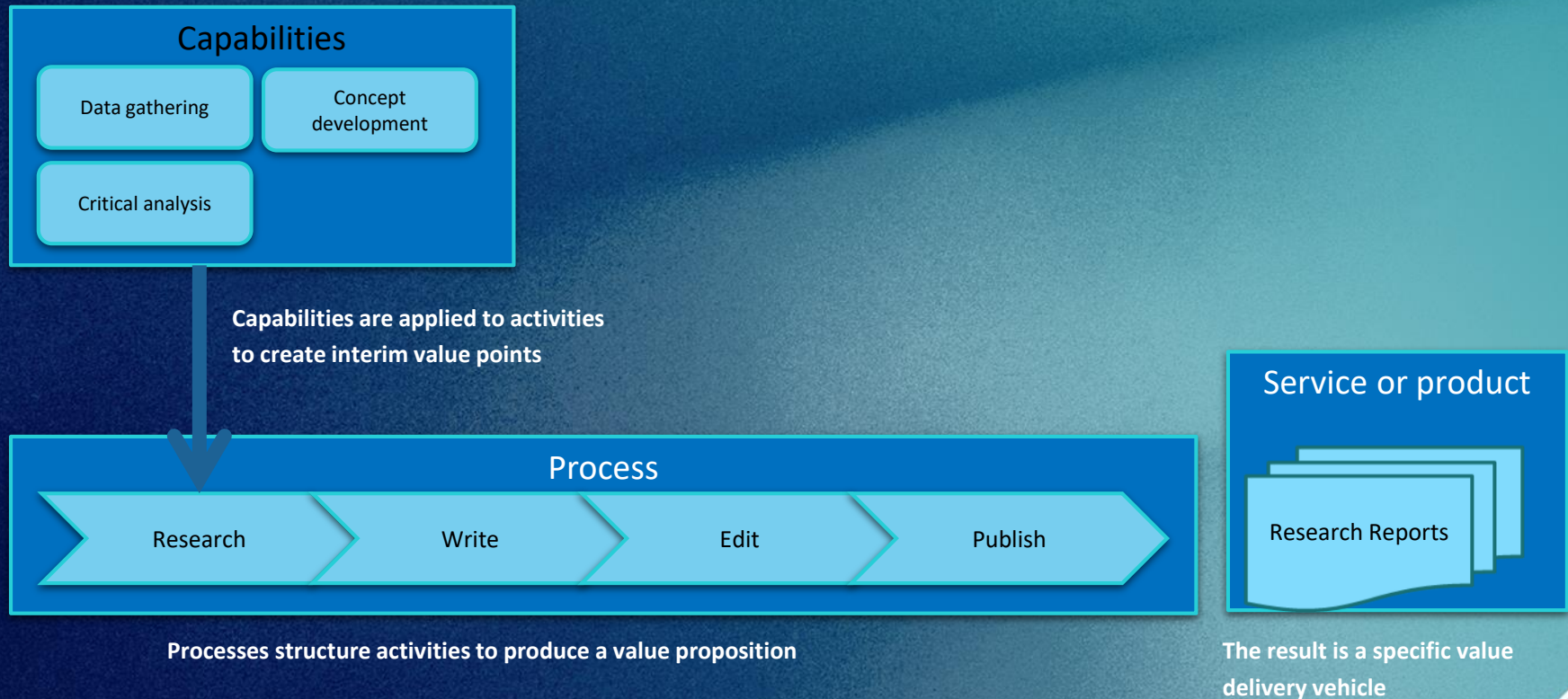


Defining “Capability”

- A **business capability** defines the organization’s capacity to successfully perform a unique business activity. Capabilities:
 - Are the building blocks of the business
 - Represent stable business functions
 - Are unique and independent from each other
 - Are abstracted from the organizational model
 - Capture the business’ interests
- A **business capability map** is:
 - A conceptual model of all of the organization’s capabilities along with the details (people, process, and technology) that enable them.

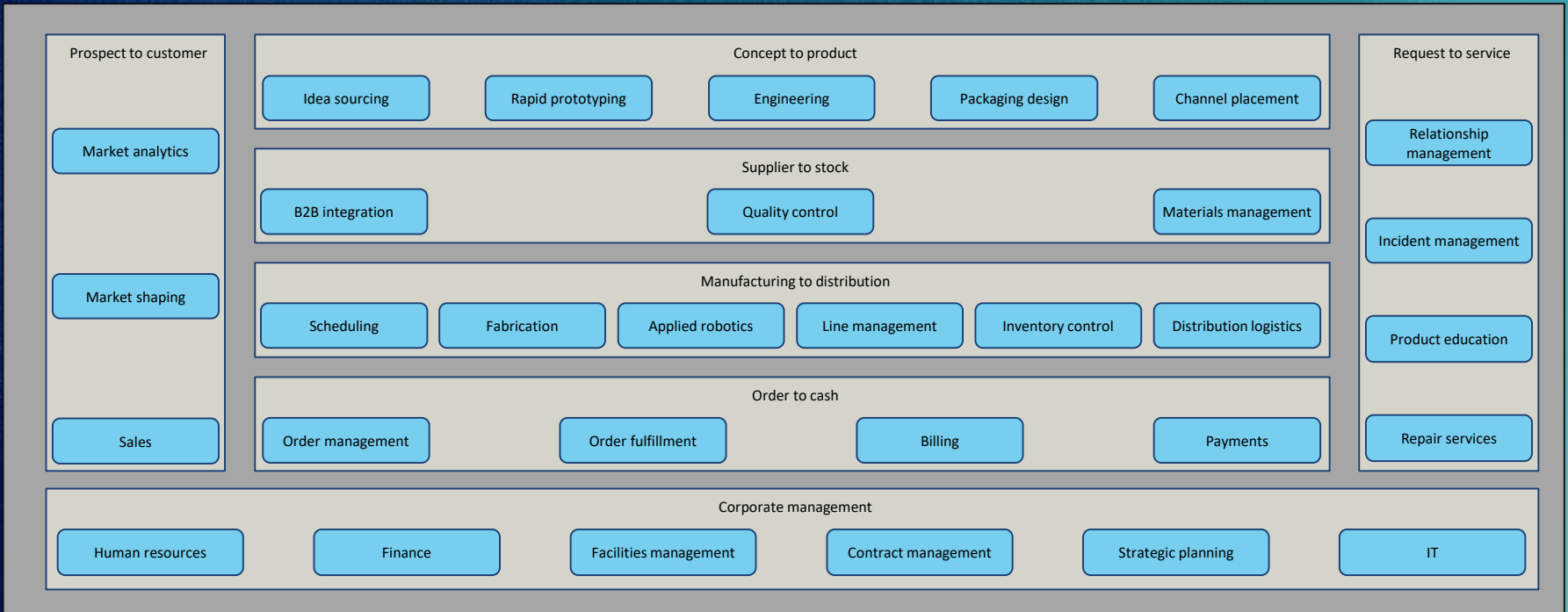


Defining "Capability"



Identify The Organization's Capability Map

Capability Map



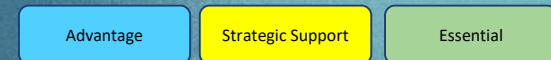
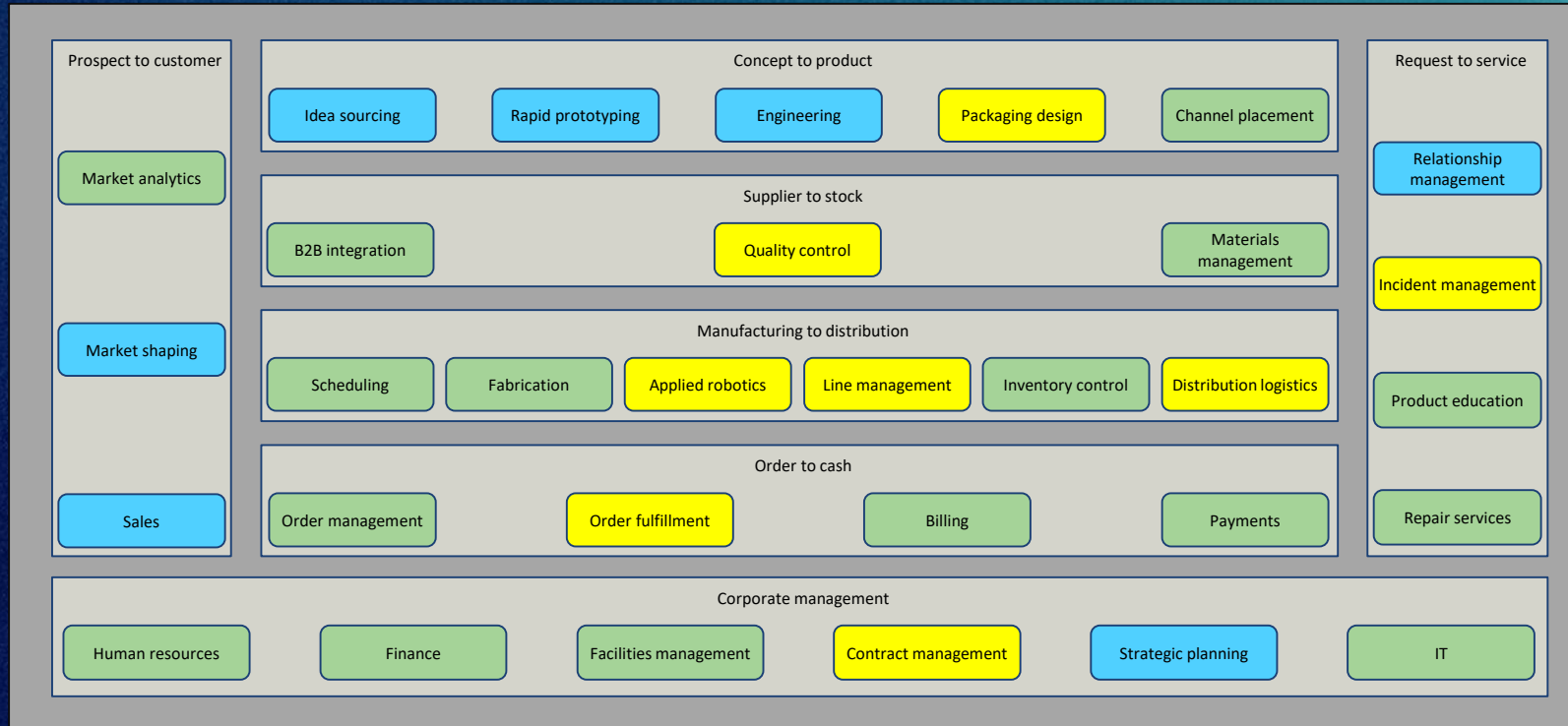
Capability Assessment

- **Advantage** capabilities directly contribute to the customer value proposition and have a high impact on company financials. Keep them inside and protect the intellectual property. (Transform the business).
- **Strategic Support** capabilities have high contribution in direct support of Advantage capabilities. Keep them close. (Grow the business)
- **Essential** capabilities may not be visible to the customer but contribute to company's business focus and have a big impact on the bottom line. Focus on efficiency improvement; especially in high volume work. (Run the business)

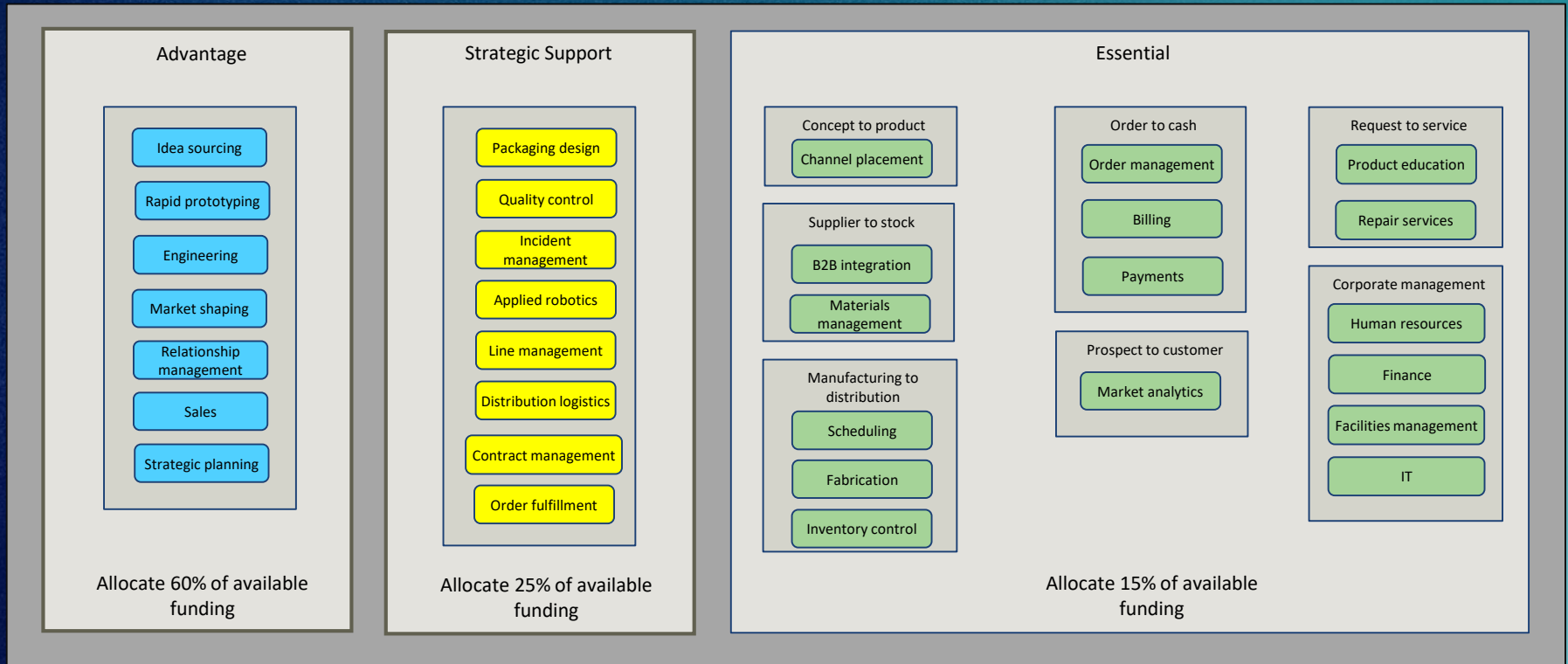


Identify Capabilities That Provide Market Differentiation

Capability Map



Create Investment Pools and Prioritize Funding



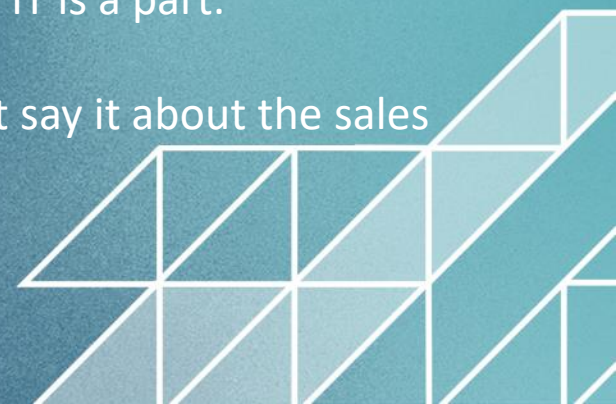
IT Strategy

- It's easier to sell this type of strategy back to the business. Your capabilities (and understanding of key business capabilities) can stimulate their ideas. Suddenly IT looks like a platform for opportunity and not just cost. Rather than conversations being about how hard it is to do what they want, the door is open to do what they didn't know they could have...
- This is difficult to do where IT is merely aligned with business. In the world of alignment, the customer is the business, and the business is always right. This mindset doesn't allow the CIO and IT to influence business strategy and help determine which projects have the most business value.



Stop Talking About IT-Business Alignment and Start Talking About Business Performance

- Focusing on “IT alignment” distracts the IT organization from the real work of understanding and promoting the goals and objectives that matter to the rest of the enterprise.
- Using language that focuses on “IT alignment with the business” and/or “IT and the business” is damaging, because such language implies that IT stands apart from “the business,” rather than being an integral part of it.
- IT’s conversations throughout the enterprise must reflect a focus on business outcomes and business performance.
- Stop thinking and talking about “the business” as something to which you need to align and start thinking about it as something of which IT is a part.
- Use the “head of sales” rule. If the head of sales wouldn’t say it about the sales function, then don’t say it about IT.



IT Strategy

- The next step on the journey is to move from an alignment perspective to an engagement and business value perspective — treating the rest of the business as partners and creating business value together.
- Value measurement, team composition/skills, communications, and governance need to be aligned to support this business value perspective.

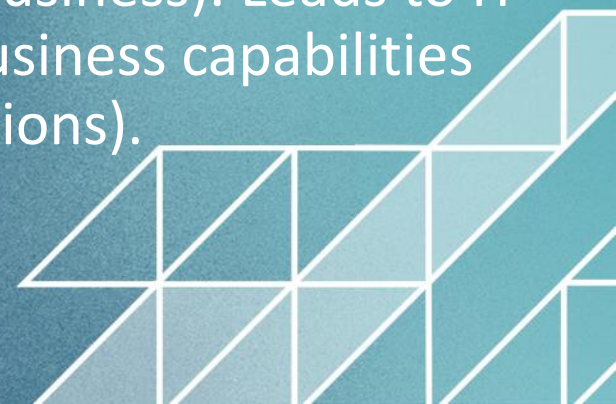


Changes in Thinking at All Levels Required

Example: IT Budgeting Process

Old Thinking: Most of IT budget (maybe 100%) spent on sustaining the business. Leads to CEO saying “We’re spending all that money and getting nothing of value.” Utility mindset.

New Thinking: Develop a portfolio approach where budget is allocated between different types of investments (e.g., run the business, grow the business, transform the business). Leads to IT becoming viewed as a strategic enabler of business capabilities and value (and also often increased expectations).



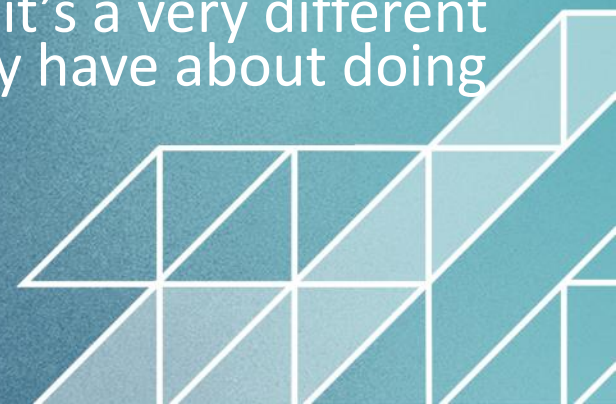
Changes in Communication at All Levels Required

Example: Value Communication

Old Thinking: Communicate network use, applications supported, projects completed on time, headcount, etc. (How we're spending money & containing costs.)

New Thinking: Discuss contribution to sales and how IT has contributed to drive revenue. (How we're contributing to making money.)

When you focus on metrics that define value, it's a very different conversation than the one you would normally have about doing things faster and cheaper

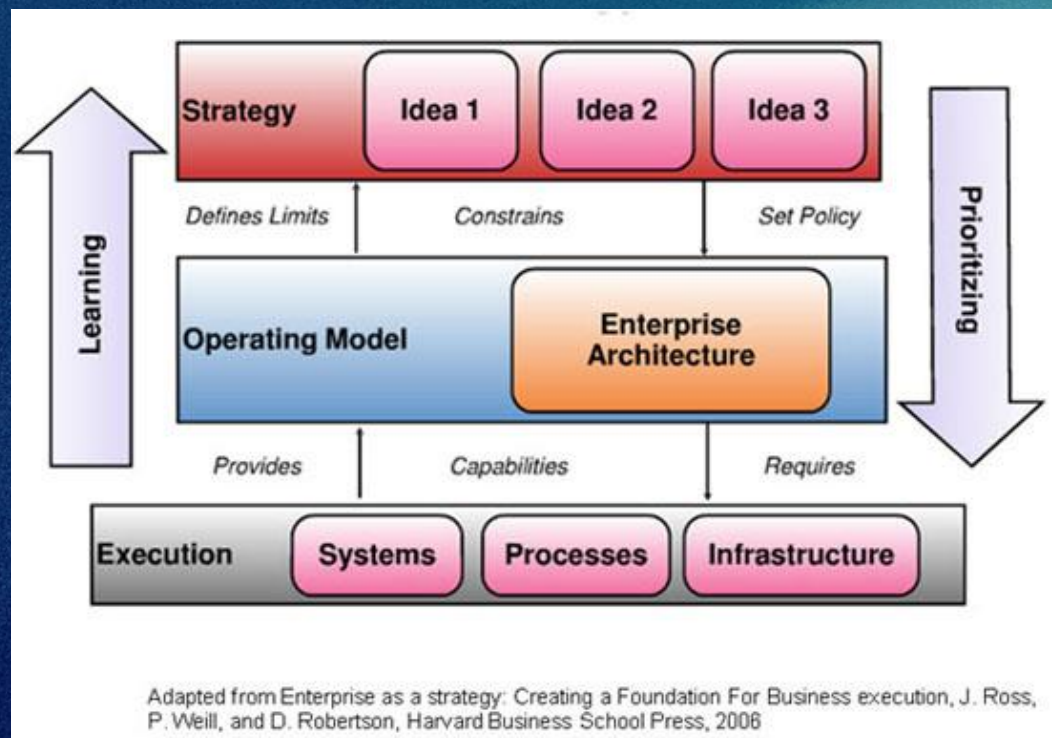


The Role of Business Architecture

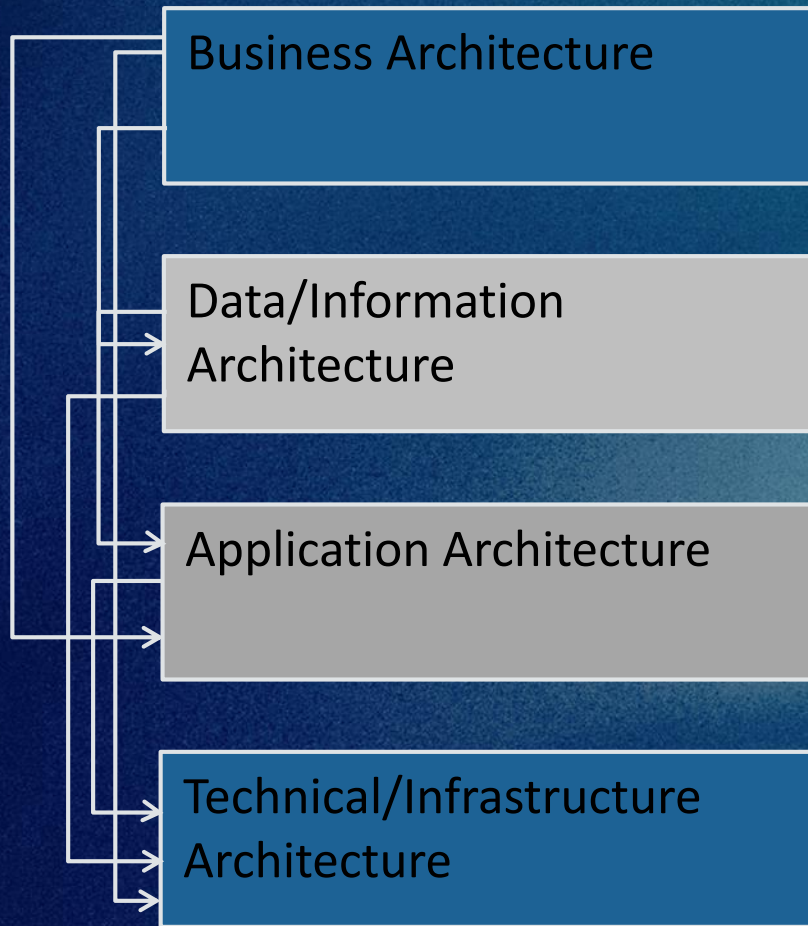


The Need for Effective Enterprise Architecture

Effective Enterprise Architecture is the key to enable the enterprise to address orders of magnitude increases in complexity and orders of magnitude increases in the rate of change.



A Traditional (and Dated?) View of Enterprise Architecture Domains



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What is Business Architecture?

At a very high level, the process of doing business architecture includes:

- Understanding your organization's business and operating model.
- Understanding your organization's actionable business strategy and target outcomes.
- Understanding the market trends impacting your business and the business strategy.
- Identifying the business capabilities that are required to support the business as well as the impact on technology, people, processes and information.
- Creating deliverables that can be used to drive business case analysis, investments, etc.

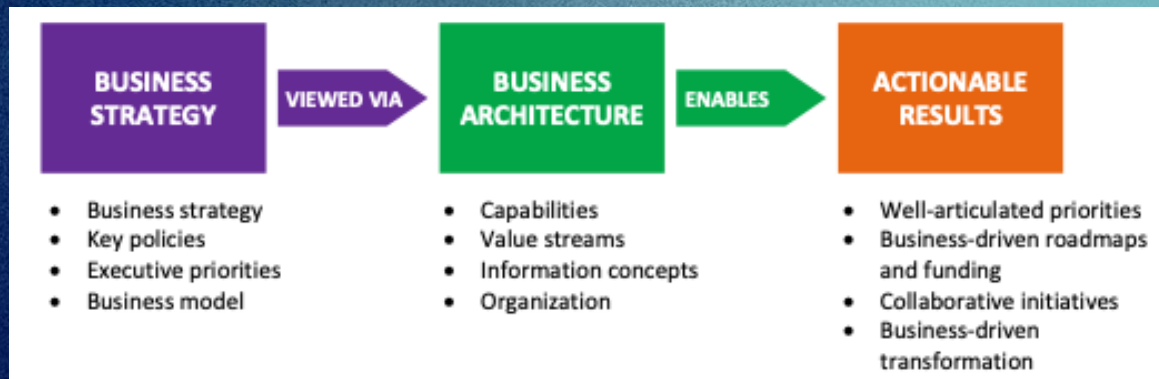
Business Architecture aims to consolidate and maintain a conceptual, multidimensional view of an organization in order to better define the target state of the firm and facilitate strategy execution.



Strategic Business Architecture

4 Dimensions of Business Architecture:

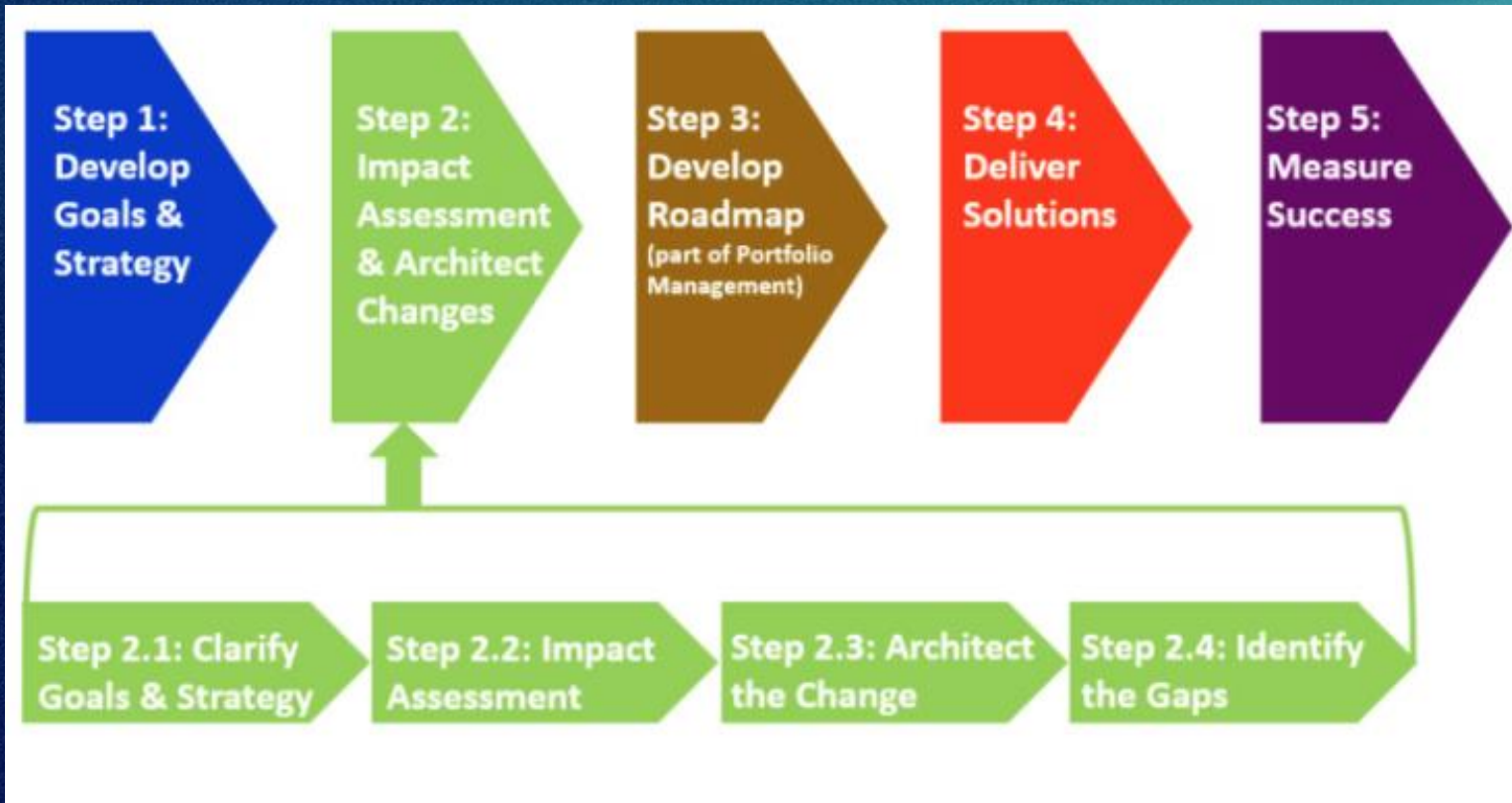
1. **Capability** – an ability or capacity that business may possess or exchange to achieve a specific purpose or outcome (what, not how)
2. **Value Streams** – the importance, worth, usefulness as perceived by the key stakeholders of that organization; for example, customers (outside-in value streams)
3. **Information concepts** – abstract level of data, owned and defined by the business, that is absent of technical or data management constraints (information concepts) and linked to business capability
4. **Organizational structure** – map of business units and their relationship to capabilities, to establish clarity about which business unit has which abilities (connect capabilities to business unit structure)



A Business Capabilities Portfolio is the Cornerstone of an Effective BA Practice



From Strategy to Execution

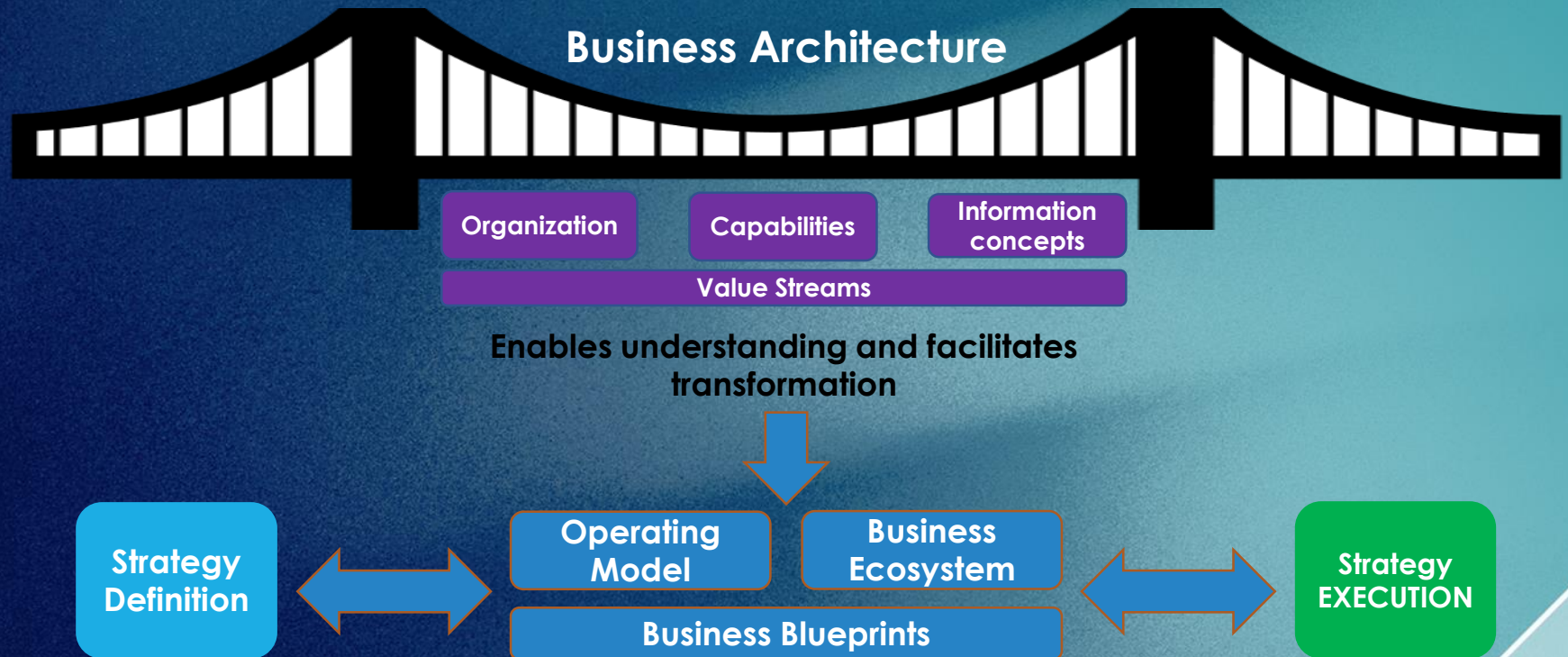


Leading Companies Leverage Business Architecture to Integrate Business and IT Strategies & Execution

- To succeed with business-outcome-driven enterprise architecture in organizations with an ill-defined, fragmented or disconnected business strategy, BA practitioners must first help business and IT leaders rationalize, articulate, and communicate their business strategies.
- Business architects achieve greater business impact faster when they engage with business leaders (including strategic planning) as early in the planning life cycle as possible.
- Leading business architects leverage a variety and a combination of techniques, tools, and practices to develop diagnostic and actionable deliverables that address their critical business and IT leadership questions.
- It is critical to support business architecture as either part of, or tightly connected with, the overall EA/BA efforts to integrate business planning with changes to processes, information, solutions, and technology.
- Leading organizations leverage business architecture not only to articulate and detail their business strategy, but also to create guidance that drives business and IT execution toward that future-state vision.
- Business architects can succeed only if they support business architecture in conjunction, and collaboration, with other business and IT disciplines, including business process management (BPM), strategy planning, application architecture and portfolio management.



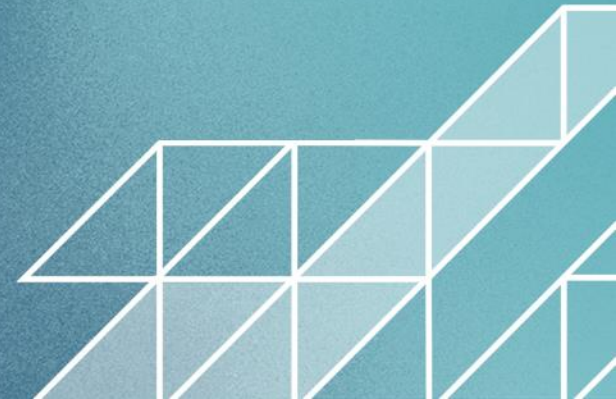
Strategic Role of Business Architecture: The Bridge Between Strategy and Execution



Portfolio Management Integration



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Managing IT Products and Services as an Investment

- An IT portfolio is....
 - A set of managed IT assets
 - allocated to investment strategies
 - according to an optimal mix
 - based on assumptions about future performance
 - to maximize value/risk tradeoffs
 - in optimizing the organization's return on IT investment.

*Portfolio management elevates discussions
between IT and
line of business leaders*

Business and IT Portfolio



Difference Between Projects, Programs and Portfolios

- Project is managed with clear end date in mind, according to set scope and budget
- Program is a collection of two or more projects sharing a common goal
- Portfolio is a group of related initiatives, projects and/or programs that attain wide reaching benefits and impacts

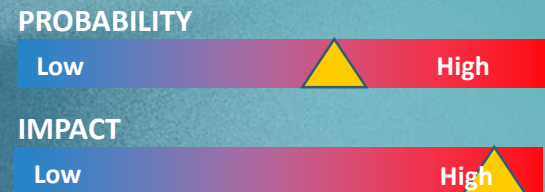
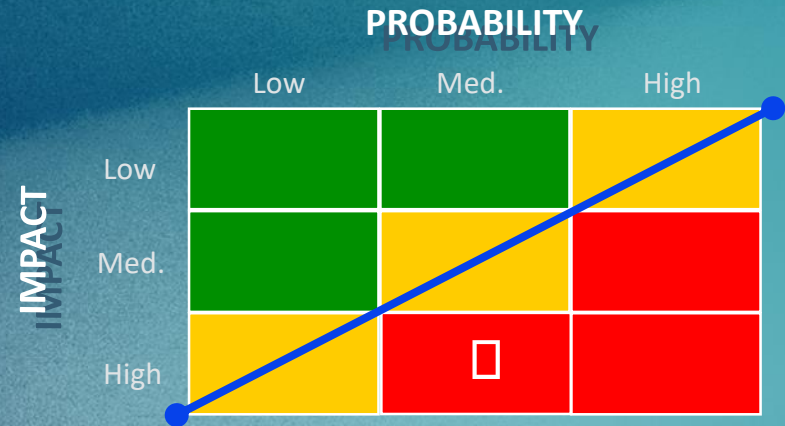


Risk and Value

The goal of IT portfolio management is to ensure that the highest business value is achieved from the IT investment

IT portfolio management is an optimal way to categorize, capture, and communicate IT value in business language

- Value is achieved from the right balance of risk and reward
- Identify potential risks, determine likelihood of occurrence and severity of consequences

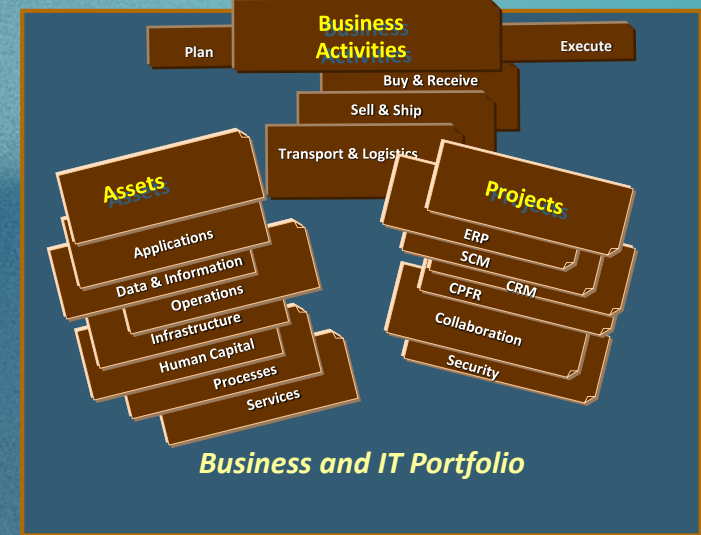


Creating and Defining Portfolios

- What is a portfolio?
- Creating portfolios
 - Overall portfolio
 - Running, growing, and transforming the business
- Business activities
- Assets
 - Liquid vs. illiquid
 - Expense vs. capital
 - Hard vs. soft
 - Goodwill
- Projects
- Capabilities

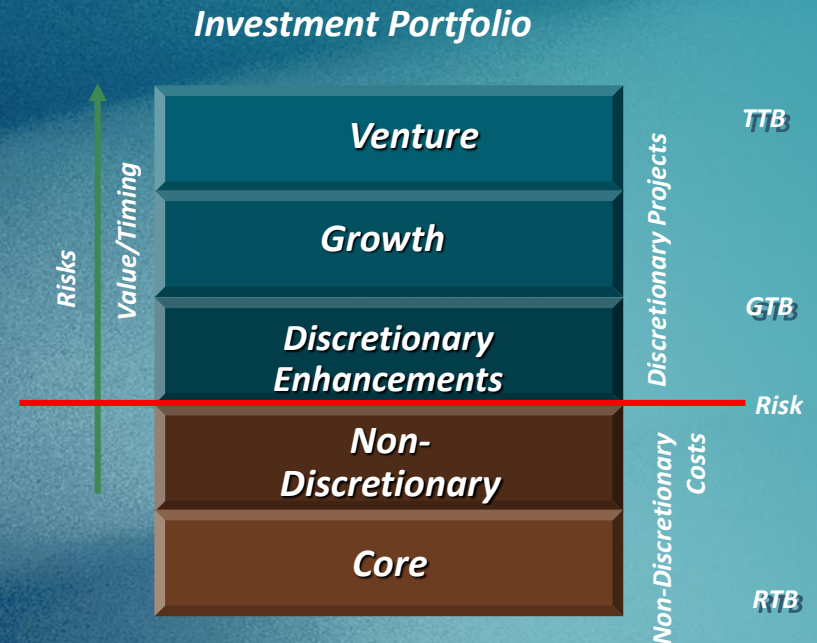
Representing a portfolio is the first step to managing it

Portfolio Example



Overall Business and IT Portfolio

- Run the business (RTB)
 - Core
 - Non-discretionary
- Grow the business (GTB)
 - Discretionary
 - Growth
- Transform the business (TTB)
 - Venture



Defines investment categories and levels of risk

Identifying Critical IT Portfolio Components and Attributes

- **Capability & Process Investments**

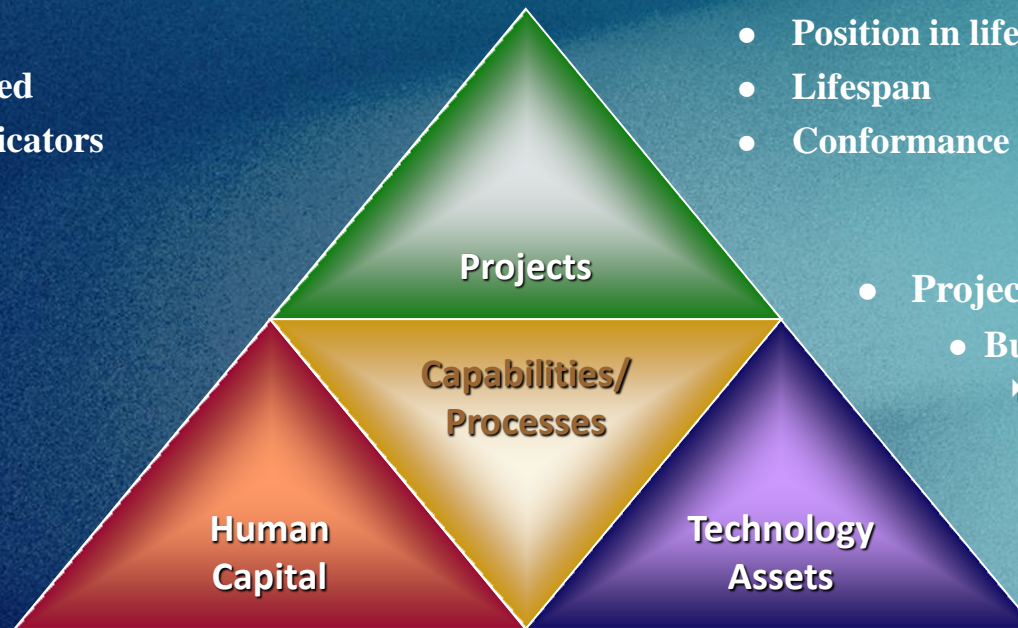
- Purpose
- Outcome
- Cycle time
- Resources involved
- Performance indicators

- **Technology Assets**

- Cost (on the books)
- Types/numbers/location
- Position in life cycle
- Lifespan
- Conformance to standards

- **Human Capital**

- Demographics
- Competencies
- Compensation
- Job class
- Skills



- **Project Investments**

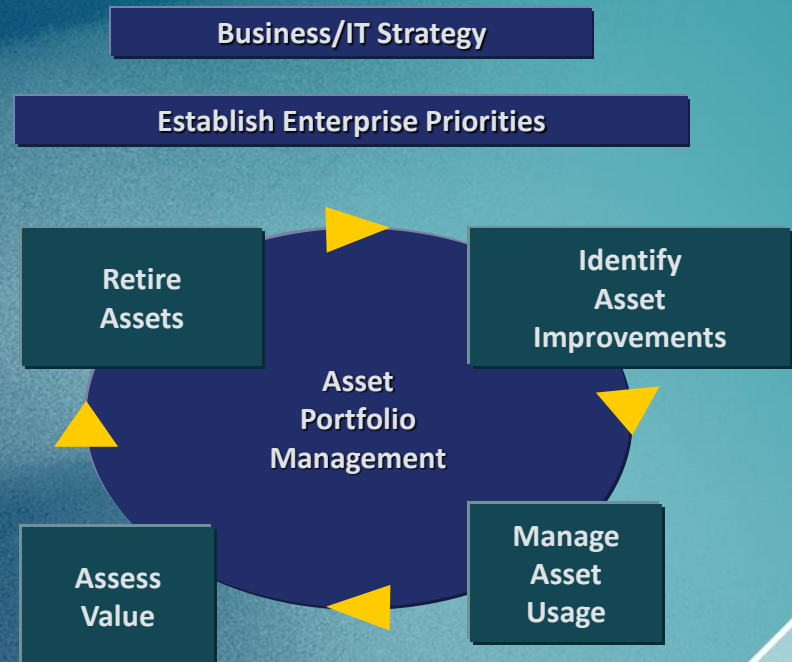
- Budget/schedule
 - ▶ Skills required
 - ▶ Supporting technology
 - ▶ Risk mitigation plans and contingencies



Asset Portfolio Management

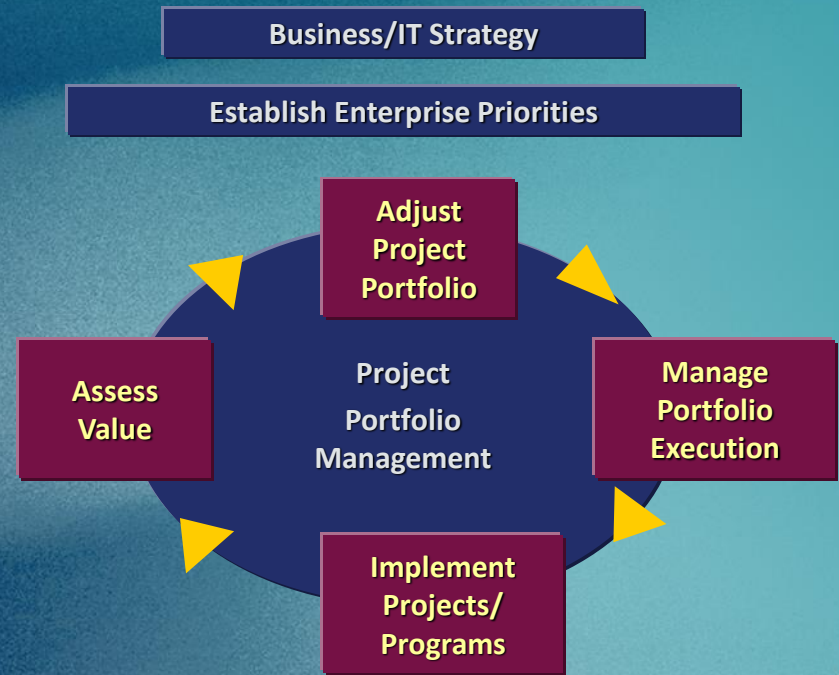
Sample asset portfolio: Desktop TCO example

- Determine desktop requirements based on business strategy and specific user needs
- Establish desktop priorities
- Identify desktop upgrades and new standard configurations
- Manage desktop service levels and support
- Determine desktop refresh cycle time
- Manage desktop retirement and refresh through lease terms or depreciation schedules



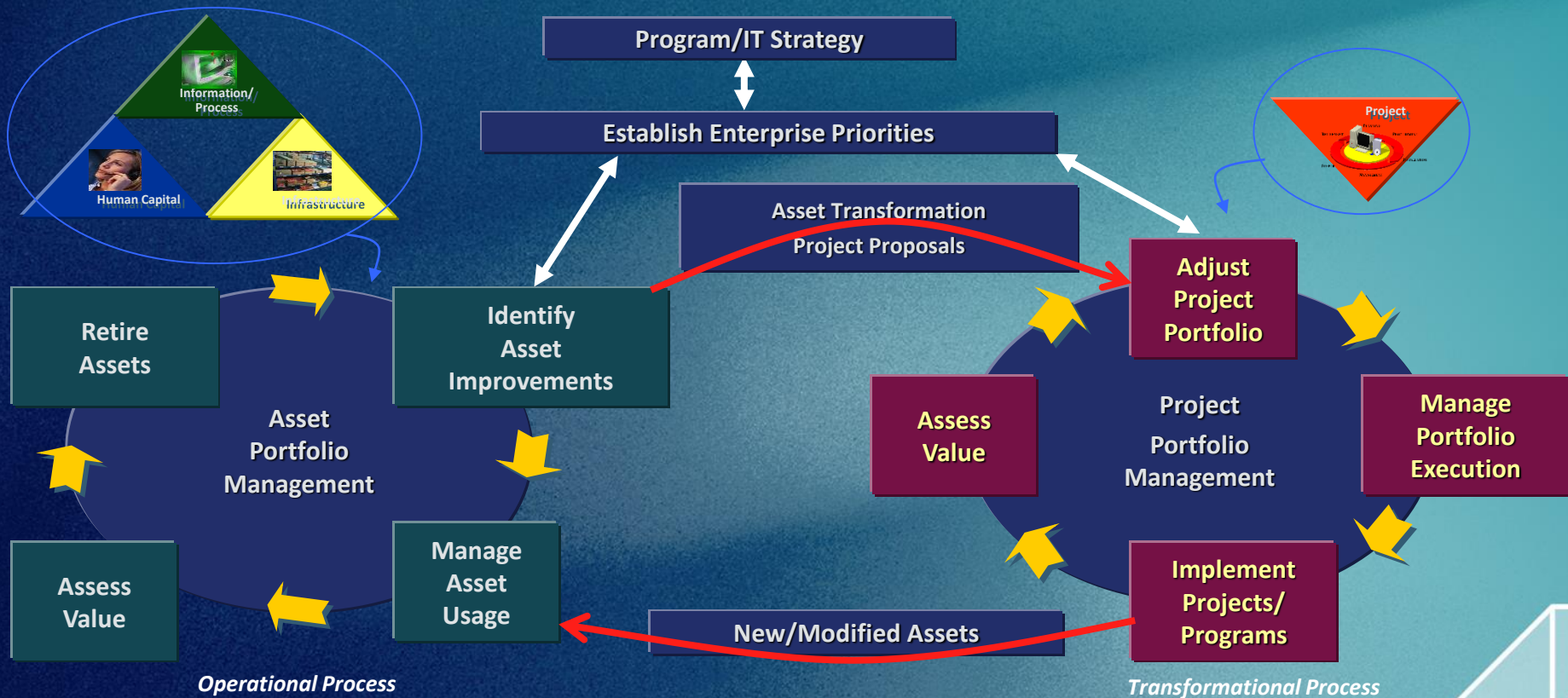
Project Portfolio Management

- Map project value back to key business drivers
 - Current projects
 - Projects in the queue
- Reprioritize and redefine projects
 - Kick off
 - Accelerate
 - Curtail
 - Spin off
 - Merge
 - Kill



Managing projects as a portfolio is one of the first steps toward enterprise portfolio management

Portfolio Management Process



**The case is becoming clear for an
integration of EA/BA and Portfolio
Management.**



BA as a Facilitator of Innovation



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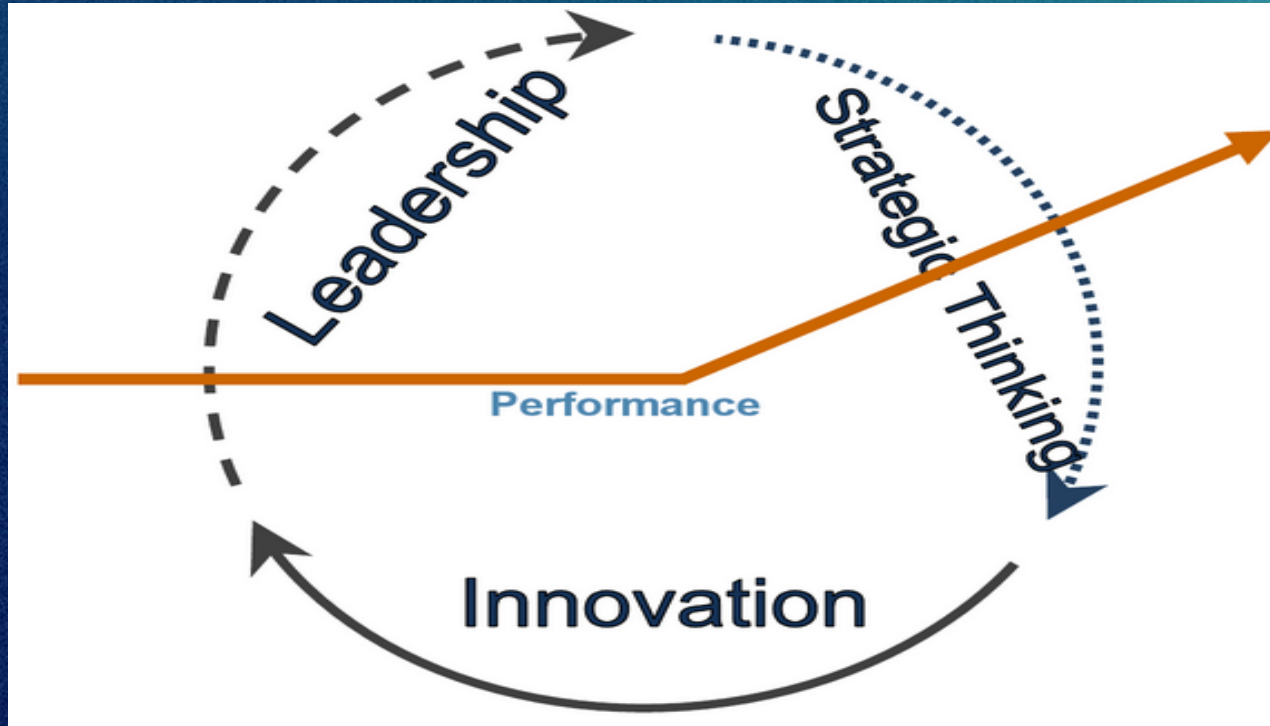
Innovation is driven by different thinking



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Innovation Accelerates Organizational Performance



IT has Significant Challenges in Innovation



Project managers



Problem obsessed



A utility paradigm

Managing Today

- Controlling
- Coping with complexity
- Planning and budgeting
- Organizing and staffing
- Controlling
- Reducing risk
- Teaching

Creating Tomorrow

- Influencing
- Coping with change
- Vision and strategy
- Aligning
- Direction
- Motivating and inspiring
- Managing risk
- Coaching



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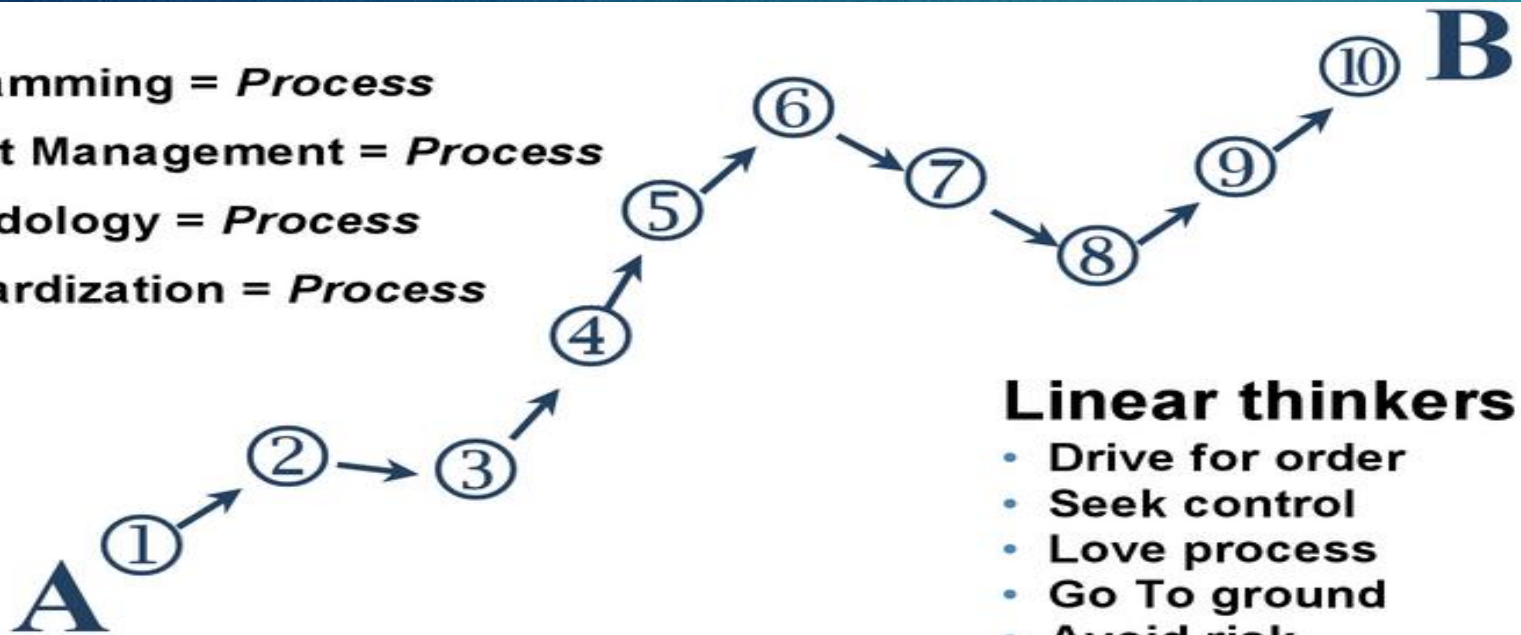
Our Thinking Patterns Are Linear

Programming = *Process*

Project Management = *Process*

Methodology = *Process*

Standardization = *Process*

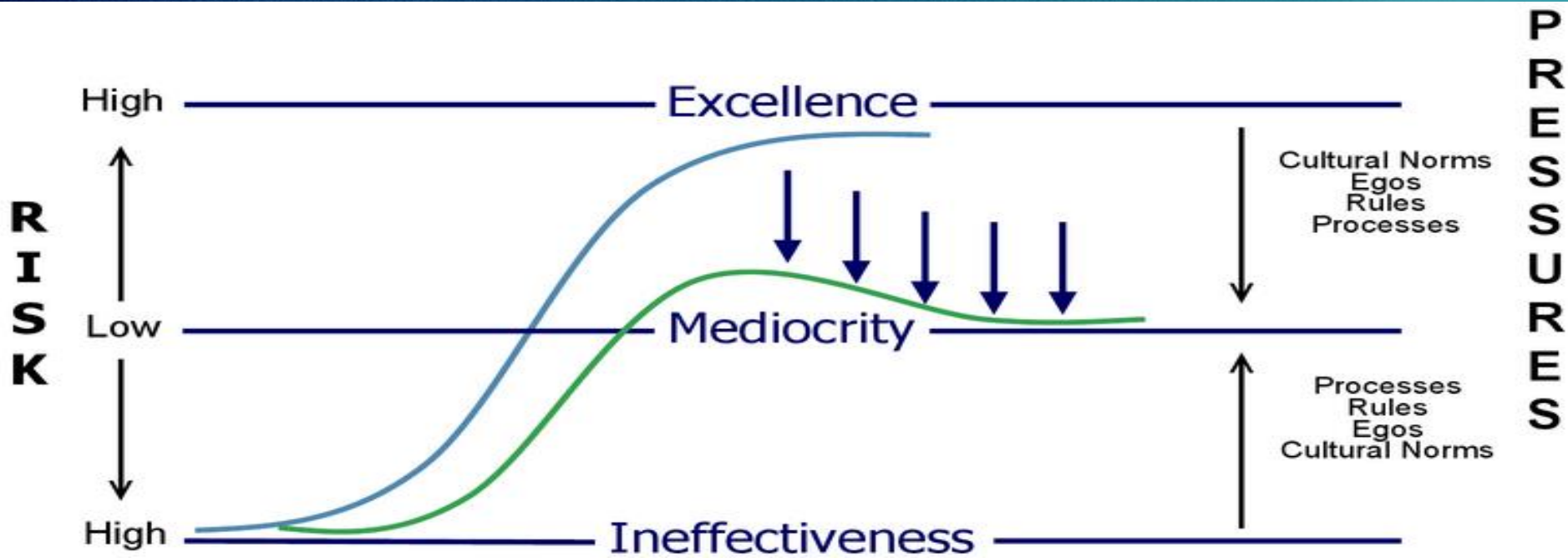


Linear thinkers...

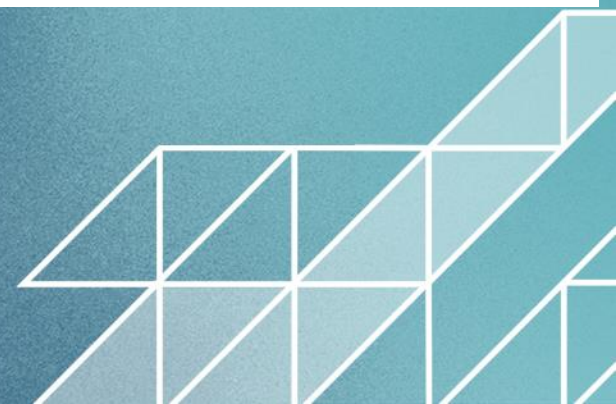
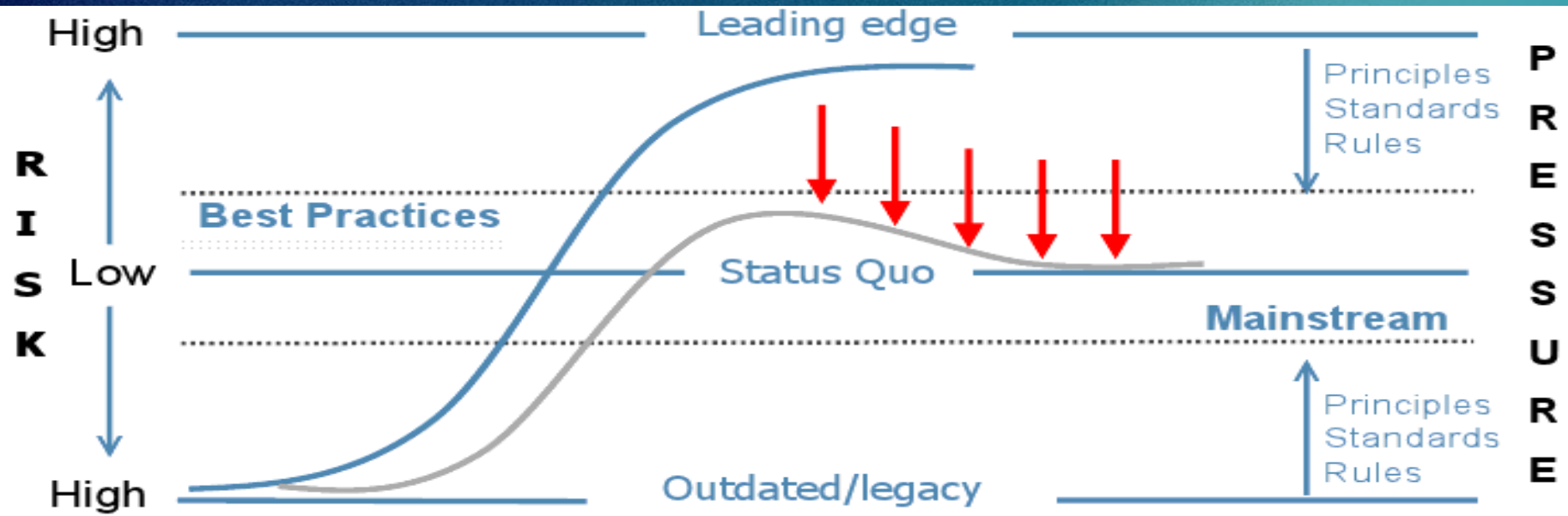
- Drive for order
- Seek control
- Love process
- Go To ground
- Avoid risk
- Resist change



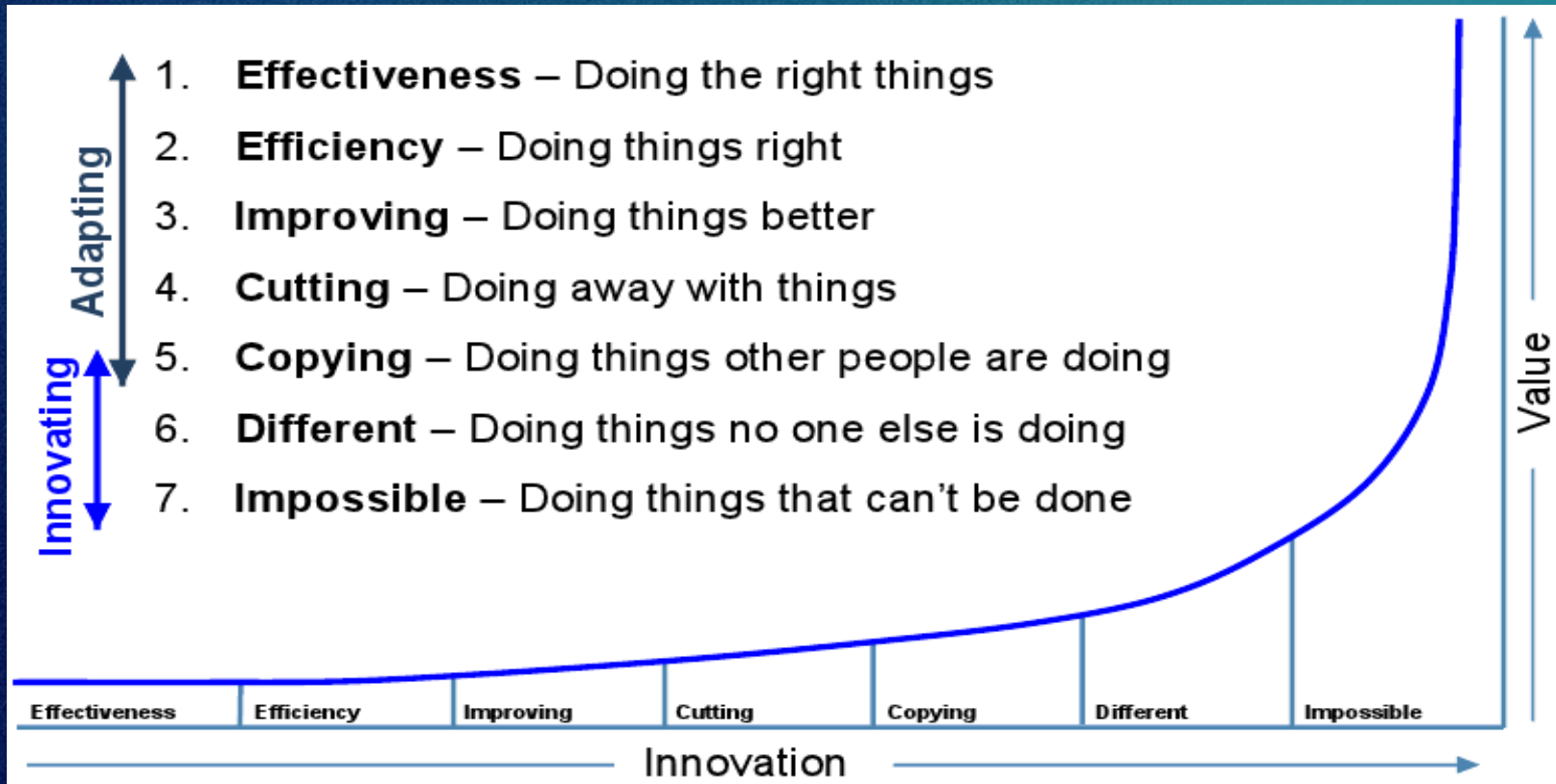
Organizations Resist Change



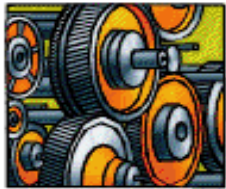
EA is Often Part of the Problem



Defining Real Innovation: The Seven Levels of Change



Innovation Is Not Just About Technology



Technology



Process



Management



**Business
model**



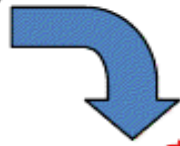
Organization



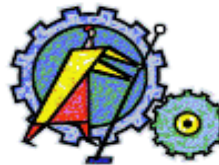
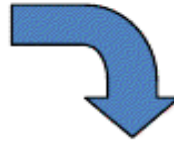
Innovative Thinking is Different Thinking



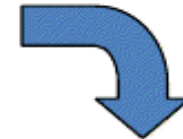
Thinking about thinking



Thinking different



Acting different



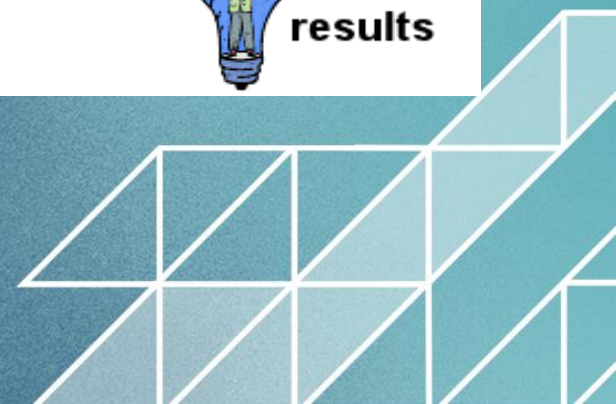
Different results

Current thinking

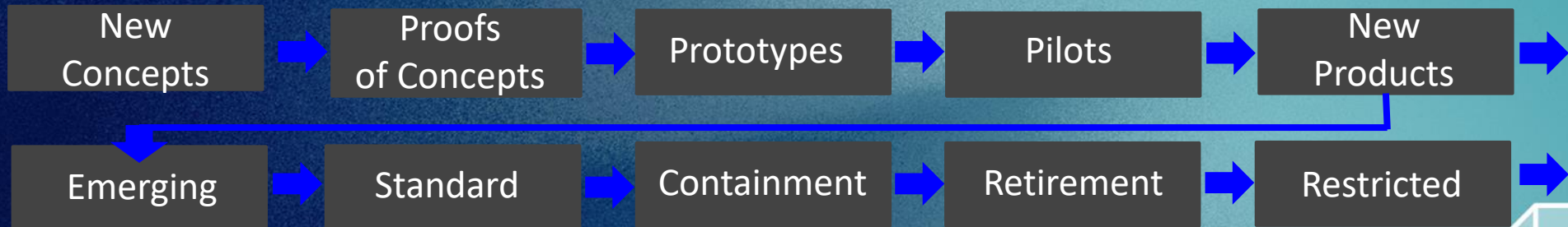
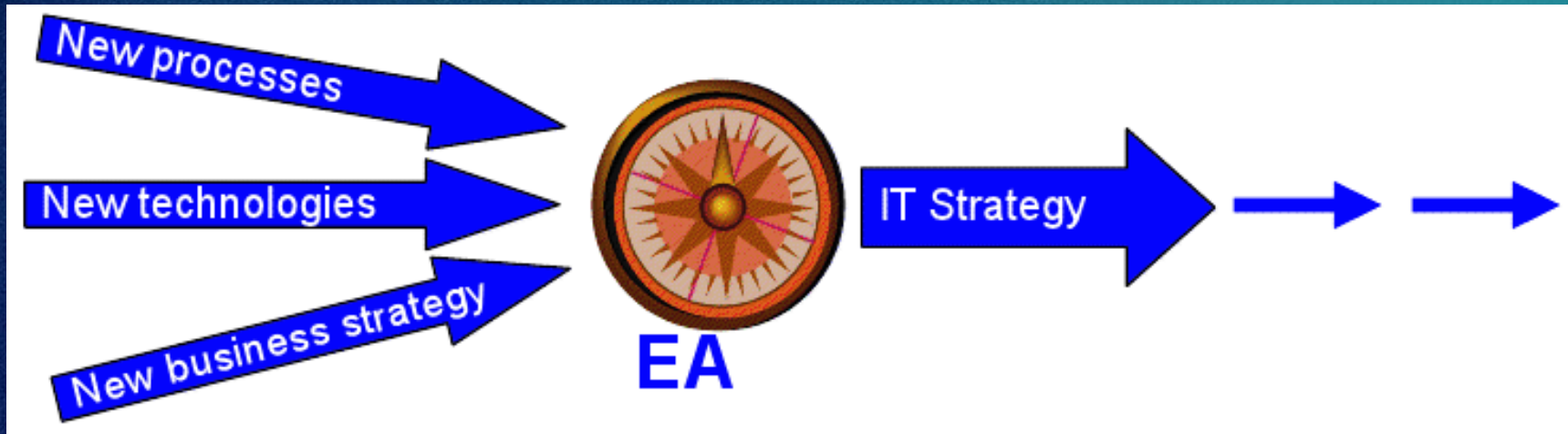
- Rigid paradigms
- Linear thinking
- Risk aversion
- Fear of failure

Thinking differently

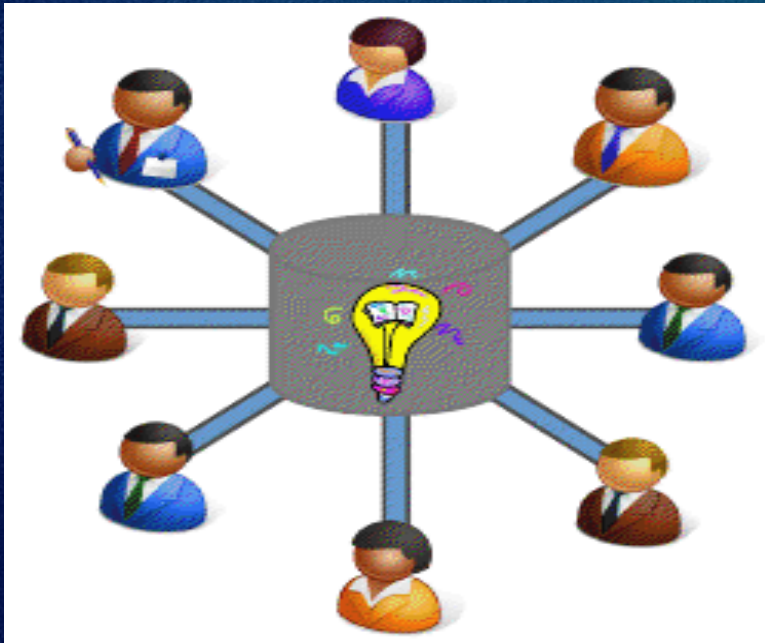
- Creative
- Strategic
- Systematic
- Reflective



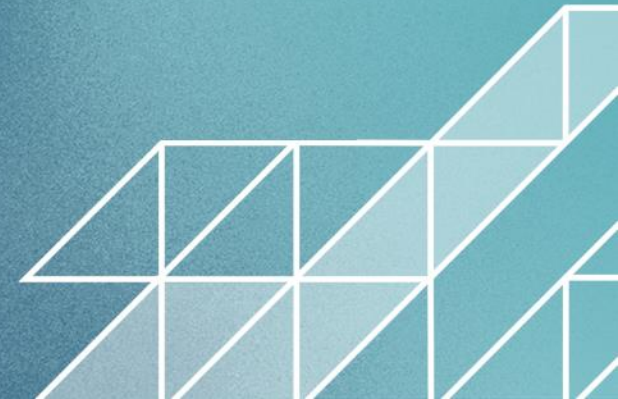
EA/BA Should be the Innovation/Strategy Nexus



Create A Marketplace For New Ideas



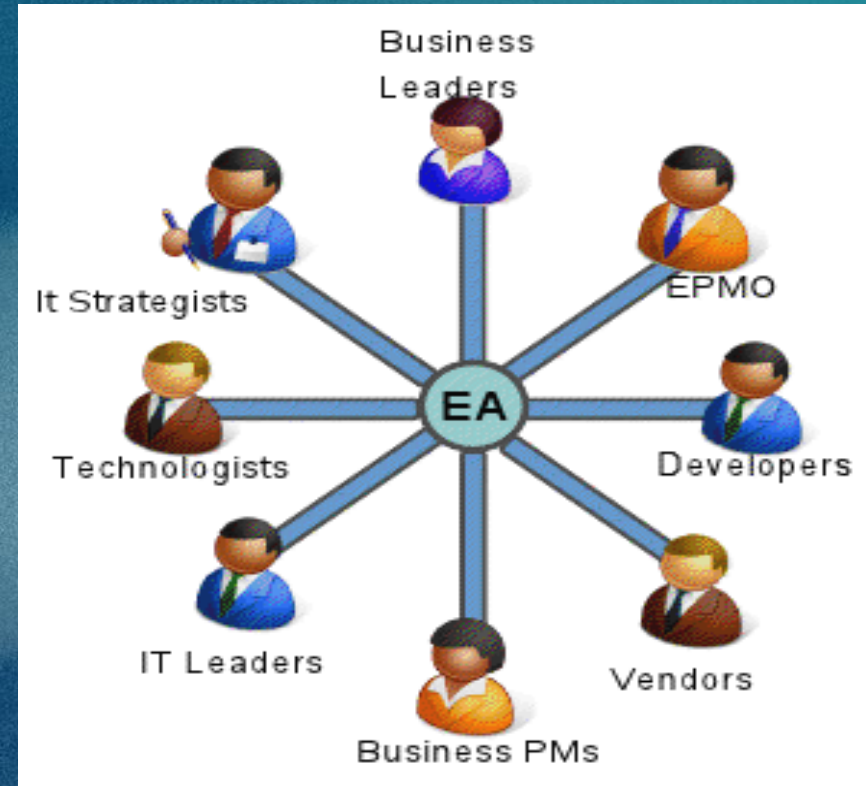
- » Build an idea clearinghouse
- » Capture ideas from everywhere
- » Find the synergies
- » Promote ideas for support
- » Review often



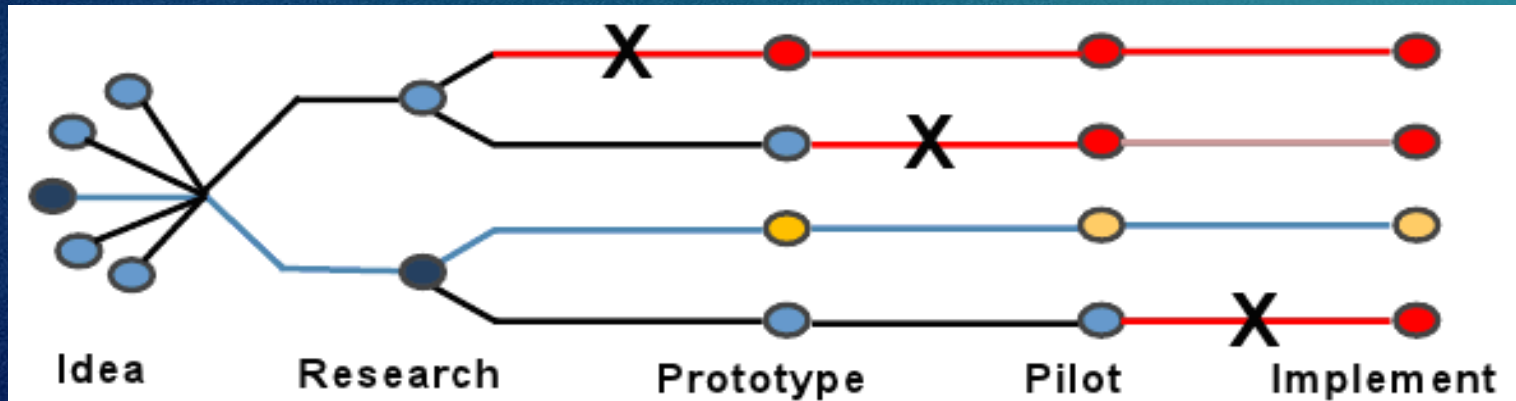
Help Others Get the Resources They Need

Architects:

- Are well connected
- Have identified critical SMEs
- Can identify strategic thinkers



Provide Opportunity/Risk Analysis



Opportunity analysis

- Value creation
- TCO
- Reuse
- Extension

Risk Analysis

- Operational
- Skill
- Industry change
- Organizational
- Vendor viability
- Vendor support

Value Measurement



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Moving from Alignment to Business Performance

This type of thinking goes *beyond traditional alignment*¹ exercises. You need to understand if there has been an impact on the business.

“The mind is everything. What you think you become.”
— Buddha

¹http://www.cio.com/article/596384/What_CEOs_Expect_from_CIOs

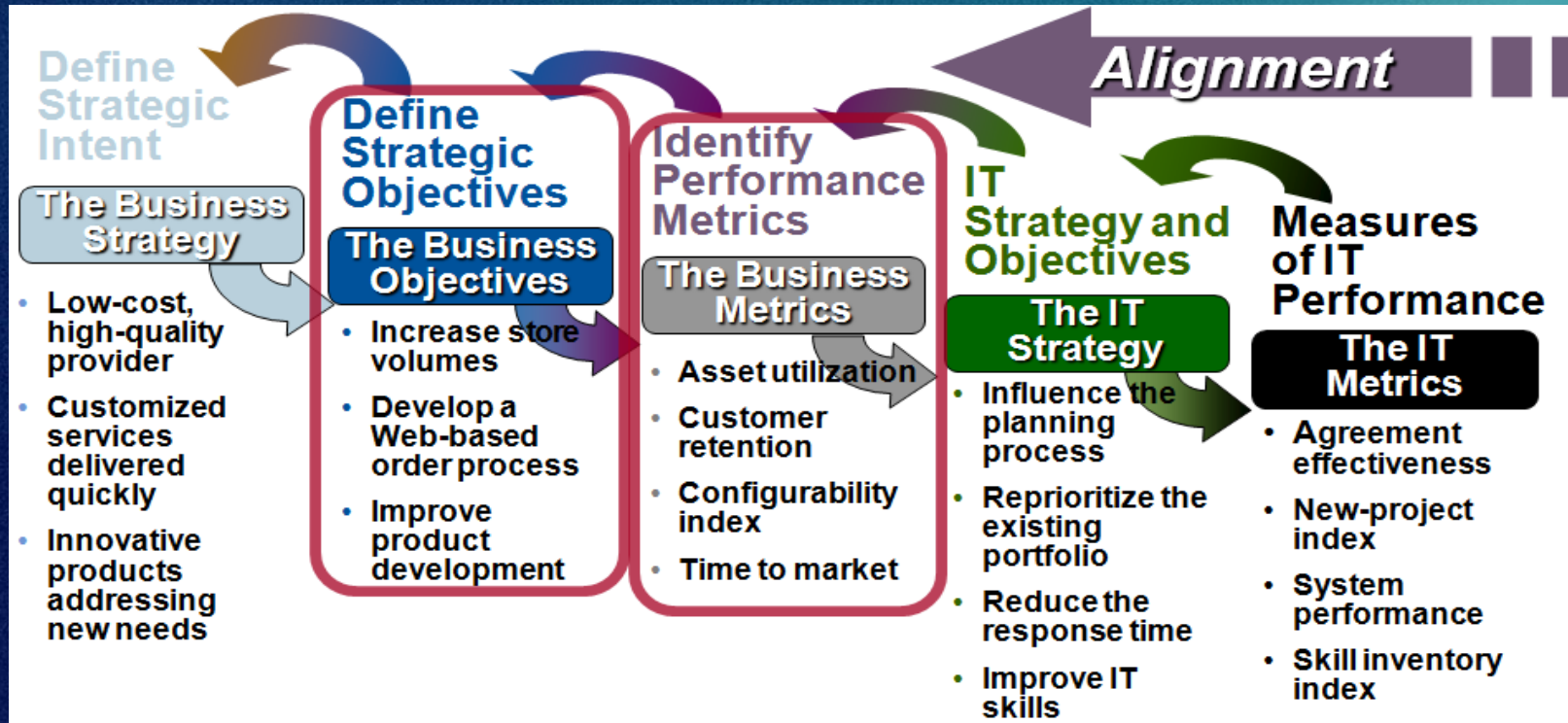


Current State of Value Measurement

Value Measurement is consistently cited as a top area of importance in enterprise architecture but also consistently cited as one of the areas of lowest maturity.



Failure to Communicate Business Strategic Objectives and Performance Metrics



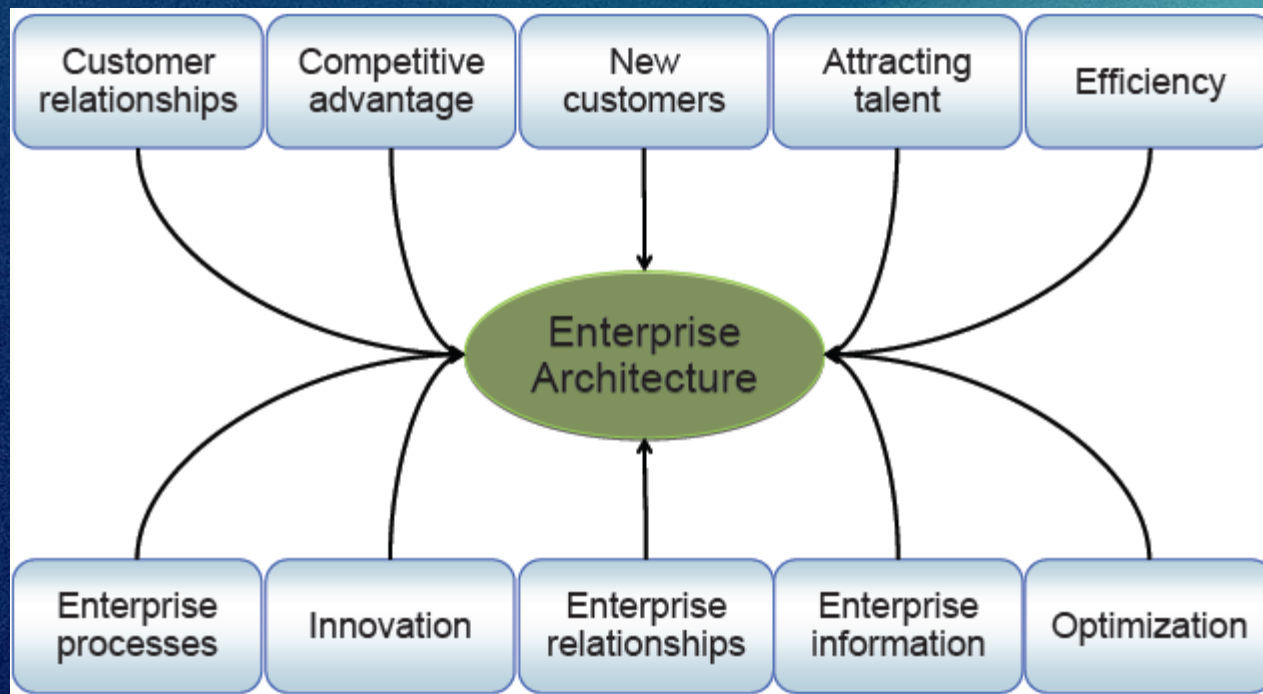
What is Valued with Stakeholders?

It is said that if you know your enemies (stakeholders) and know yourself, you will not be imperiled in a hundred battles; if you do not know your enemies (stakeholders) but do know yourself, you will win one and lose one; if you do not know your enemies (stakeholders) nor yourself, you will be imperiled in every single battle.

—Sun Tzu, The Art of War



EA Can Address C-Suite Priorities – but Only if You Understand Those Priorities (and How They are Measured/Valued)



7



Several potential KPIs may include:

*“What Gets Measured Gets Improved.”
— Peter Drucker*



Level of Awareness and Understanding of What Business Architecture Is

- Periodic Polls measure awareness
- Various groups
- Number of correct answers
- Capture at different points in time
- Compare with past measurements



Business Architecture Team Skills and Capability Growth

- Track existing gaps in BA skills
- Progress along the plans to close the gaps
- Periodic measurement



Business Architecture Coverage

- Number of units engaged in BA activities
- Percent of total organization engaged in BA activities
- Number of initiatives that have requests to involve BA



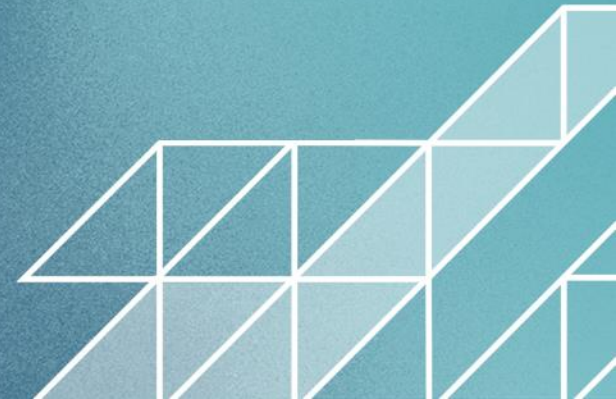
Progression along Business Architecture Maturity Model

- Based on the maturity model selected, identify current state
- Capture information over a set period of time
- Track the progress
- Visualize the progress and target state



Metrics Overload

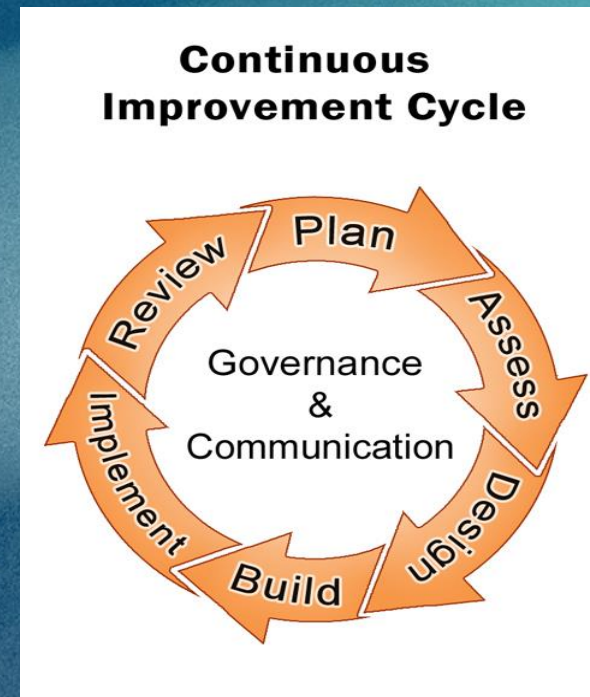
The problem isn't a lack of metrics, it's knowing which ones make sense for your organization and will provide the most "value" for the effort required.



The Business Value Measurement Framework

Purpose: To provide guidance on where to focus value measurement efforts

- Stakeholder Analysis/Value Mapping
- Business Capability Analysis/Value Mapping
- Stakeholder and Business Capability Value Measures Mapping & Analysis
- Metrics Selection/Development
- Governance Considerations
- Communications Considerations



Penn State Graduate Certificate in Business Architecture

<u>Title</u>	<u>Abbreviation</u>	<u>Description</u>	<u>Credits</u>
Strategic Business Architecture	BA 809	Provides a concentrated and comprehensive approach to the practice of business architecture; focuses on business motivations, business operations and business analysis frameworks, and related components that link these aspects of the enterprise together.	3 credits
Emerging Trends, Technology, and Corporate Innovation	ENTR 810	Surveys emerging trends and disruptors in technology and industry that create new markets and influence decision making, product development, business models, and business practices associated with innovation.	3 credits
Enterprise Modeling	EA 873	Explores the use and effectiveness of architectural modeling to describe an organization and examines model-based products as tools to support, influence, and enable organization planning and decision-making. Prerequisite: BA 809	3 credits



Questions/Discussion

For more information on the Penn State business architecture graduate certificate program and related masters programs, please visit:

<https://info.smeal.psu.edu/businessanalysis>

