

7 Agile and DevOps Insights I Wish I Knew Earlier

Presented by Hans Eckman



Where did we go wrong?

We Have a Big Problem

Software products are taking more and more out of IT budgets.

38%

of spend on IT employees goes to software roles

Source: [Info-Tech's Staffing Survey](#)

18%

of OpEx is spent on software licenses

Source: [SoftwareReviews.com](#)

33%

of capex is spent on new software

Source: [Info-Tech's Budgeting Survey](#)

However, the perception and value of software products do not justify the money invested.

Only

34%

of software is rated as both important and effective by users.

Source: [Info-Tech's CIO Business Vision](#)

Agile is the Best! Or is it?

Qualitatively

Every survey conducted by Agile consulting shops and tool vendors shows Agile feels more successful **than traditional approaches.**

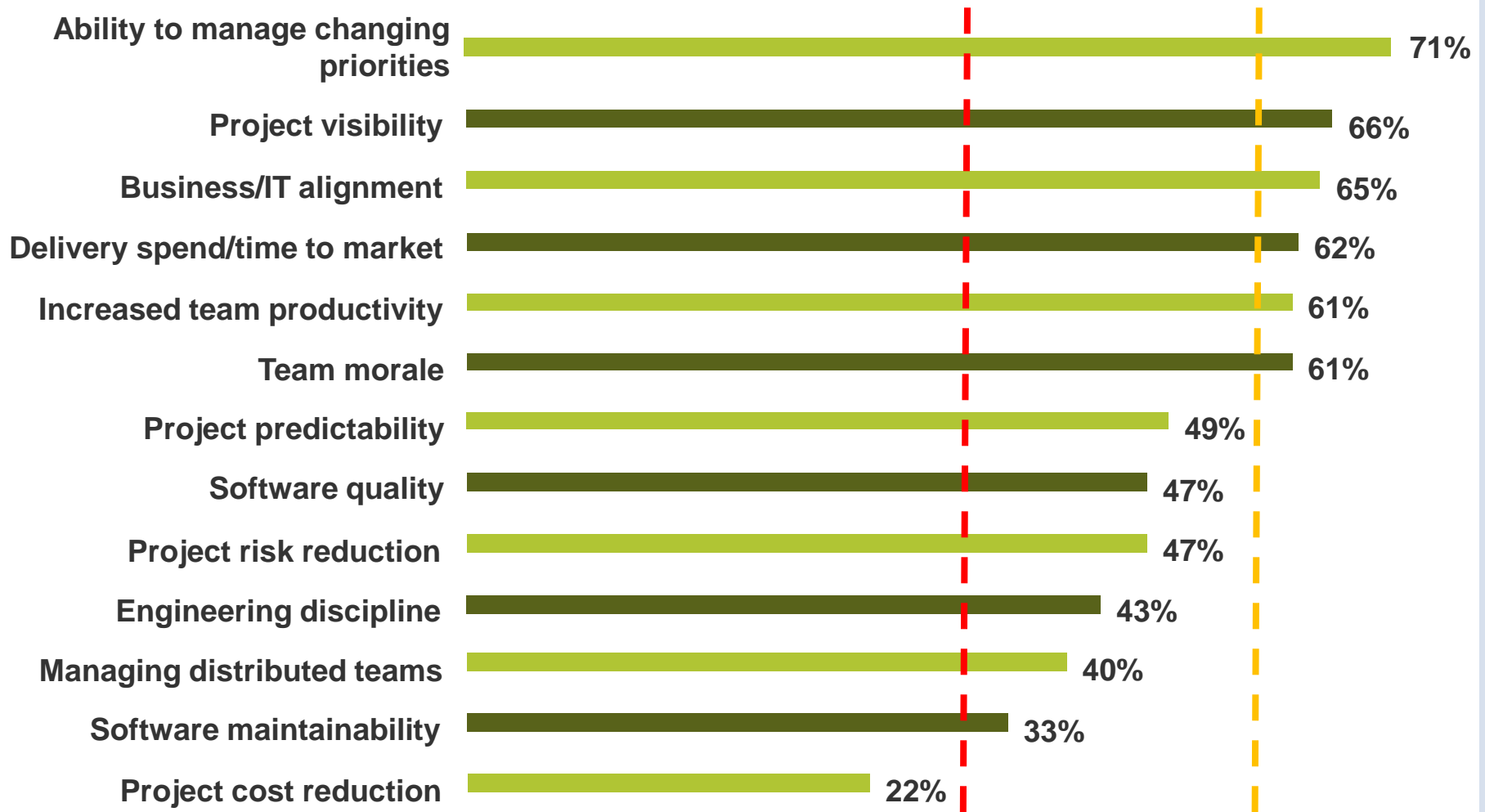
- “*Based on the results of our recent agile quality study, expect agile software quality to exceed traditional method performance by a factor of from 6 to 12 percent in about three years.*”
- “Quantitative Analysis of Agile Methods Study (2017): Twelve Major Findings”

Quantitatively

The average Agile practice is no more productive than Waterfall.

- “*...some researchers argue that there is nothing new about agile methods...*”
- “Empirical Studies of Agile Software Development: A Systematic Review”
- “*Agile isn't necessarily better. Being involved in the process of throughput just feels better.*”
- “The 12 Stages Of The Agile Transformation Journey”

Agile Continues to Fall Short



Adapted from: "12th Annual State of Agile Report"

7 Lessons I Wish I Learned Earlier

- 1. Depth of the Organizational Divide**
- 2. It's All About Culture**
- 3. Why MVPs Work**
- 4. Teams Must Embrace Change**
- 5. Transition from Projects to Products**
- 6. A Hybrid Approach is Often Best**
- 7. DevOps Isn't Automation**

1. Depth of the Organizational Divide

How far off are initial project estimates?

The average rough
order of magnitude
estimate for software
is off by up to 400%*

**Based on functionality needed to meet
business and end user needs*

Our Biggest Challenge

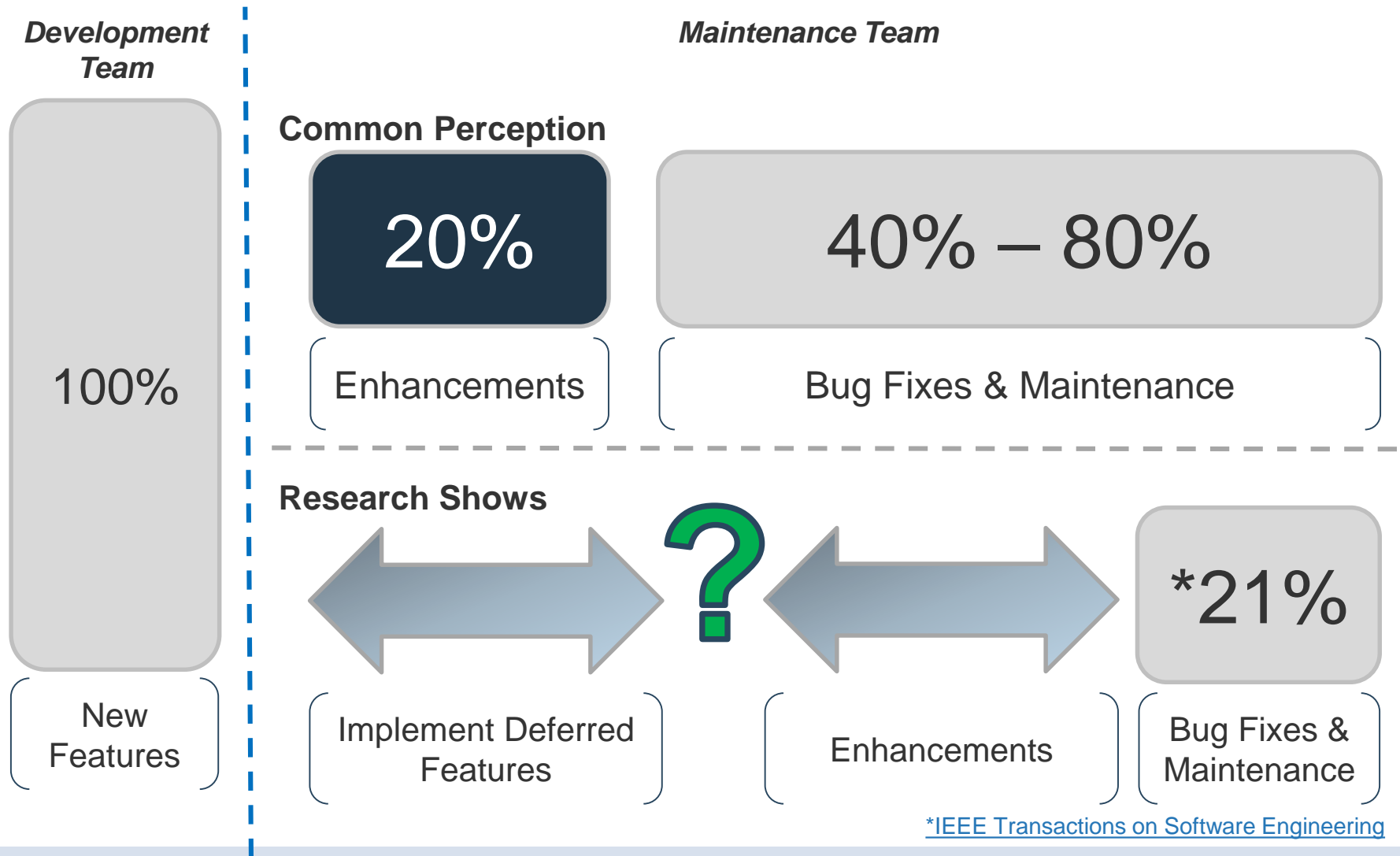


Lines of
Business



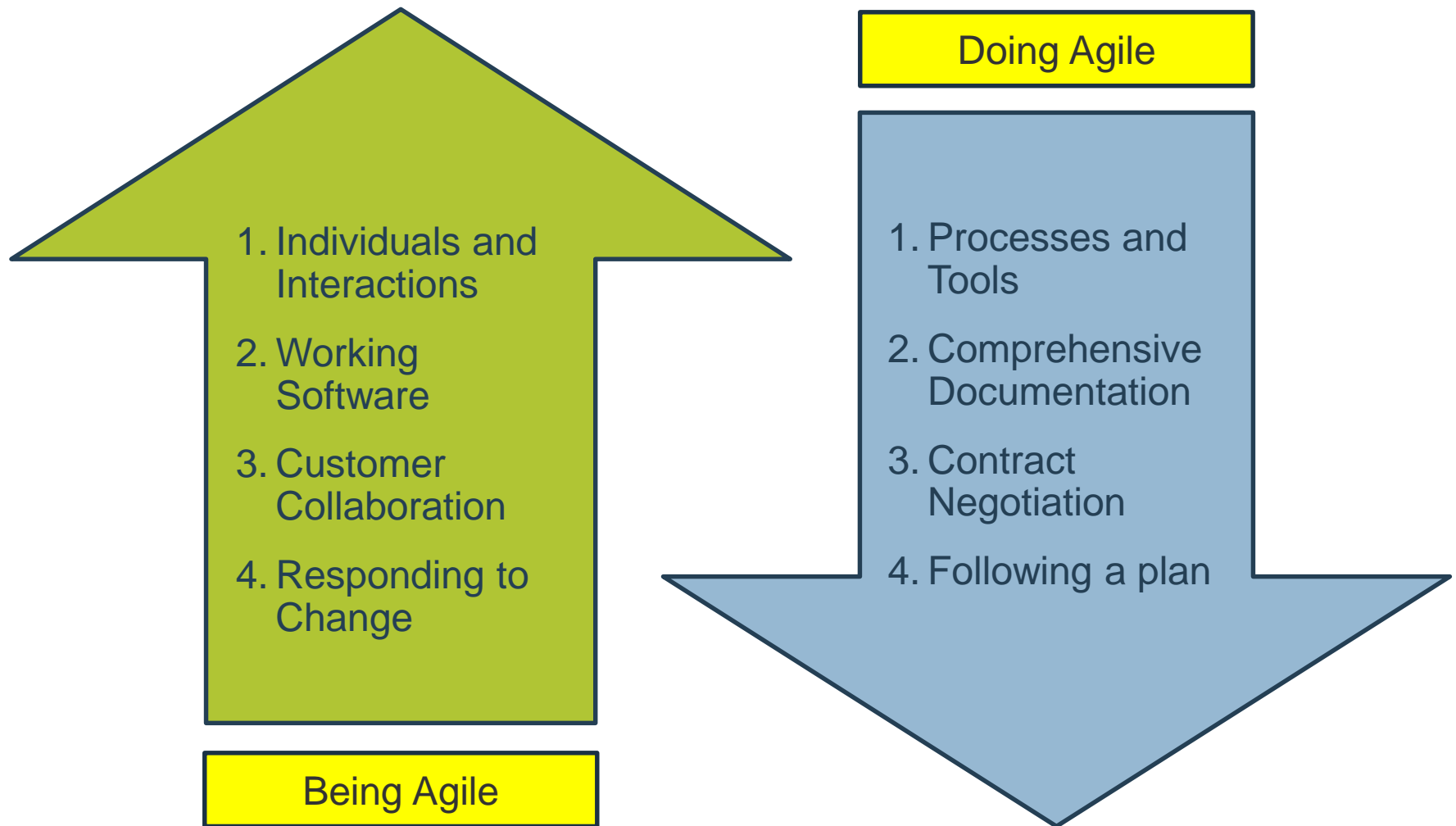
I.T.

Development vs Maintenance is Misunderstood

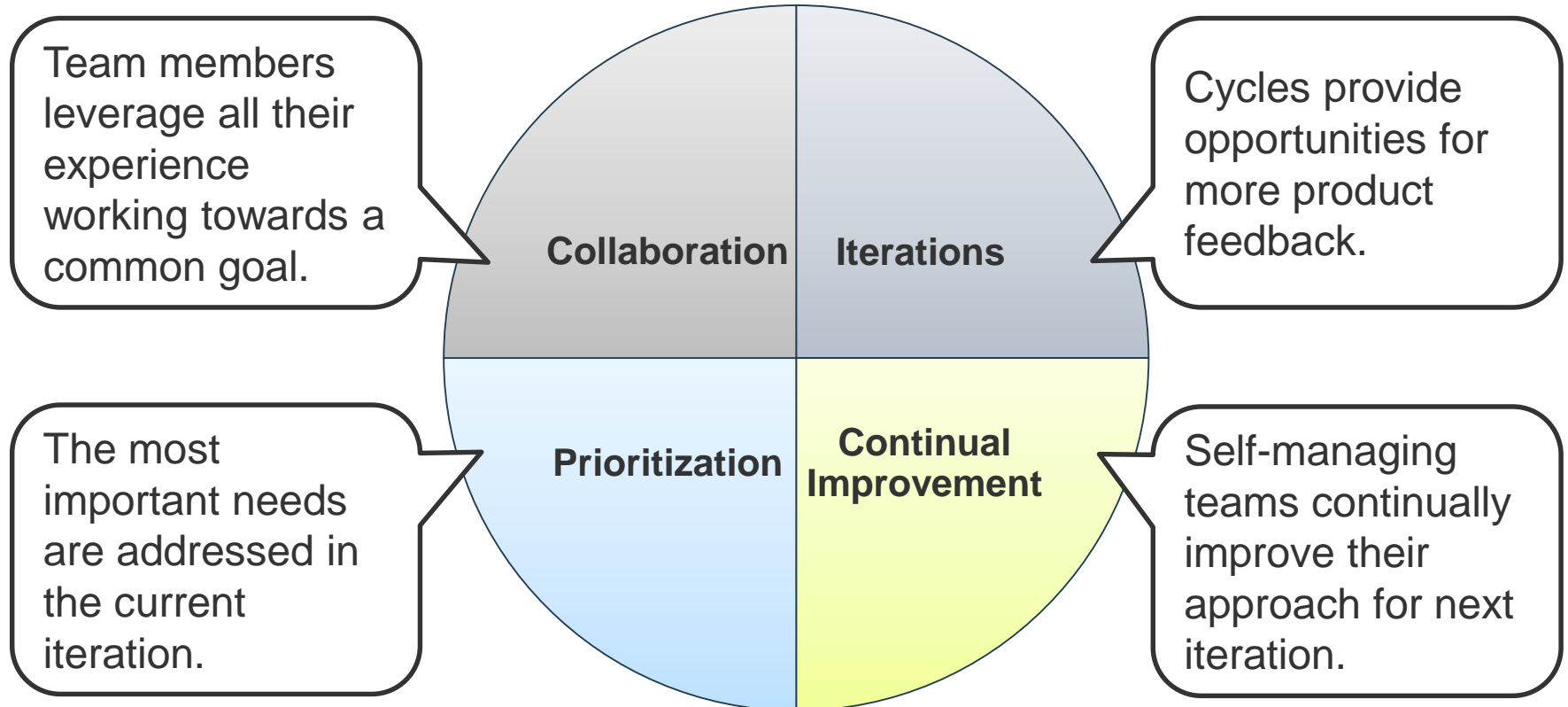


2. It's All About Culture

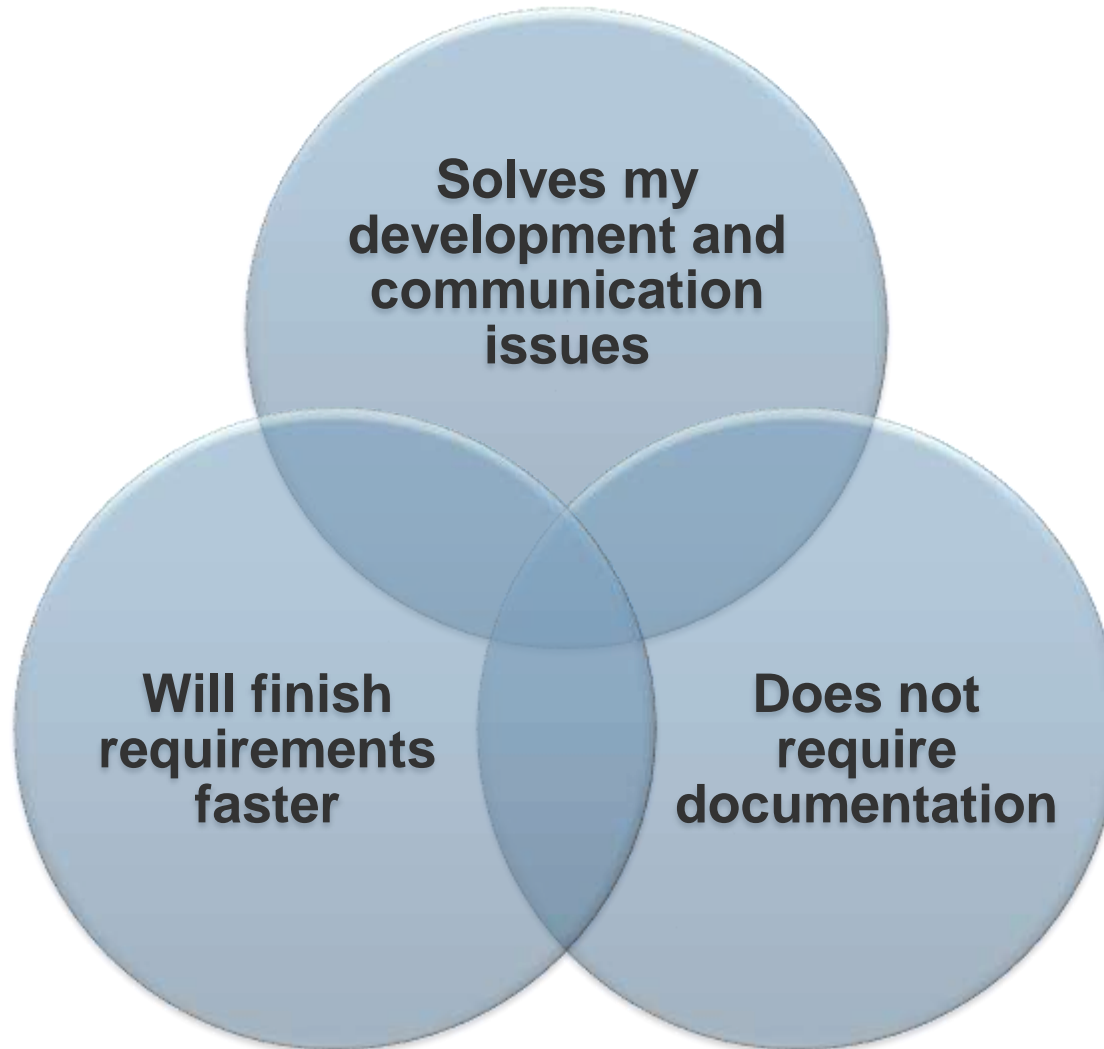
The Manifesto for Agile Software Development



Cultural Advantages of Agile



Beware of Common Agile Myths



3. Why MVPs Work

How to Build a Minimum Viable Product

Not Like This

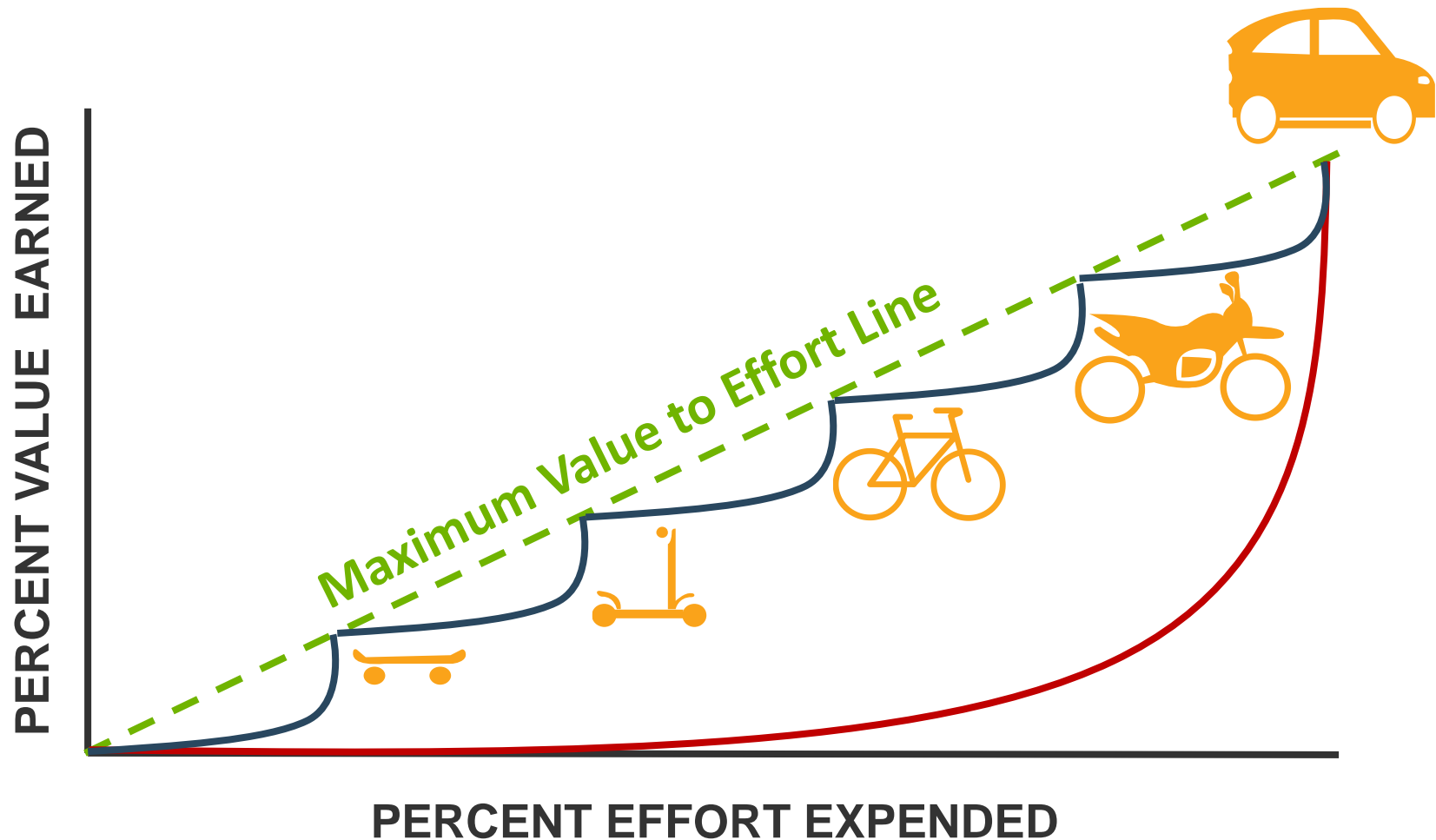


Like This

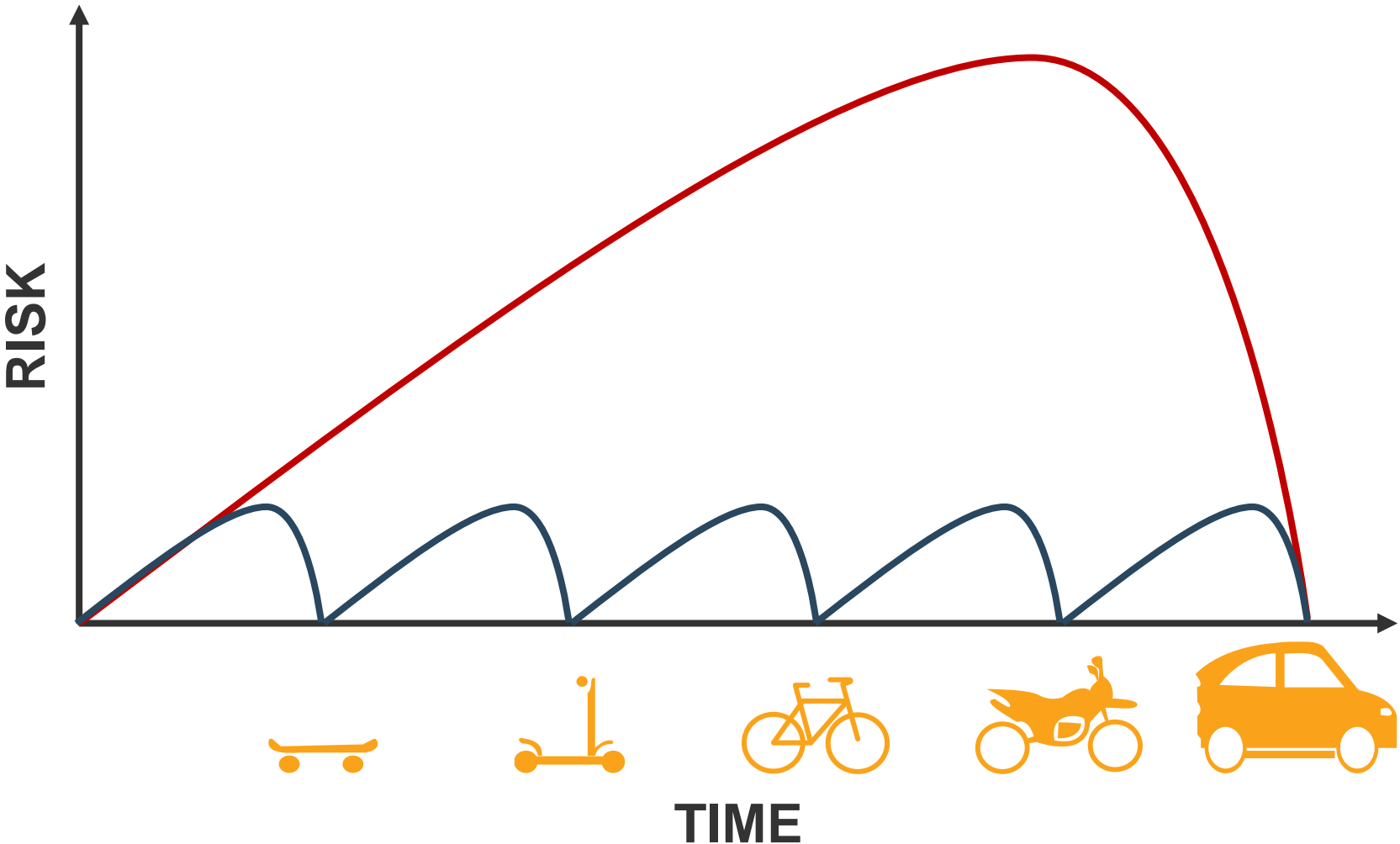


Source: SunTrust Bank, 2014-2017

Iterations Maximize Value Delivery



Iterations Reduce Accumulated Risk



4. Teams Must Embrace Change

Stability Inhibits Change

Processes

Hierarchies

Culture

Policies

Compliance

Legal

Funding

Controls

Regulations

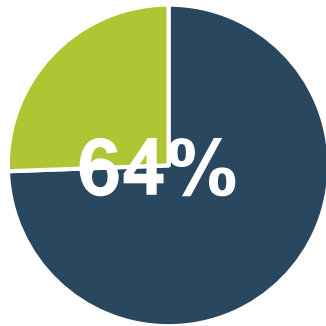
Security

Systems

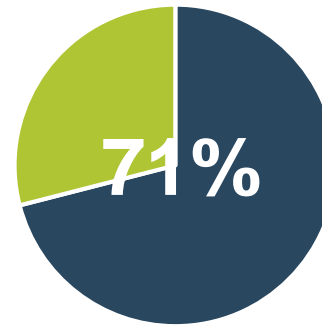
Approvals

And many more...

Change is inevitable



64% of IT professionals adopt Agile to enhance their ability to manage changing priorities.

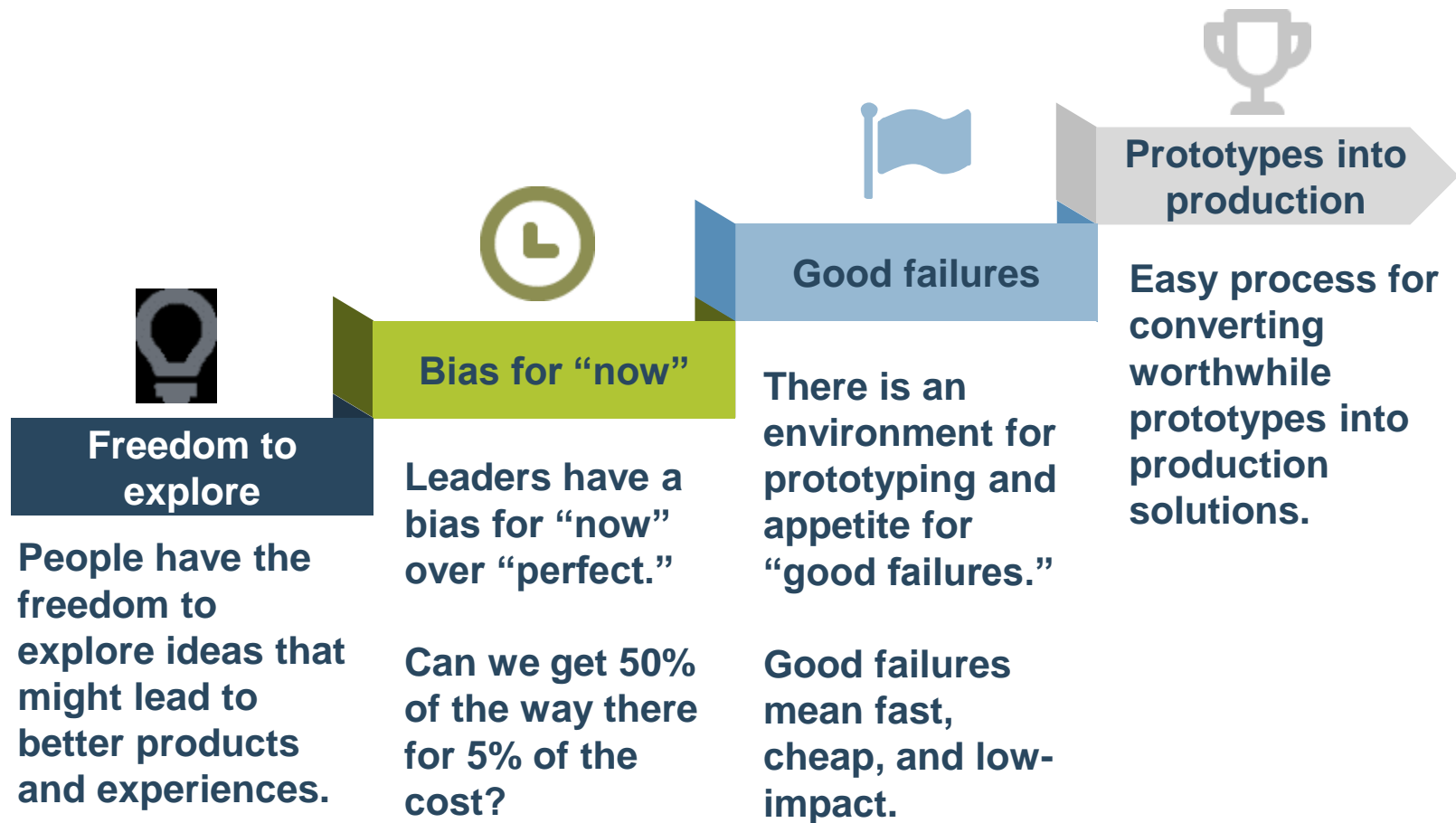


71% of IT professionals found their ability to manage changing priorities actually improved after implementing Agile.

Source: “12th Annual State of Agile Report”

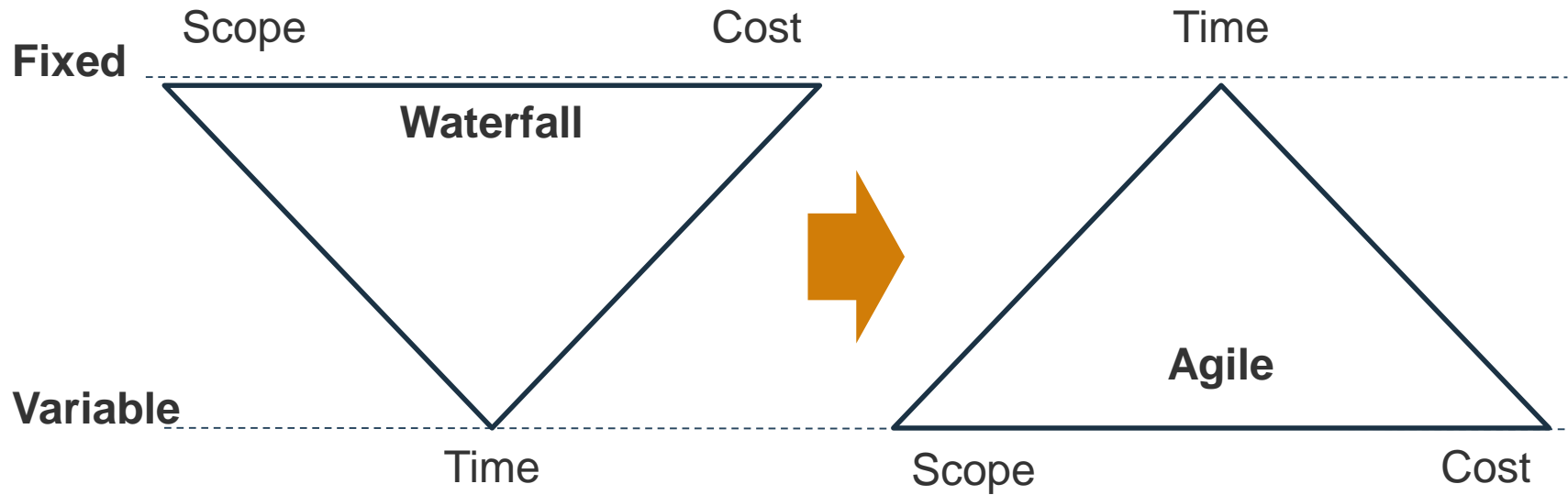
However, traditional delivery processes work on the assumption that product requirements will remain constant throughout the SDLC. This results in delayed delivery of product enhancements which are critical to maintaining a positive customer experience.

Create a culture that fosters innovation

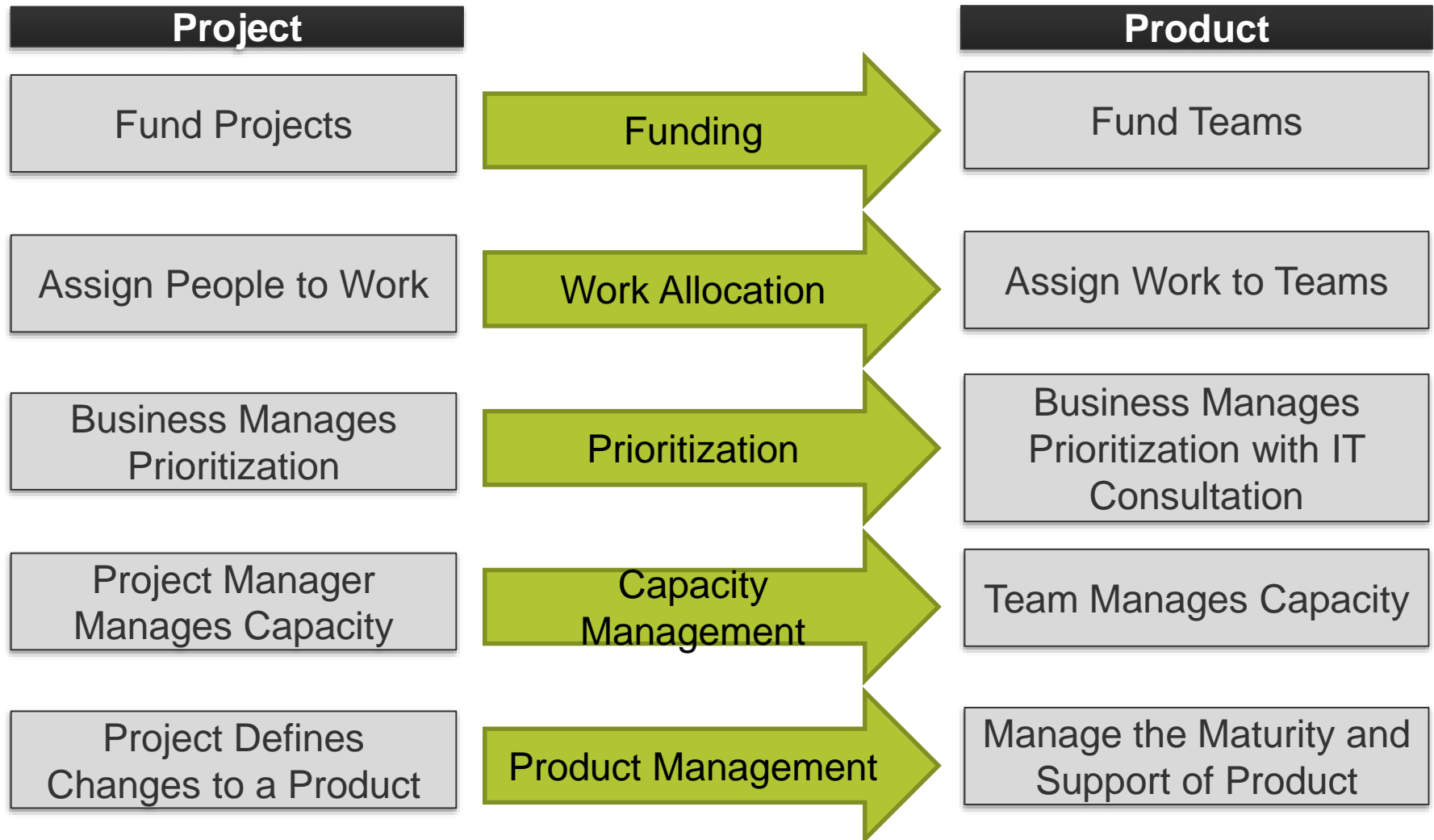


5. Transition from Projects to Products

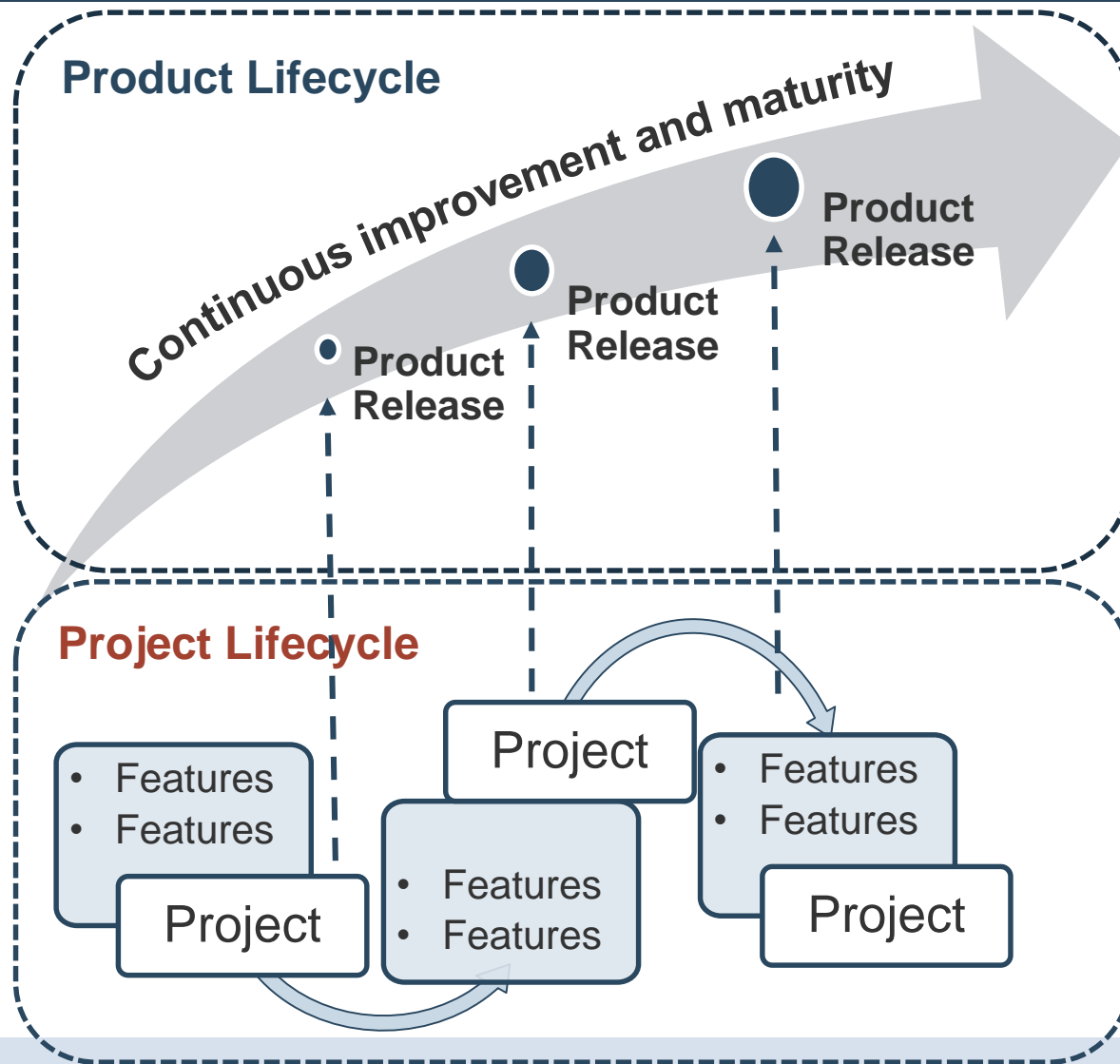
Transitioning to an Agile Mindset



Shift from Project to Product Centric

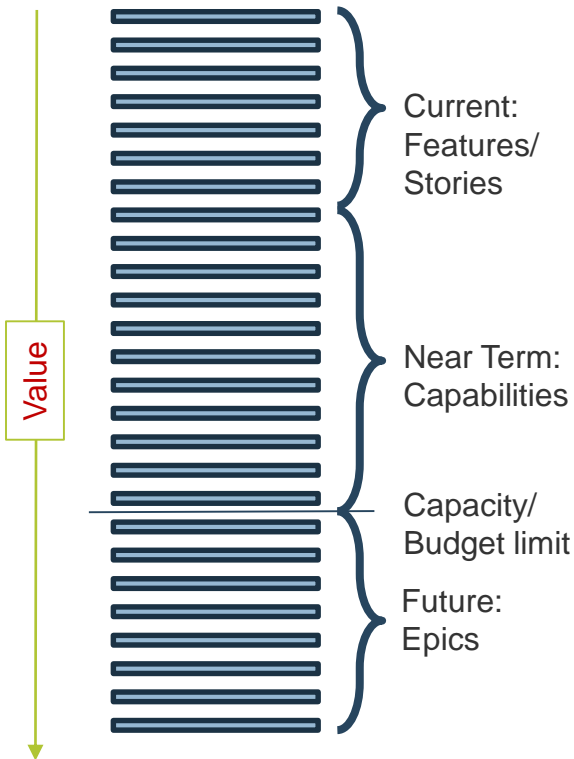


Products are About Maturity

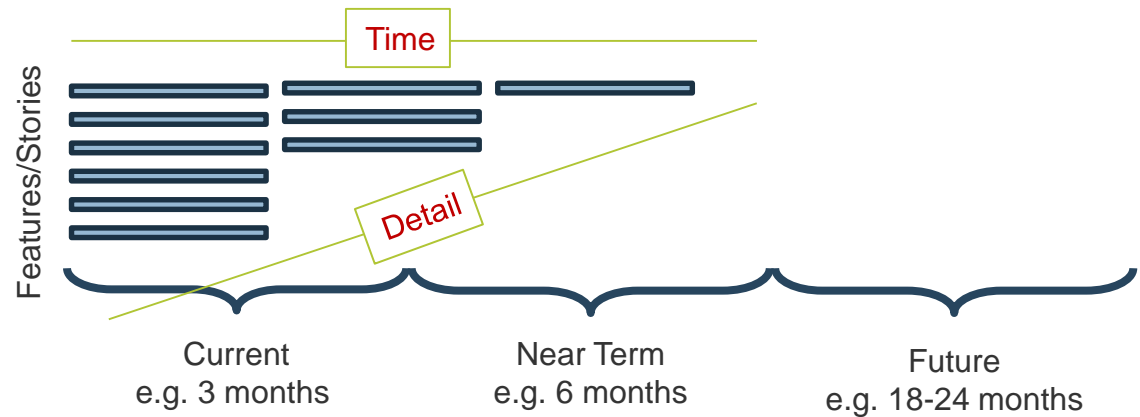


Backlogs are NOT Roadmaps

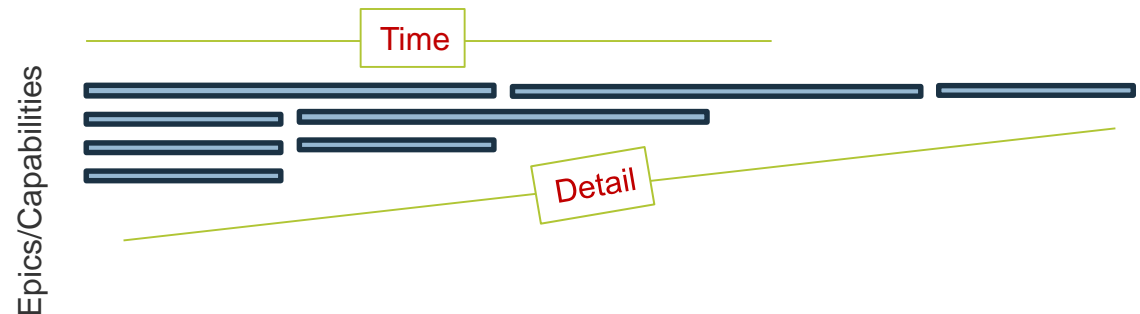
Product Backlog



Product Roadmap

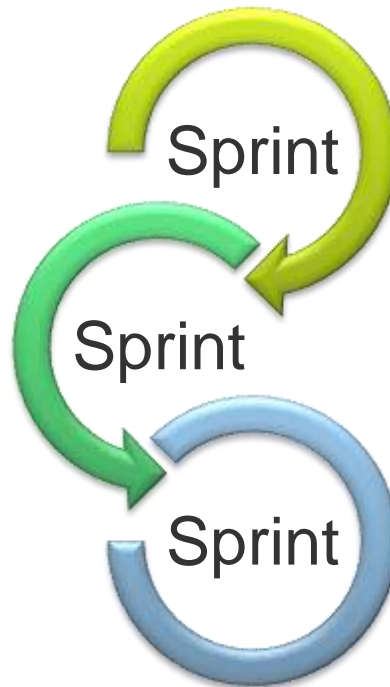


Product Family/Portfolio Roadmap



6. A Hybrid Approach is Often Best

WaterAgileFall is Often the Best Place to Start



Agile may not be Right for all Situations

We don't recommend implementing Agile under the following scenarios:

If stakeholders lack of accountability and/or authority.

If you already have a project in flight in a Waterfall procurement or contractual environment.

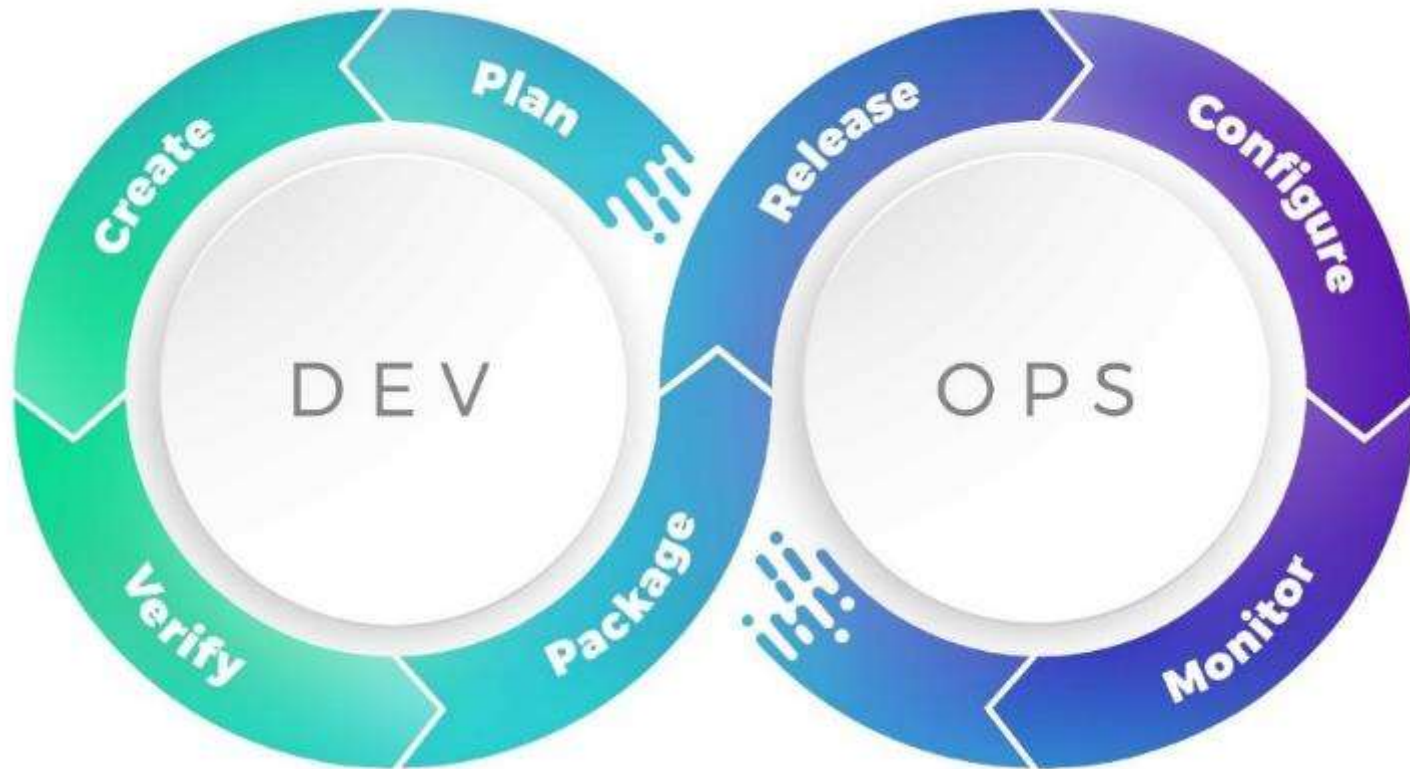
If all stakeholders need to agree to a standard before proceeding with development.

If the project is a one-off.

If the project touches on highly sensitive, risky, or critical systems.

7. DevOps Isn't Automation

DevOps Closes the Operational Gap



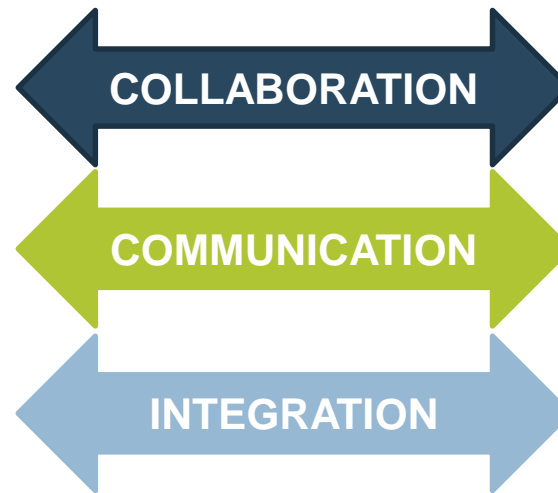
DevOps is an operational philosophy that seeks to promote an improved relationship between development and operations to break down existing silos and better align the groups in providing customer value.

3 Keys to Successful DevOps

Development



Operations



Collaboration

Development and Operations working together through all stages of the development lifecycle, from design through the development process and into production support.

Communication

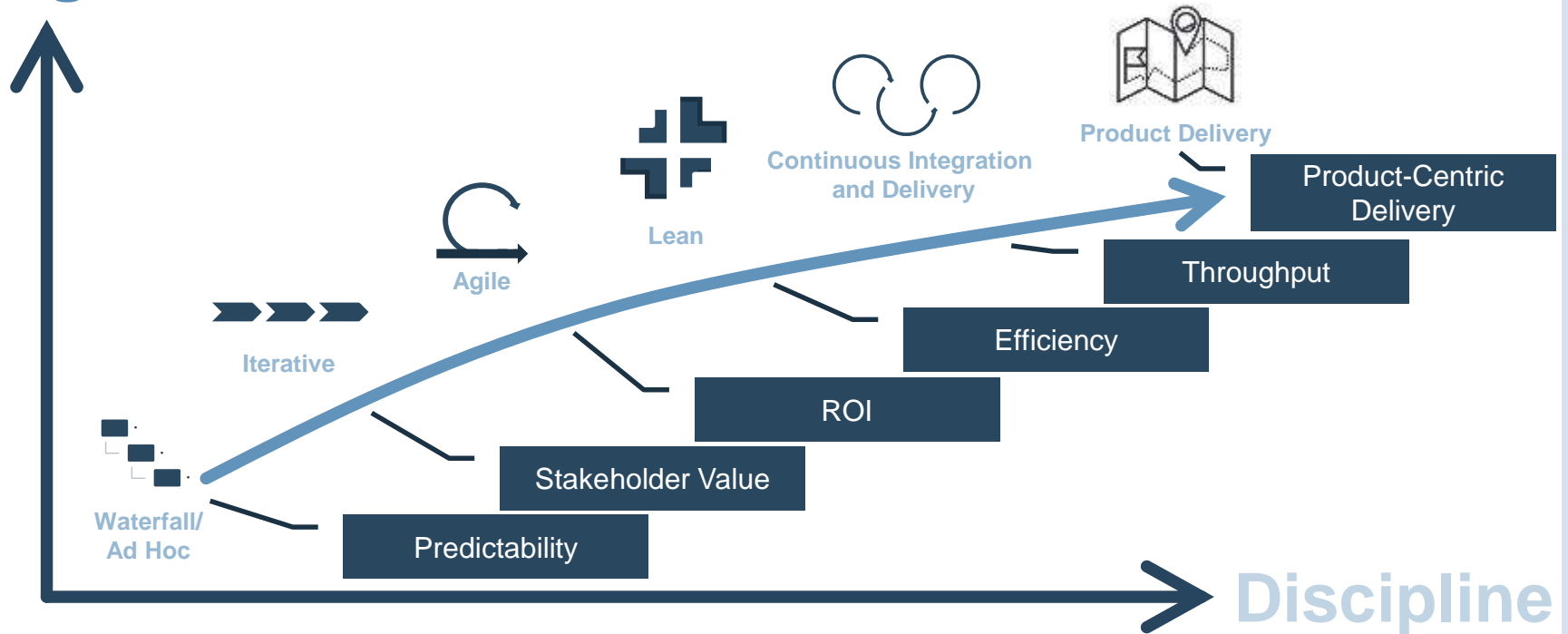
Prioritizing high-value modes of communication to break down existing silos and create common understanding, transparency, and empathy across functions.

Integration

Explore methods to integrate the workflows and toolsets between your development and operations groups to become more reactive to changes in business and customer expectations.

Understand the Delivery Maturity Continuum

Integration



The effectiveness of your delivery method will depend on how integrated you are with the various areas of IT and the business, and how disciplined you are in the execution of the method.

7 Lessons I Wish I Learned Earlier

- 1. Depth of the Organizational Divide**
- 2. It's All About Culture**
- 3. Why MVPs Work**
- 4. Teams Must Embrace Change**
- 5. Transition from Projects to Products**
- 6. A Hybrid Approach is Often Best**
- 7. DevOps Isn't Automation**

Stay Connected

- **Info-Tech Research Group**
 - <https://www.infotech.com>
- **Hans Eckman**
 - heckman@infotech.com
 - <http://www.linkedin.com/in/hanseckman>
 - @HansEckman
 - <http://EckmanGudies.com>



INFO~TECH
RESEARCH GROUP

It Just Makes Sense to . . .

Leverage Best-Practices

35,000
Members
sharing best
practices you
can Leverage

Millions spent
developing
tools and
templates
annually

Leverage direct
access to over
100 Analysts as
an extension of
your team

Use our
Massive Data-
Base of
Benchmarks
and Vendor
Assessments

Get up to
speed in a
fraction of
the time

Avoid starting from scratch

Systematically Improve IT Performance

Follow our standardized path to drive IT maturity & effectiveness for your department. Each leader on your team will work with a dedicated Info-Tech Executive Advisor to create customized annual roadmaps to address their specific challenges and opportunities. Whether your IT department is an Unstable Operator, an Innovative Champion, or at any stage in between, Info-Tech has the proven knowledge & skills, and years of practical IT management & advisory experience to help stabilize and optimize your IT operations.

Each Executive on Your Team Receives:

- ▶ A dedicated Executive Advisor to help diagnose and drive improvement within your organization.
- ▶ A customized Key Initiative Plan around your top priorities and a clear roadmap of how to improve their IT function.
- ▶ On-demand advisory support for all of your key projects.
- ▶ Complete online access to tools and best-practice resources.

Info-Tech Research Group Maturity Model



A Step by Step

Program to Systematically

Improve IT Performance

Info-Tech provides best-practice research making your job easier.

- ▶ Tools & Templates
- ▶ Step-by-Step Methodologies
- ▶ Benchmarking & Diagnostic Programs
- ▶ Training & Executive Coaching
- ▶ Insights & Advice from 20,000+Peers

01 MANAGE AND IMPROVE

Core IT Processes

02 FASTER AND MORE EFFECTIVELY COMPLETE YOUR

Technology Projects

03 TRAIN AND DEVELOP YOUR

IT Leadership Team

04 BUILD A DATA-DRIVEN

IT Strategy

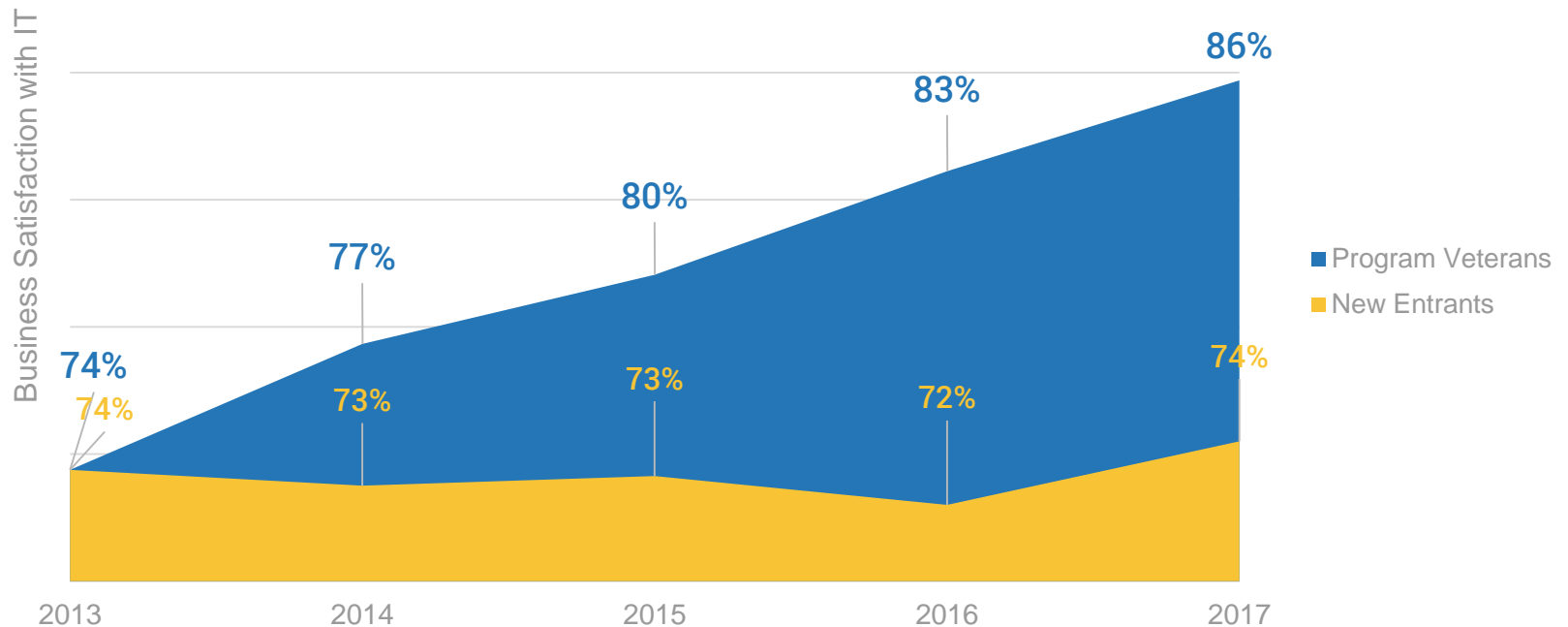
05 A STEP BY STEP PROGRAM TO

Systematically Improve IT

Performance Difference

For over 20 years Info-Tech has provided IT teams with practical advice that helps make measurable improvement.

Since launching our systematic program to improve IT performance in 2013, Info-Tech members have dramatically outperformed their peers by delivering superior levels of business satisfaction.



Appendix

Key observations made by Info-Tech's research



Culture is the biggest challenge to Agile implementation

Agile thinking and behaviors may be well accepted within the development team but can conflict with the organization culture, such as tolerance to failure and empowerment. Fears of runaway development teams and loss of scope control are commonly announced stakeholder concerns that can derail future buy-in. Regular communication and a common understanding of Agile principles can level-set expectations and reassure stakeholders that development teams are completing projects with stakeholder interests and concerns top of mind.



Hybrid development methodologies can be a better fit than pure Agile

Certain organizational and technical constraints and complexities can limit the implementation of Agile to development teams only. Some organizations eventually realized that their steady state process is a hybrid of Agile and Waterfall methodologies. Adopting some Waterfall principles can in fact improve the success of development projects over pure Agile in certain situations, such as hardware implementation and modifications to large, complex systems.



Don't let your organization get carried away with success

Agile is not a methodology that will apply to every project, team, or business unit the same way: teams will interpret and value principles and tasks differently. Be prepared for failure as successes in one project may be issues in another. Teams must now be disciplined to address high risk issues collectively and collaboratively without falling back on old habits.

So where do the problems start?



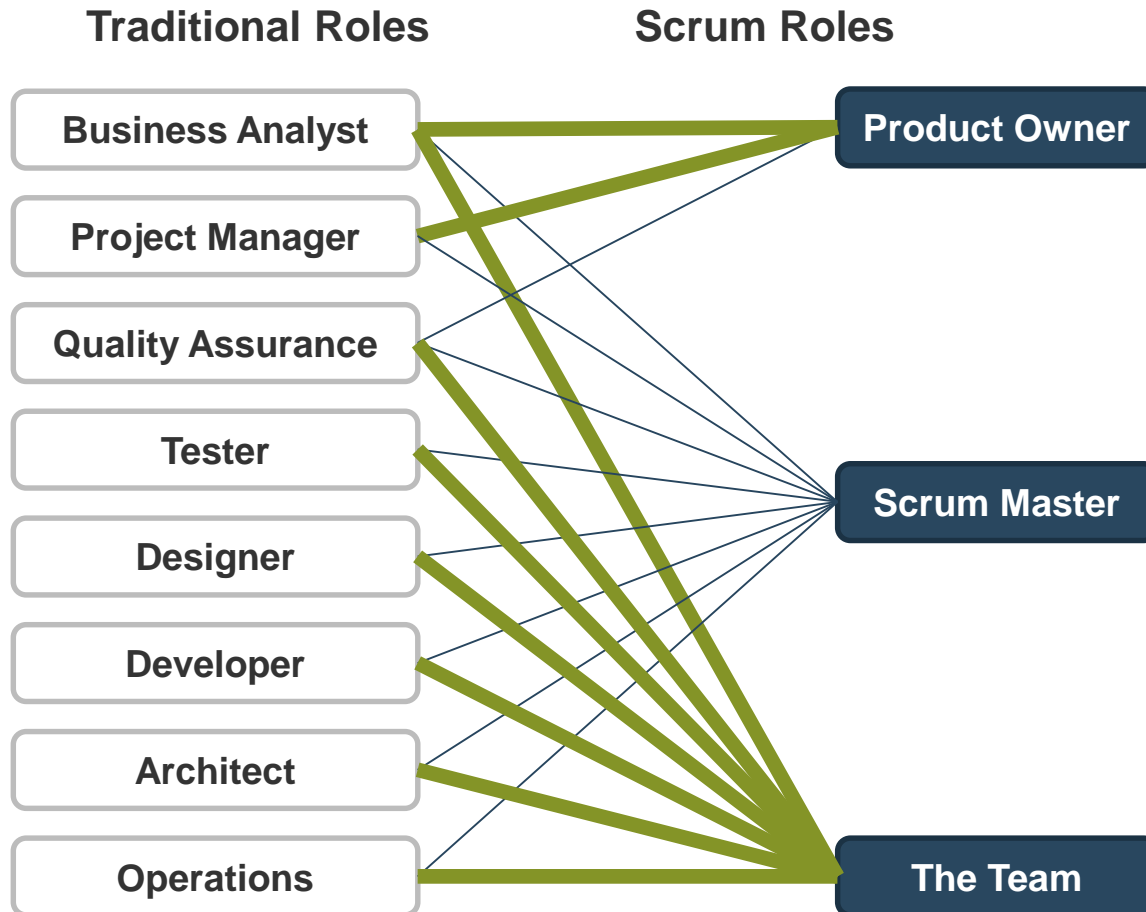
“Most IT funding depends on one-time expenditures or capital-funding mechanisms that are based on building construction-funding models predicated on a life expectancy of 20 years or more.

Such models don't provide the stability or flexibility needed for modern IT investments.”

– Educause

Traditional roles translate to those in Scrum

Development roles may shift, but the value of each role will remain the same.

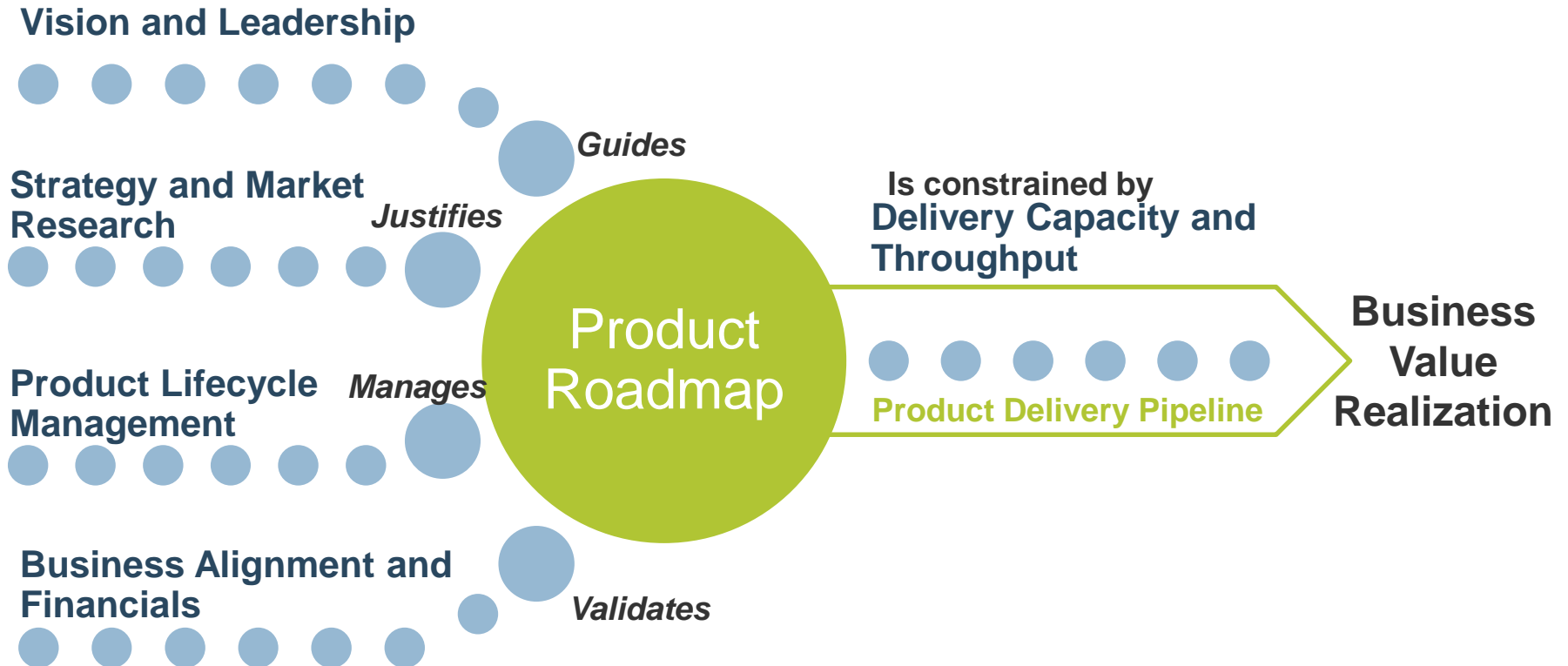


Legend	
	Most likely transition
	Possible options

Info-Tech Insight

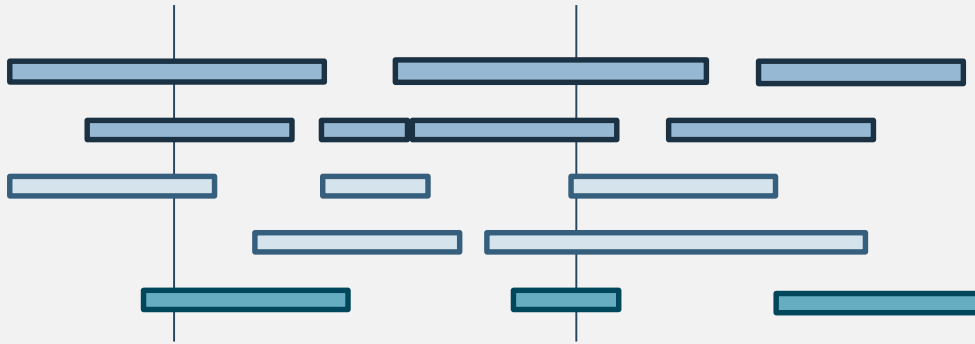
- Be aware of conflicting interests
- Rotate Scrum Masters
- Keep the team size to 5-9 members

Product Roadmaps are Key to Product Delivery



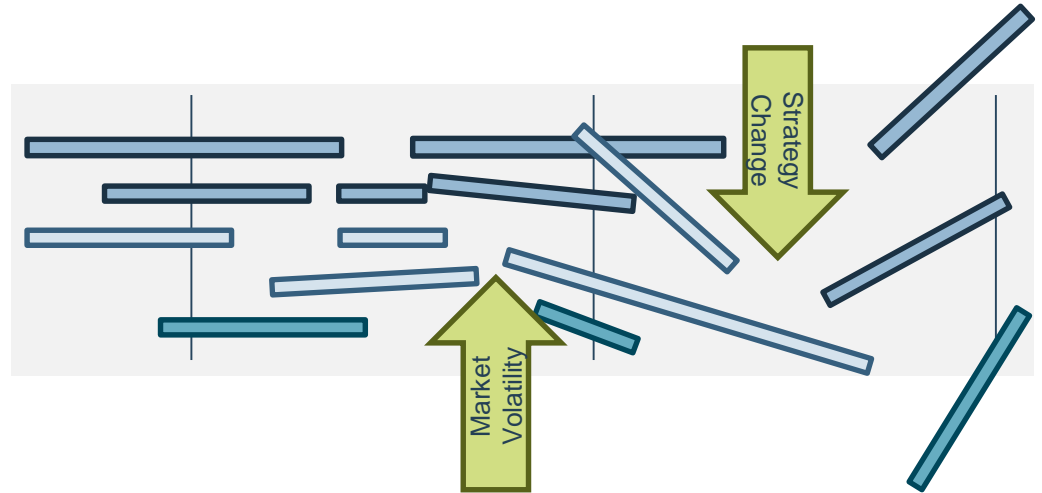
Adapted From: [Roman Pichler, 2014](#)

Roadmaps Should Match Your Circumstances.



In an ideal scenario, a roadmap that illustrates detailed, committed and long terms plans can be immensely valuable by allowing you to align your teams and stakeholders and to increase your ability to project costs, required skills, and delivery dates.

In reality, things change. Your strategic intentions are subject to volatility, especially those planned within a further timeline. The more costs you incur in planning, the more you leave yourself exposed to inefficiency and waste if those plans change.



The real questions here is, ***how flexible do you need to be?***

It Just Makes Sense to . . .

Leverage Best-Practices

35,000
Members
sharing best
practices you
can Leverage

Millions spent
developing
tools and
templates
annually

Leverage direct
access to over
100 Analysts as
an extension of
your team

Use our
Massive Data-
Base of
Benchmarks
and Vendor
Assessments

Get up to
speed in a
fraction of
the time

Avoid starting from scratch

Systematically Improve IT Performance

Follow our standardized path to drive IT maturity & effectiveness for your department. Each leader on your team will work with a dedicated Info-Tech Executive Advisor to create customized annual roadmaps to address their specific challenges and opportunities. Whether your IT department is an Unstable Operator, an Innovative Champion, or at any stage in between, Info-Tech has the proven knowledge & skills, and years of practical IT management & advisory experience to help stabilize and optimize your IT operations.

Each Executive on Your Team Receives:

- ▶ A dedicated Executive Advisor to help diagnose and drive improvement within your organization.
- ▶ A customized Key Initiative Plan around your top priorities and a clear roadmap of how to improve their IT function.
- ▶ On-demand advisory support for all of your key projects.
- ▶ Complete online access to tools and best-practice resources.

Info-Tech Research Group Maturity Model



A Step by Step

Program to Systematically

Improve IT Performance

**Info-Tech provides
best-practice research
making your job easier.**

- ▶ Tools & Templates
- ▶ Step-by-Step Methodologies
- ▶ Benchmarking & Diagnostic Programs
- ▶ Training & Executive Coaching
- ▶ Insights & Advice from 20,000+Peers

01 MANAGE AND IMPROVE

Core IT Processes

02 FASTER AND MORE EFFECTIVELY COMPLETE YOUR

Technology Projects

03 TRAIN AND DEVELOP YOUR

IT Leadership Team

04 BUILD A DATA-DRIVEN

IT Strategy

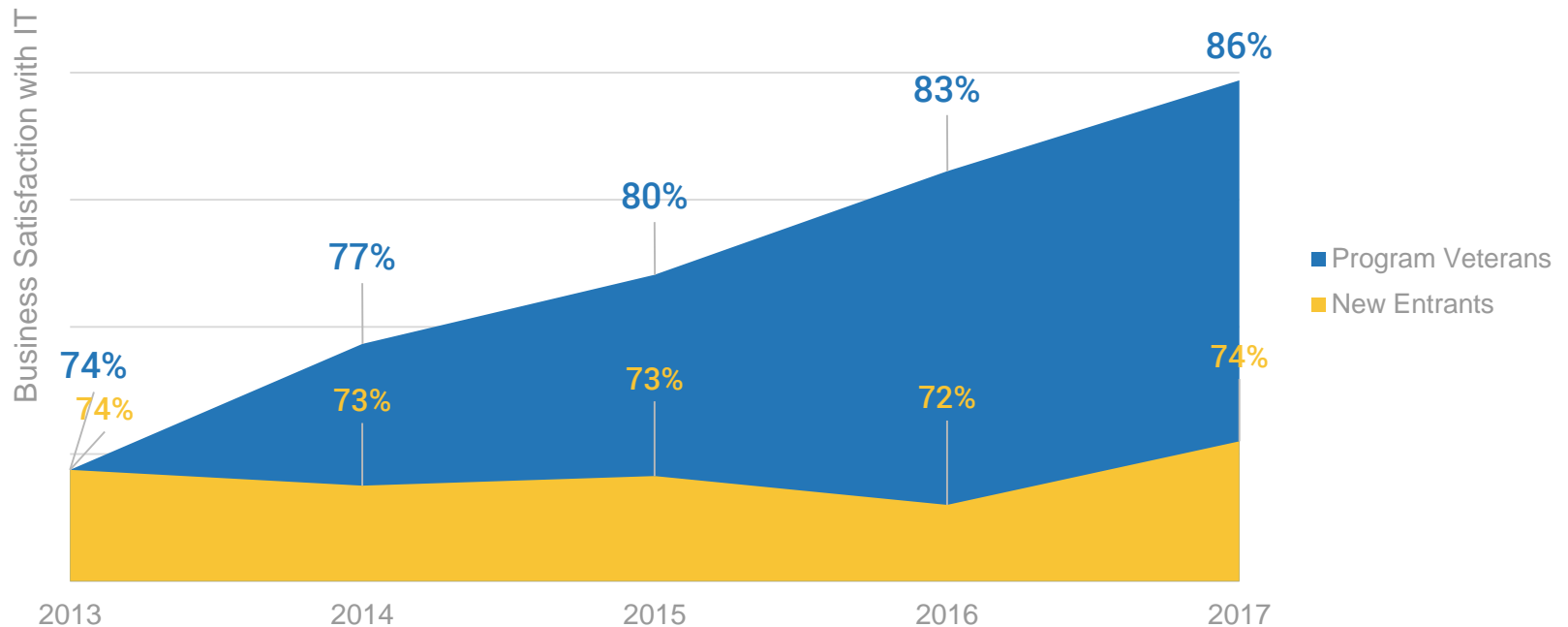
05 A STEP BY STEP PROGRAM TO

Systematically Improve IT

Performance Difference

For over 20 years Info-Tech has provided IT teams with practical advice that helps make measurable improvement.

Since launching our systematic program to improve IT performance in 2013, Info-Tech members have dramatically outperformed their peers by delivering superior levels of business satisfaction.



Info-Tech covers

a comprehensive set of 45 core IT processes, and more

STRATEGY & GOVERNANCE

EDM01 IT Governance	AP002 IT Strategy	MEA01 Performance Measurement	EDM02 Business Value	AP006 Cost and Budget Management	AP010 Vendor Management
AP003 IT Management and Policies	MEA04 Innovation	EDM03 Stakeholder Relations	AP009 Knowledge Management	EDM04 Cost Optimization	

IT Management & Governance Framework

A comprehensive and connected set of research to help you optimize and improve your core IT processes.



PEOPLE & RESOURCES

AP007 Human Resources Management	ITRG01 IT Organizational Design	ITRG02 Leadership, Culture and Values	ITRG03 Manage Service Catalogs
-------------------------------------	------------------------------------	--	-----------------------------------

INFRASTRUCTURE & OPERATIONS

AP003 Enterprise Architecture	BAI04 Availability and Capacity Management	BAI05 Change Management	AP009 Service Management	BAI09 Asset Management	BAI10 Configuration Management	DSS07 Operations Management	DSS02 Service Desk
----------------------------------	---	----------------------------	-----------------------------	---------------------------	-----------------------------------	--------------------------------	-----------------------

SECURITY & RISK

APD13 Security Strategy	DSS05 Security Management	EDM03 Risk Management	DSS06 Business Process Controls and Internal Audit	MEA03 External Compliance	DSS04 Business Continuity	DSS03 Incident and Problem Management	DSS04 Disaster Recovery Planning
----------------------------	------------------------------	--------------------------	---	------------------------------	------------------------------	--	-------------------------------------

APPS

ITRG04 Application Portfolio Management	BAI03 Enterprise Application Selection & Implementation	BAI03 Application Development Throughput	BAI07 Application Development Quality	ITRG05 Application Maintenance	BAI06 Organizational Change Management
--	--	---	--	-----------------------------------	---

DATA & BI

ITRG06 Business Intelligence and Reporting	ITRG07 Data Architecture	ITRG08 Data Quality	AP005 Portfolio Management	BAI01 Project Management	BAI02 Requirements Gathering
---	-----------------------------	------------------------	-------------------------------	-----------------------------	---------------------------------

FINANCIAL MANAGEMENT

SERVICE PLANNING & ARCHITECTURE

PPM & PROJECTS

