

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 reception 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 Always Better?

What the practitioners say:

- 87% of teams enhanced their ability to manage changing priorities.
- 84% increased team productivity.
- 79% of teams increased team morale.
- 77% of teams experienced accelerated time-to-market.
- 75% reported better alignment between IT and business goals.

Source: VersionOne, LLC. "12th Annual: State of Agile Survey." 2018.

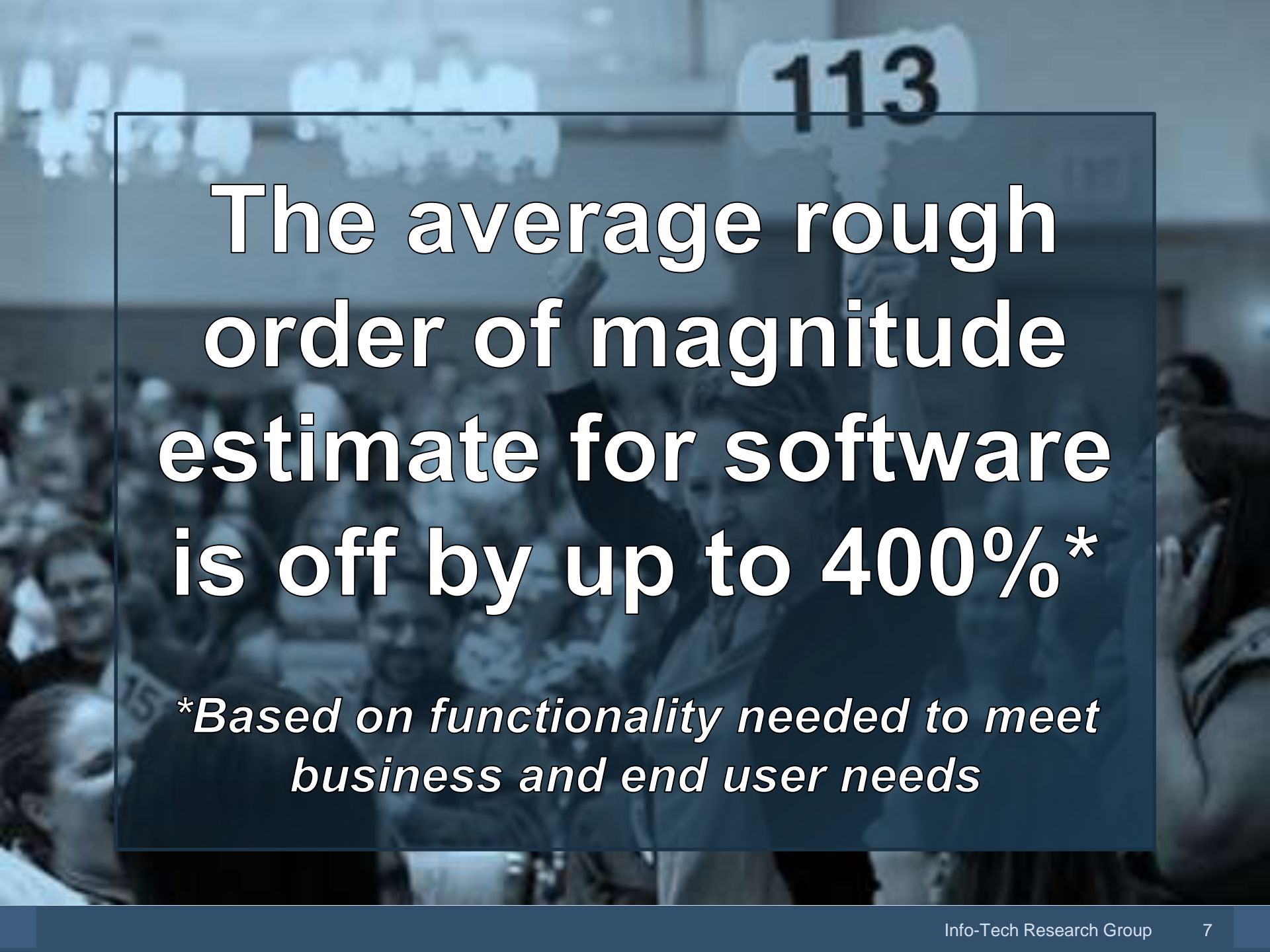
What our research says:

- Every **qualitative** study shows Agile is more **effective**.
- **Quantitative** studies are inconclusive, but show that productivity is **the same on average**, but may be superior at the extreme.

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



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

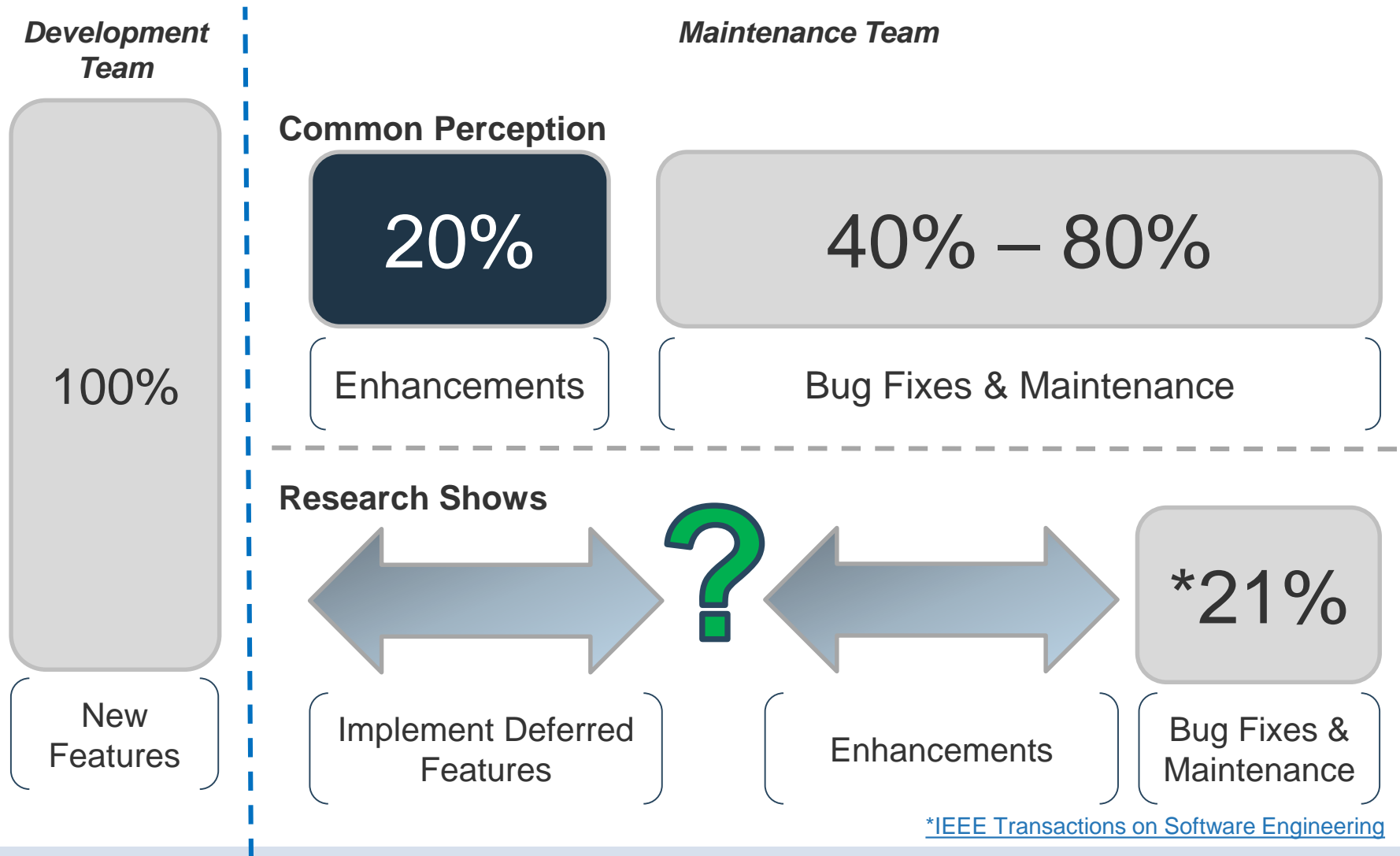


Lines of
Business



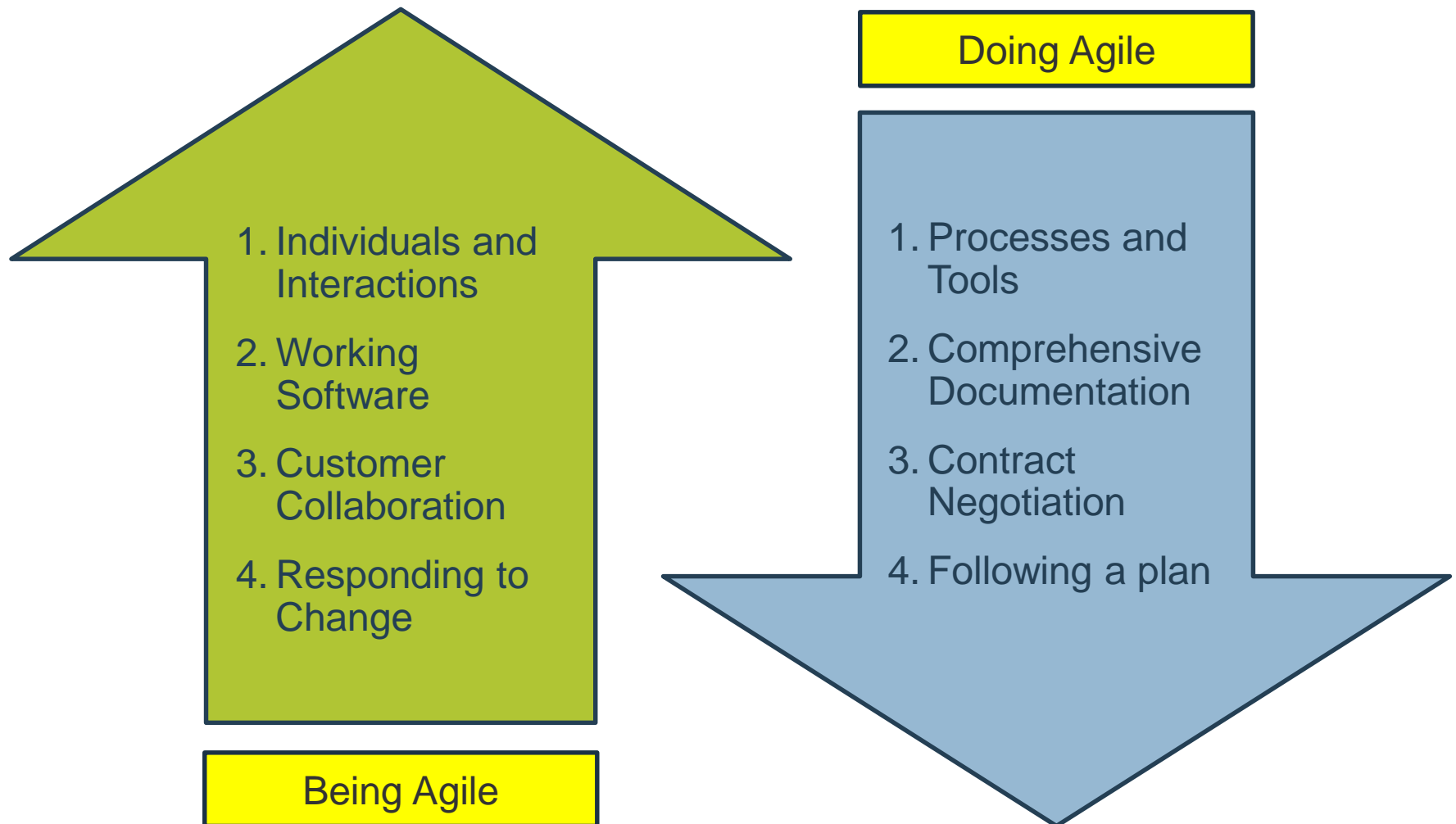
I.T.

Development vs Maintenance is Misunderstood

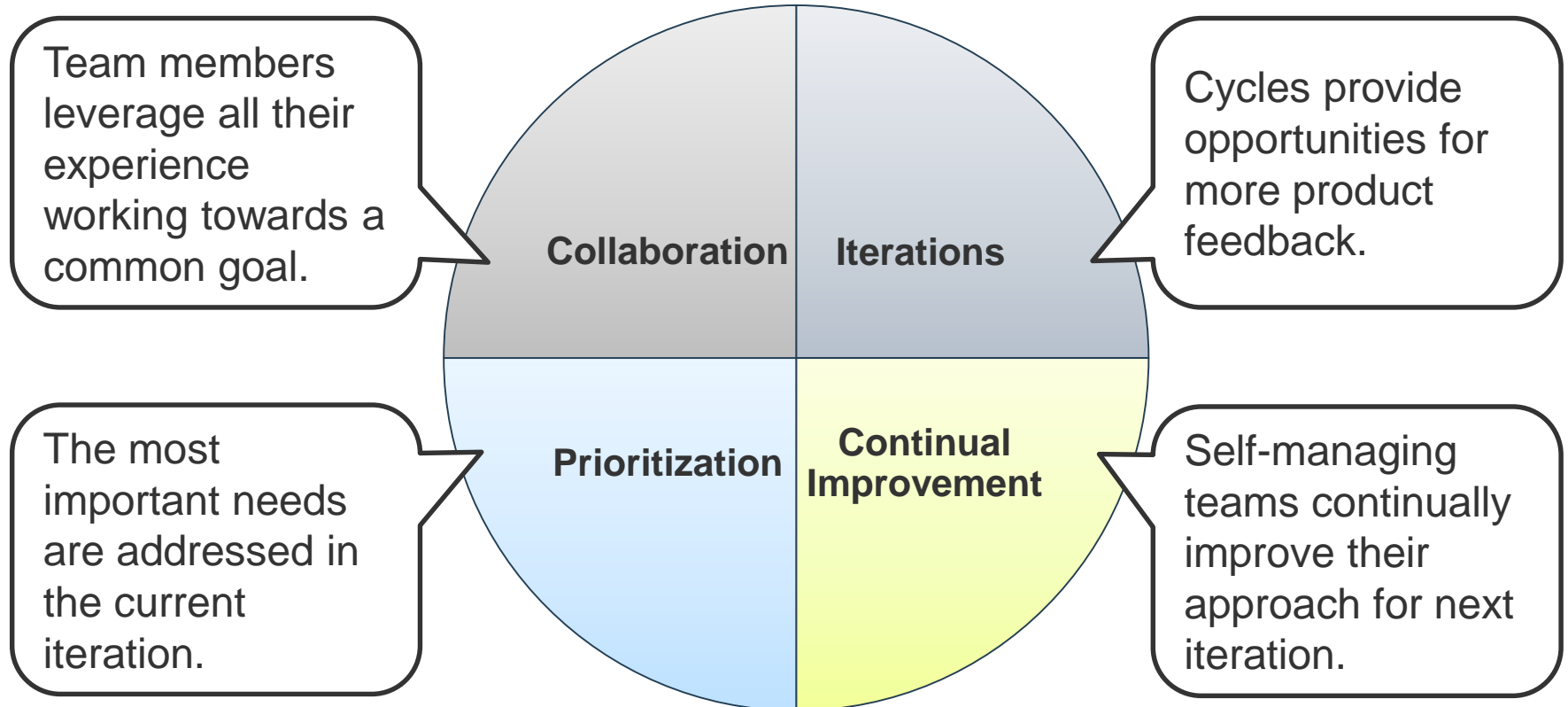


2. It's All About Culture

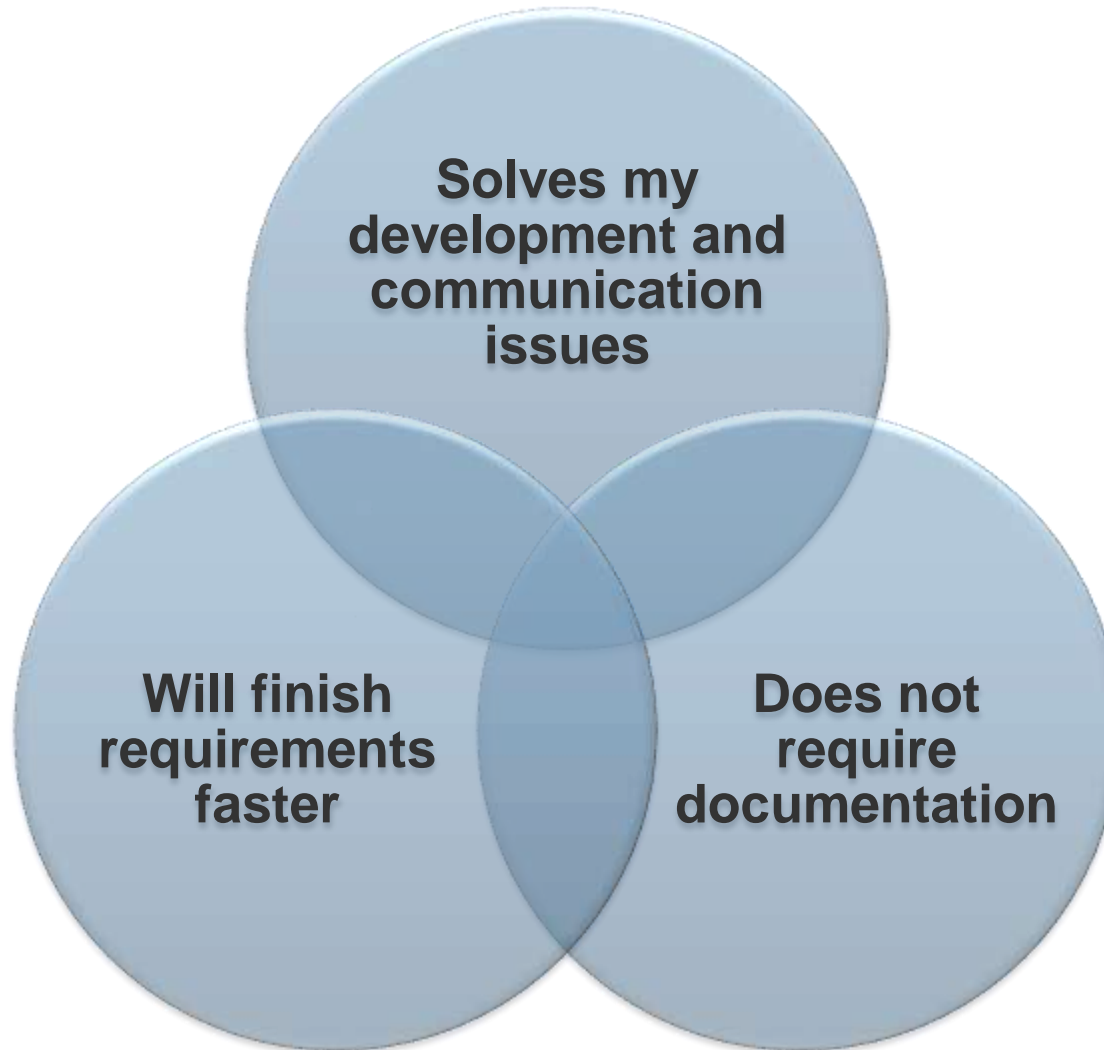
The Manifesto for Agile Software Development



Cultural Impact of Agile



Beware of Common Agile Myths



3. Why MVPs Work

How to Build a Minimum Viable Product

Not Like This

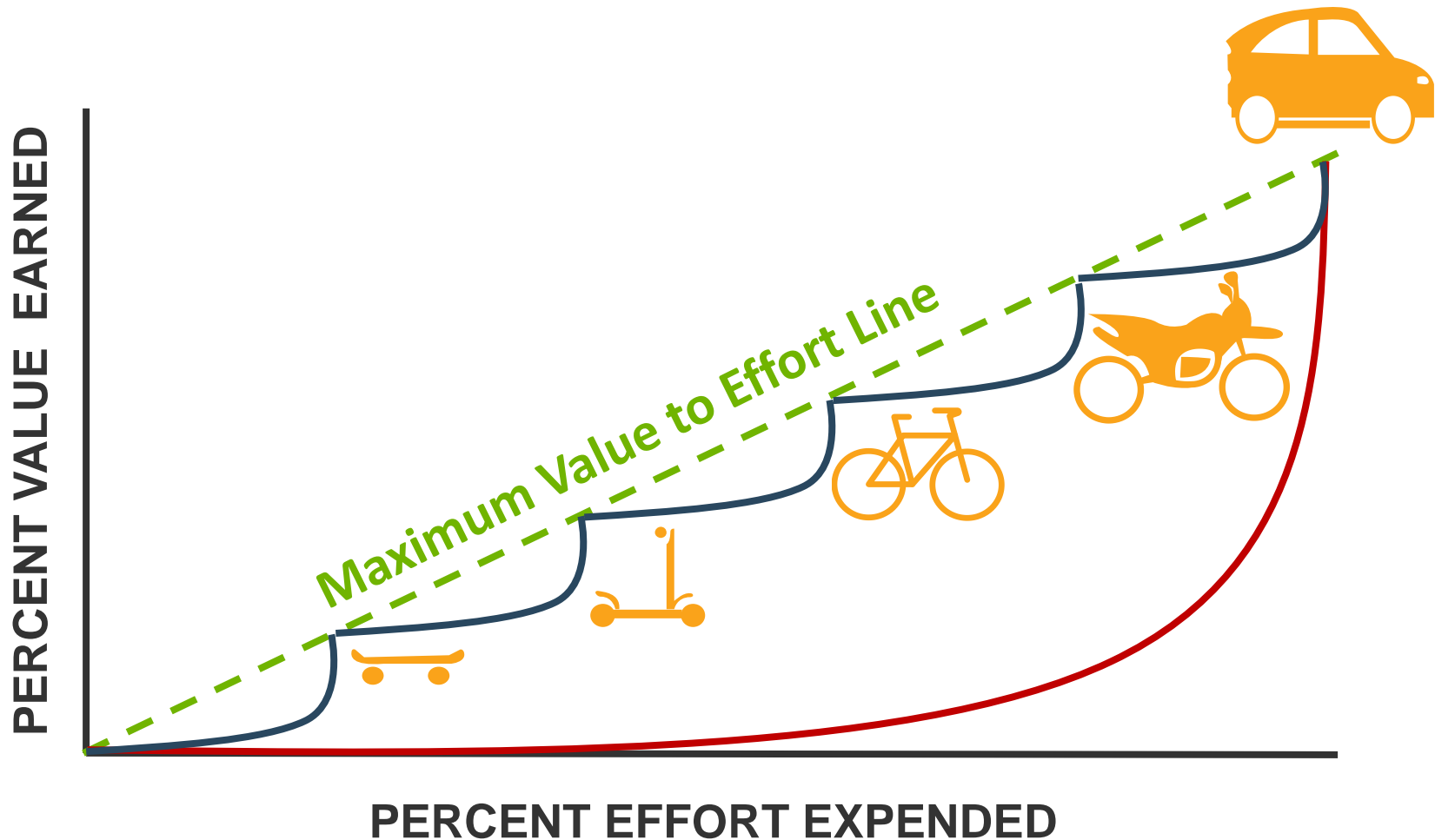


Like This

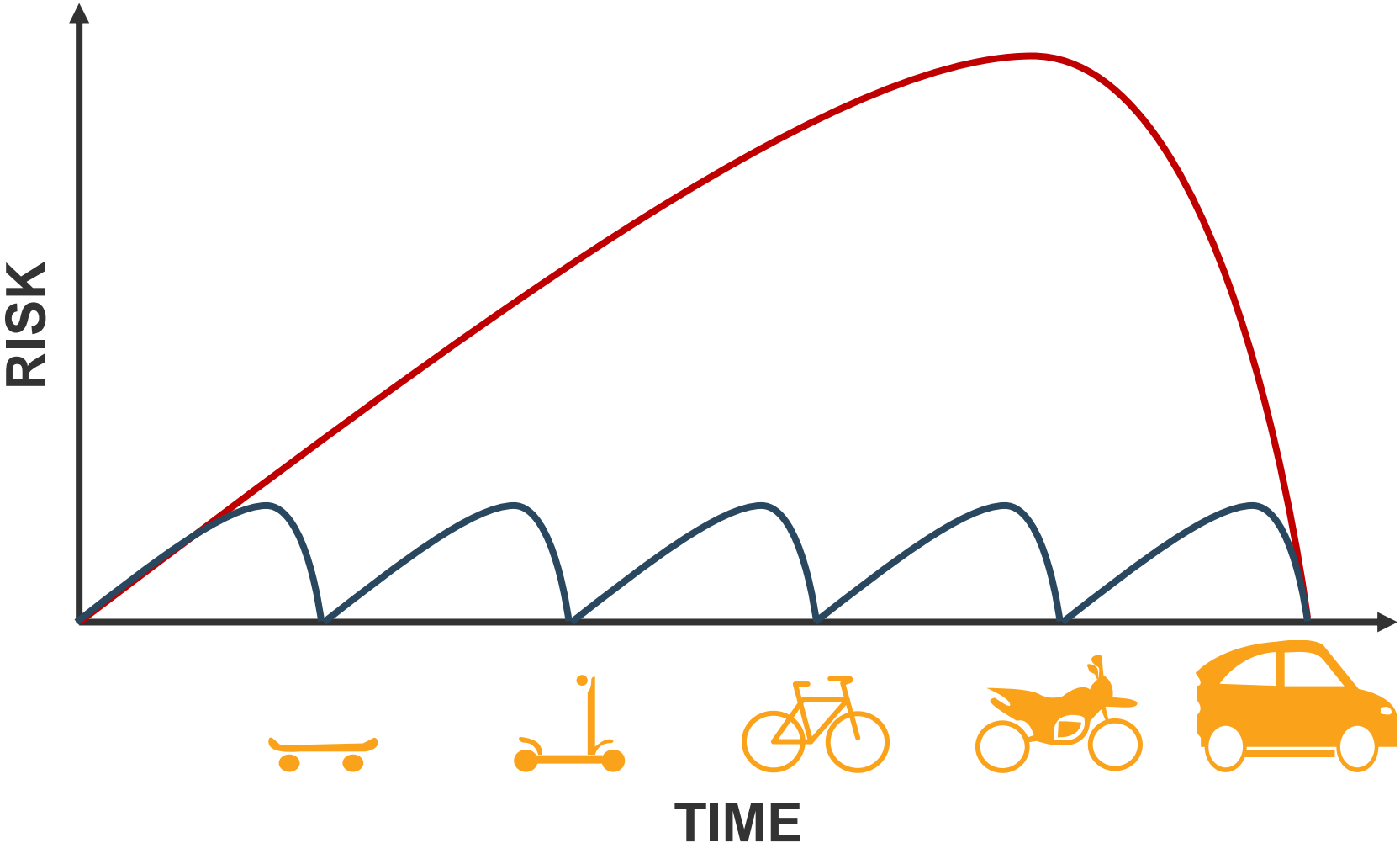


Source: SunTrust Bank, 2014-2017

Percent Completion vs. Value Earned



Risk Accumulation Over Time



4. Teams Must Embrace Change

Stability Inhibits Change

Processes

Hierarchies

Culture

Policies

Compliance

Legal

Funding

Controls

Regulations

Security

Systems

Approvals

And many more...

Embracing Business Agility

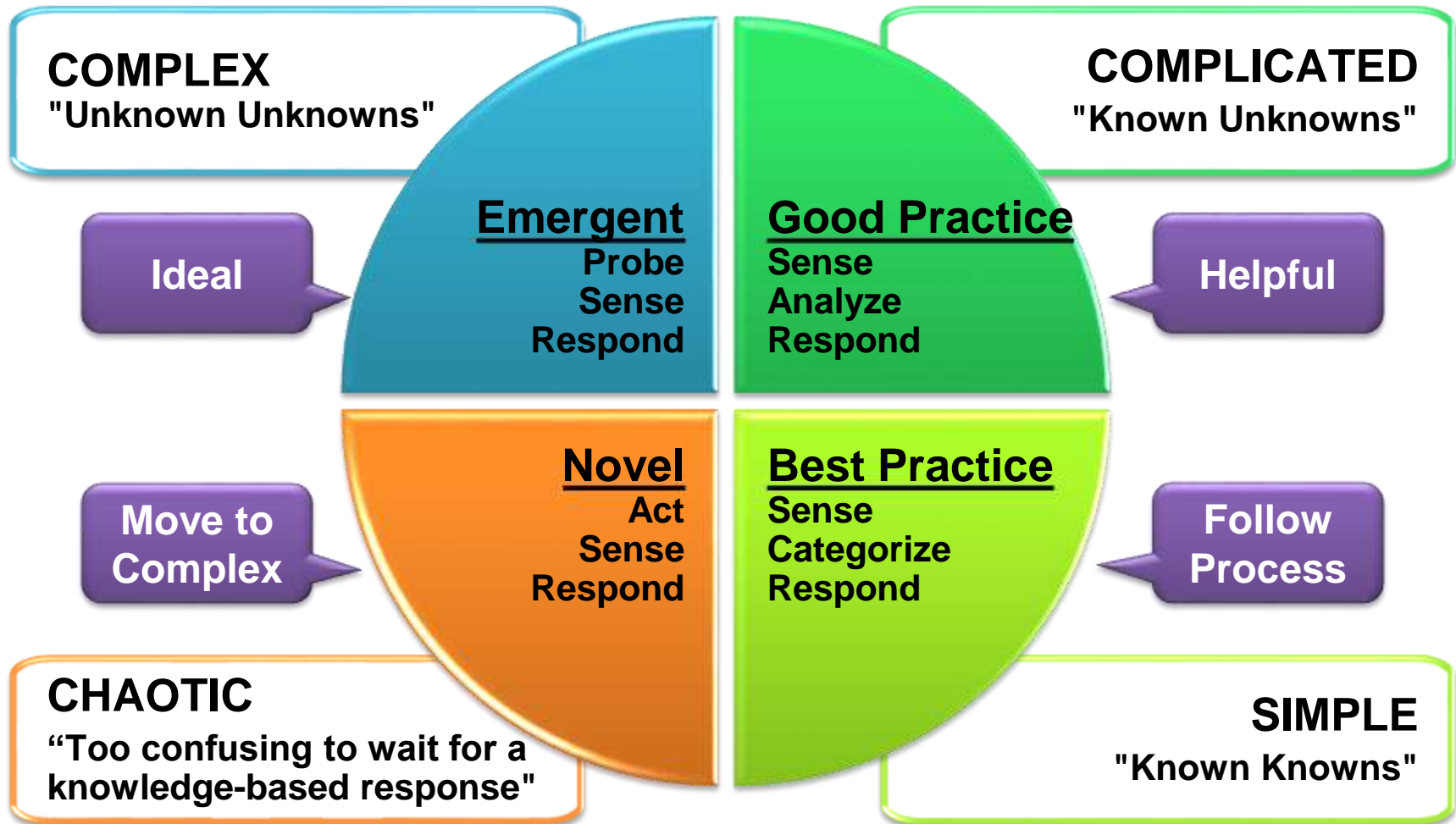
Deliver Value Quickly



Respond Rapidly To Change.



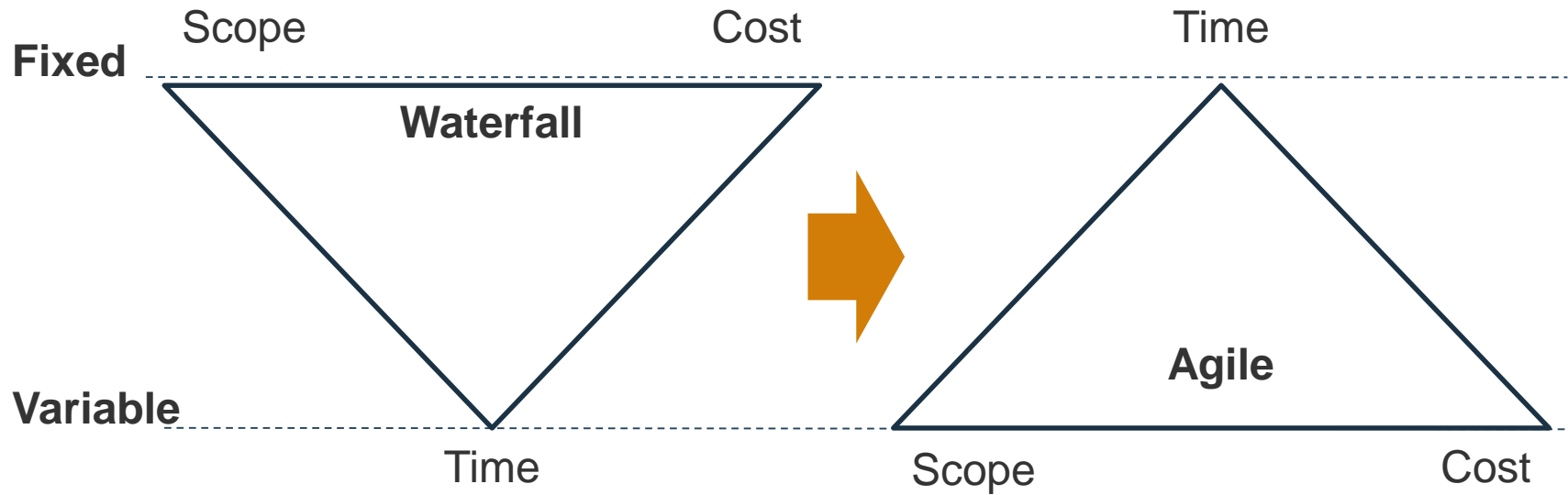
Cynefin Framework: Where More Iterations Help



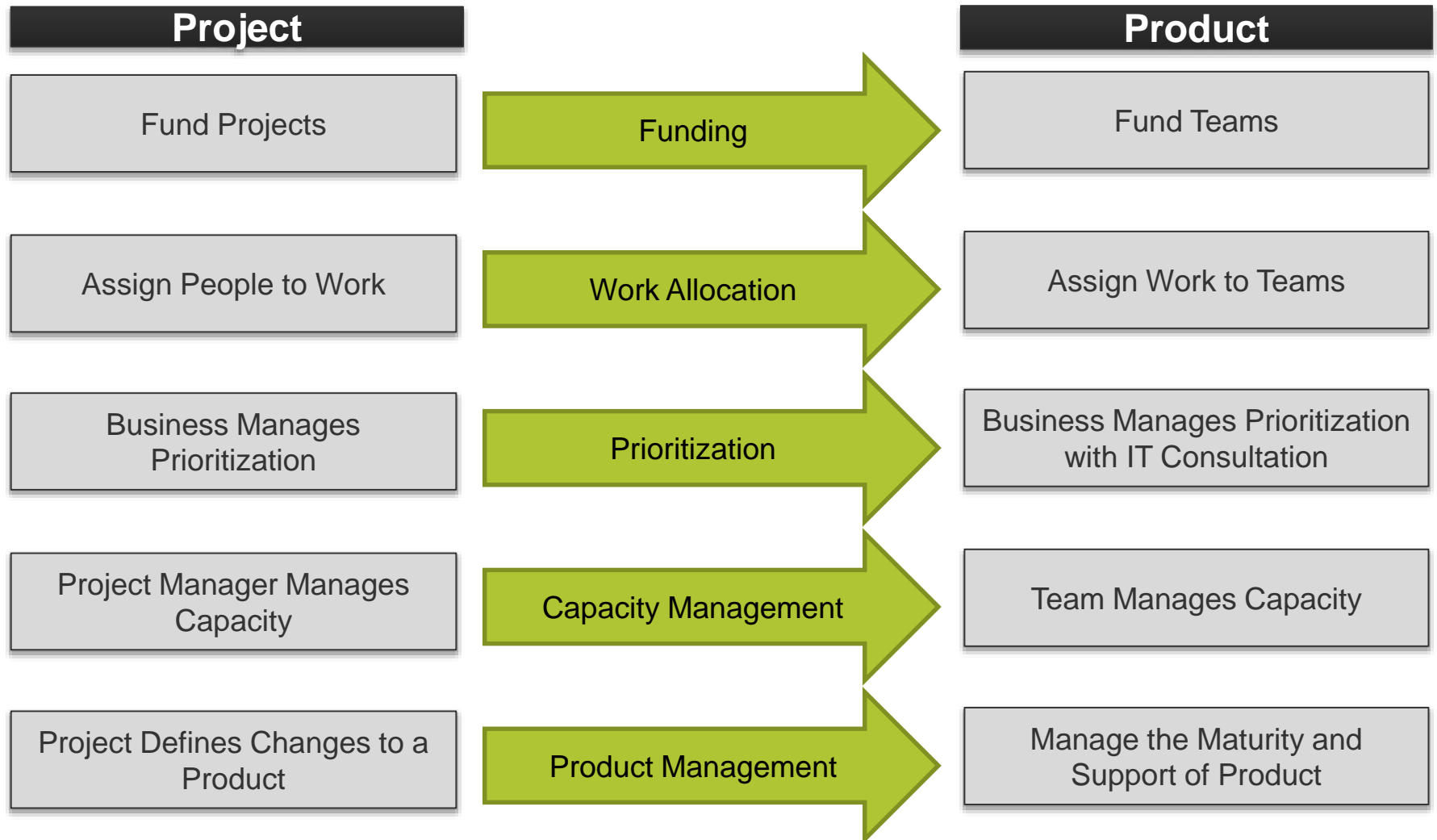
Source: Cynefin (KUN-iv-in) https://en.wikipedia.org/wiki/Cynefin_framework

5. Transition from Projects to Products

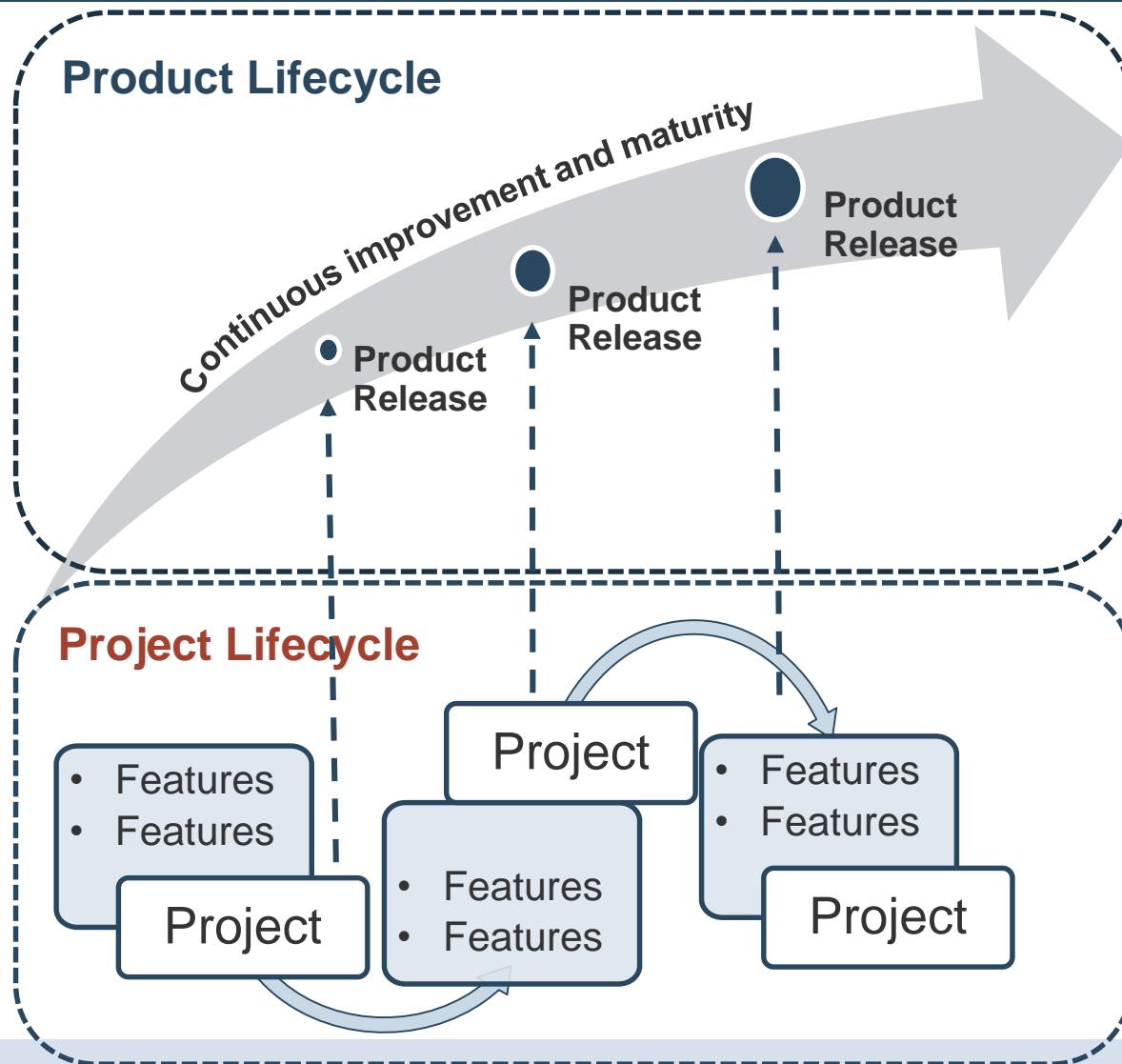
Transitioning to an Agile Mindset



Shifting from Project Centric to Product Centric

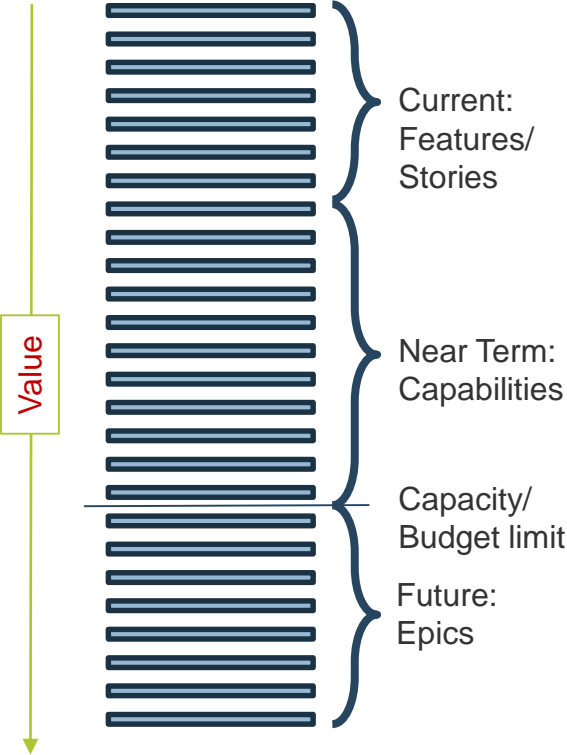


How Projects Impact Product Delivery

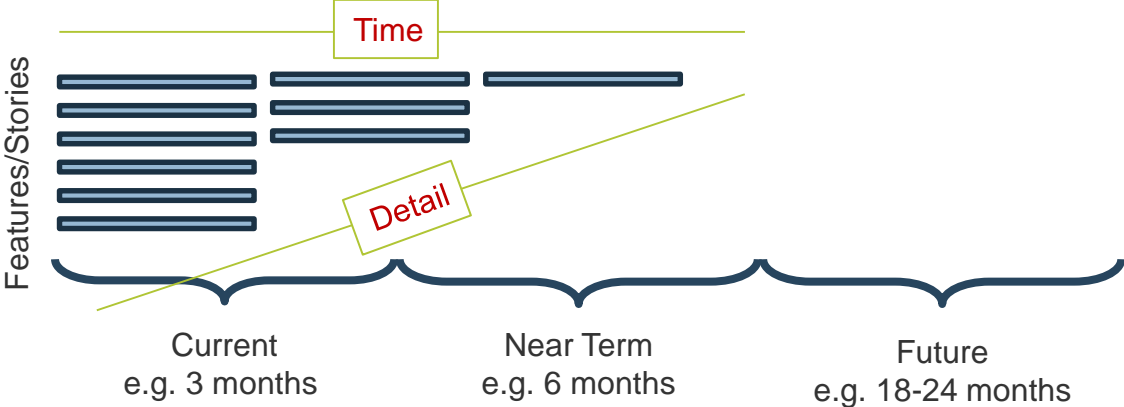


Backlogs are NOT Roadmaps

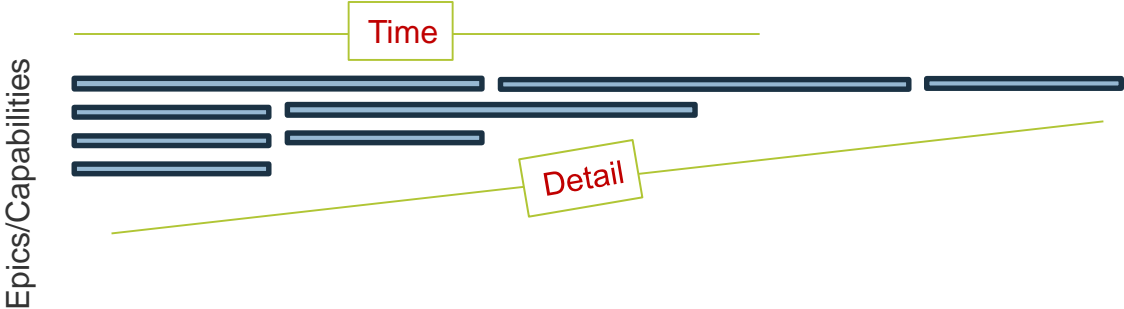
Product Backlog



Product Roadmap

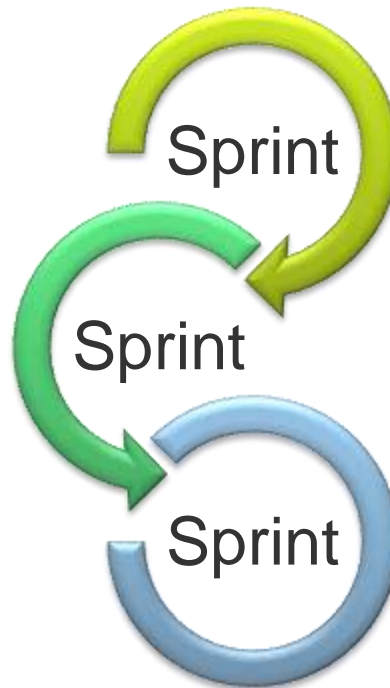


Product Family/Portfolio Roadmap



6. A Hybrid Approach is Often Best

Hybrid Agile: 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.

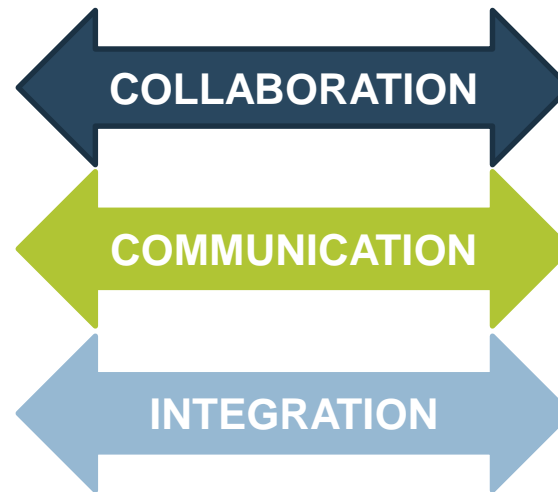
7. DevOps Isn't Automation

What is 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.

Keys to Successful DevOps

Monitoring

- Manage throughput
- Handoffs and checkpoints
- Continuous improvement

Automation

- Regression and load testing
- Deployments
- Configuration management

Integration

- End to End teammate participation
- Knowledge management
- Roadmaps and backlog refinement

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

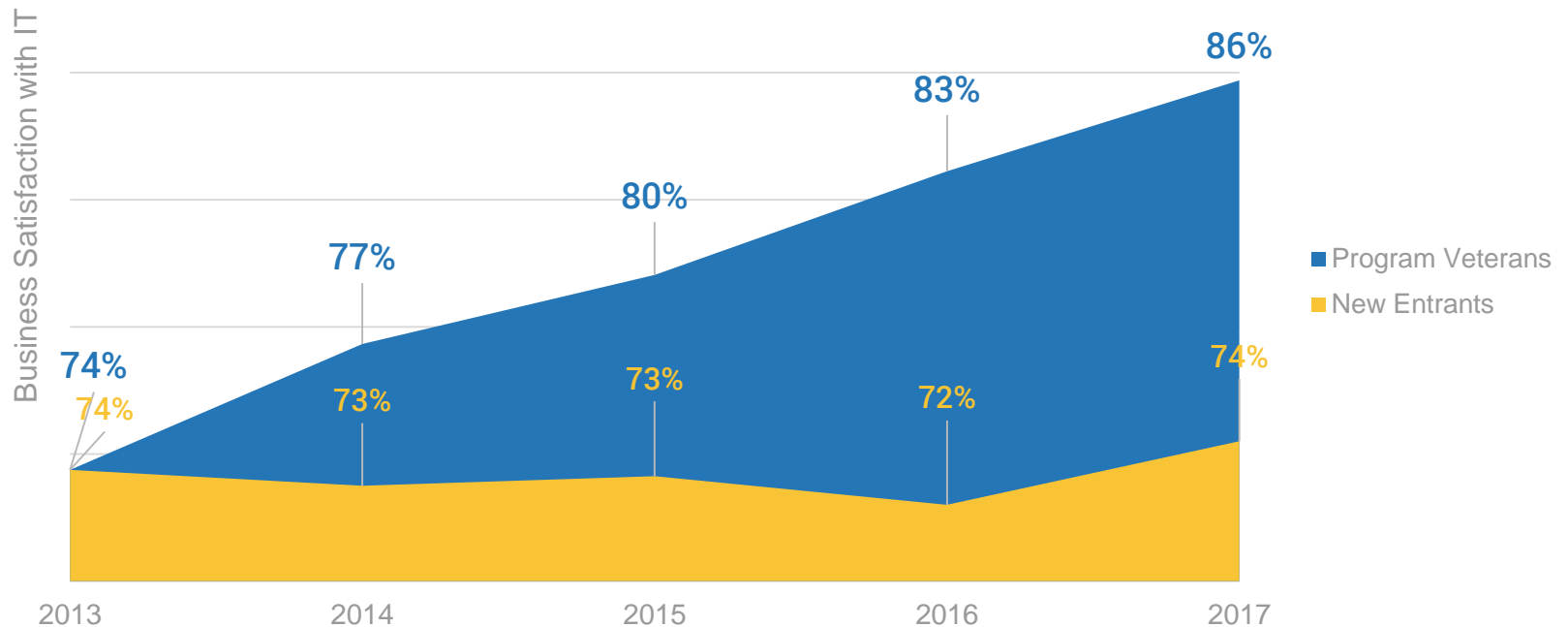
05 A STEP BY STEP PROGRAM TO

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

The Agile Manifesto minus the redundancy, practices, and platitudes

Principles of the Agile Manifesto

1. Our highest priority is to satisfy the customer through early and continuous delivery of ~~valuable software~~ VALUE.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Business people and developers must work together daily throughout the project.
4. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
5. The best architectures, requirements, and designs emerge from self-organizing teams.

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.

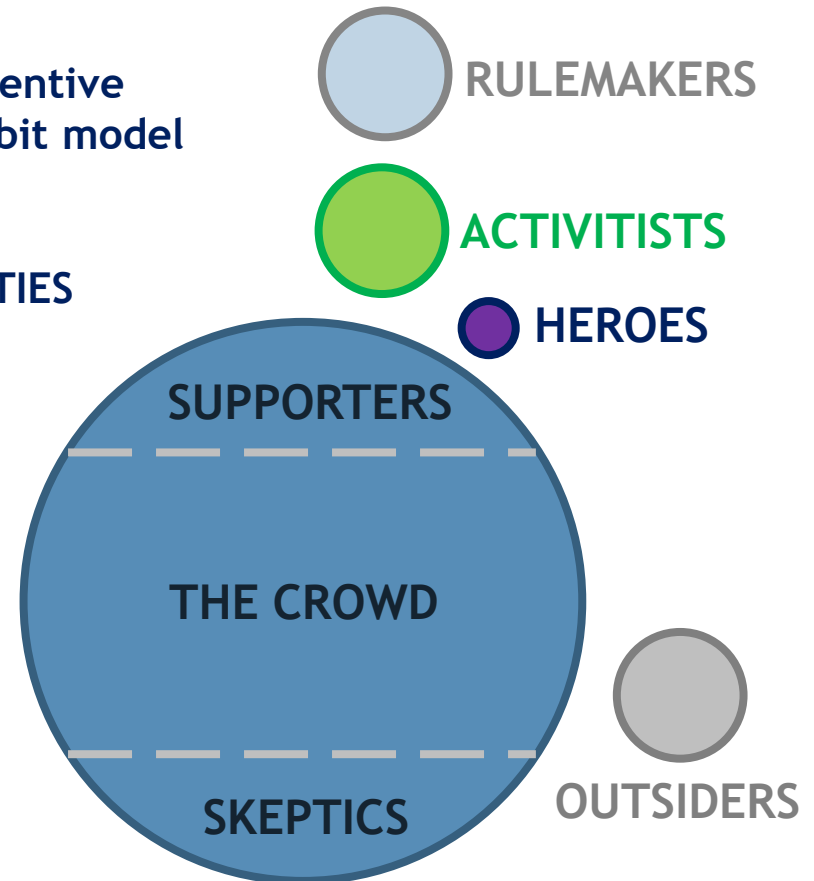


Don't let your organization get carried away with success

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.

Framework for Cultural Change

1. RULEMAKERS give PERMISSION and incentive to **ACTIVISTS** and SUPPORTERS to exhibit model behaviors.
2. **ACTIVISTS** work to create OPPORTUNITIES for SUPPORTERS to become **HEROES**.
3. HERO STORIES are shared with SUPPORTERS and THE CROWD to give energy to the movement.
2. Real-world results and evidence from **OUTSIDERS** are shared with **SKEPTICS** as **PROOF** that this cultural movement is the more valid model for the future.



So where do the problems start?

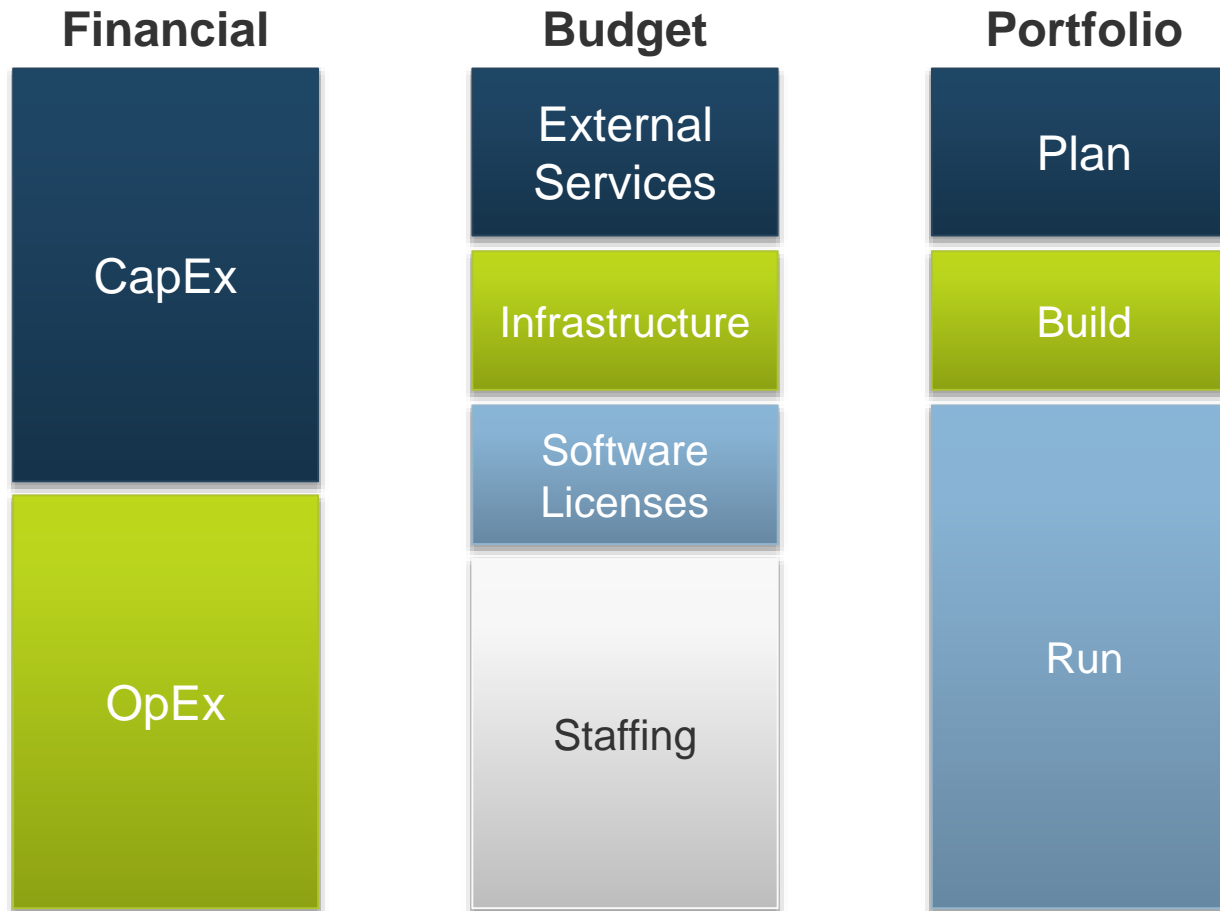


“Most IT funding depends on one-time expenditures or capital-funding mechanisms that are based on building construction-funding models predicated on a life expectancy of 20 years or more.

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

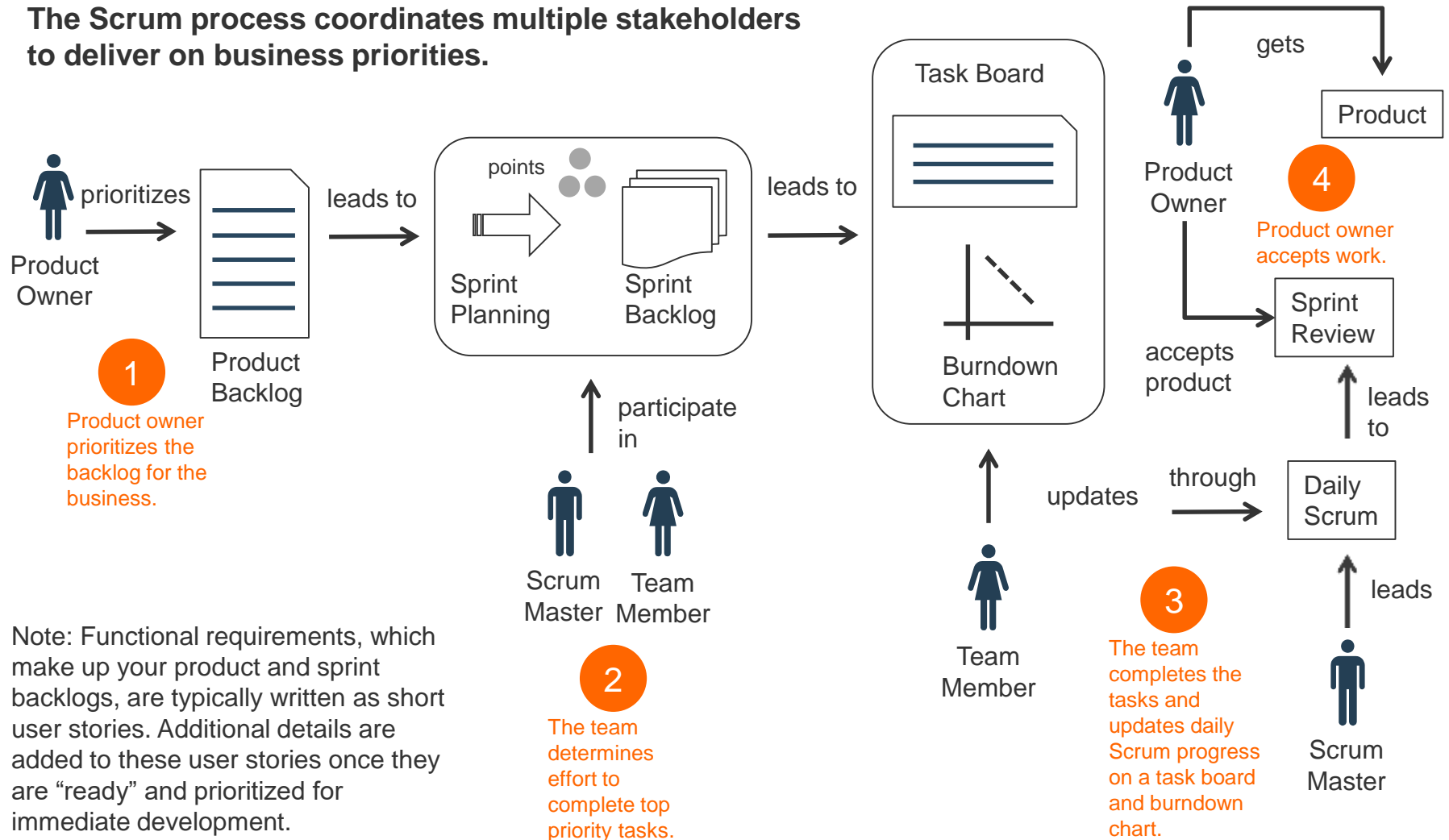
– Educause

Funding: Round up the Usual Suspects



Understand the Scrum process

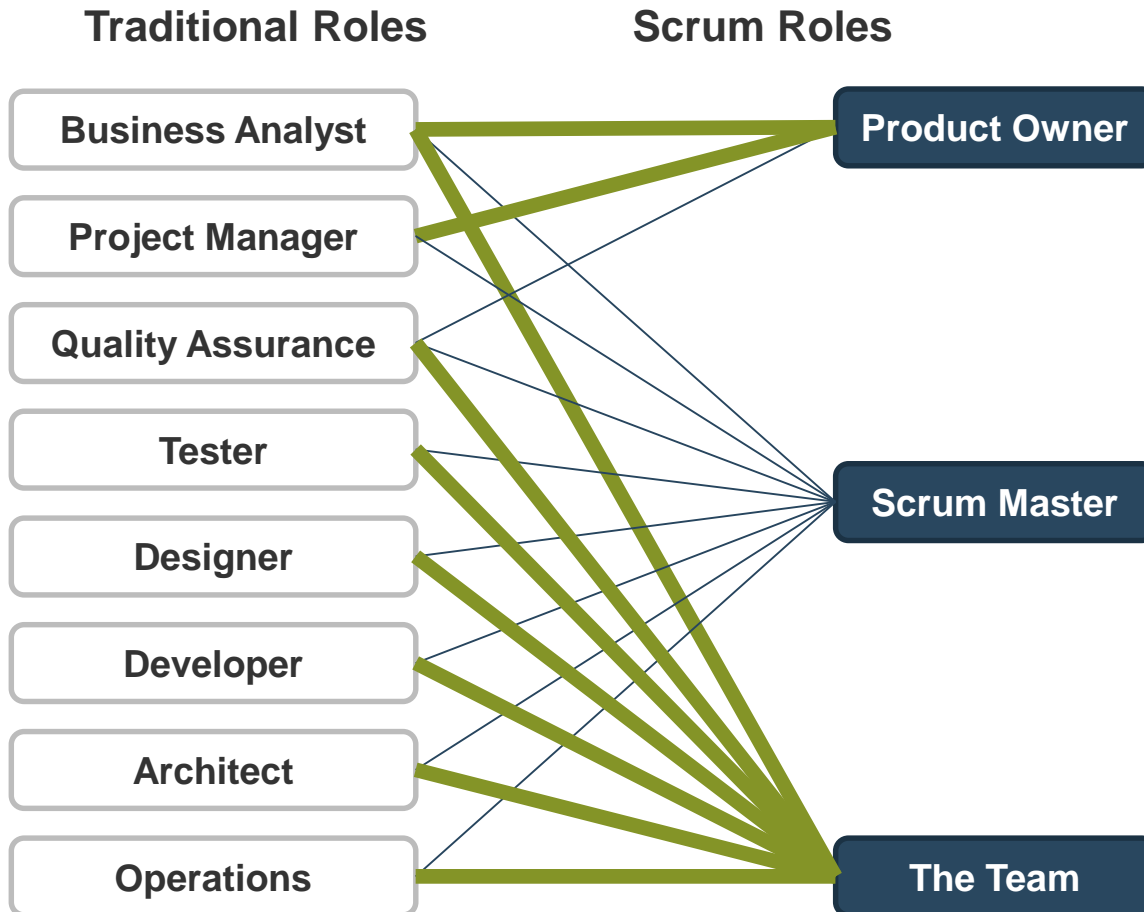
The Scrum process coordinates multiple stakeholders to deliver on business priorities.



Note: Functional requirements, which make up your product and sprint backlogs, are typically written as short user stories. Additional details are added to these user stories once they are “ready” and prioritized for immediate development.

Traditional roles translate to those in Scrum

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

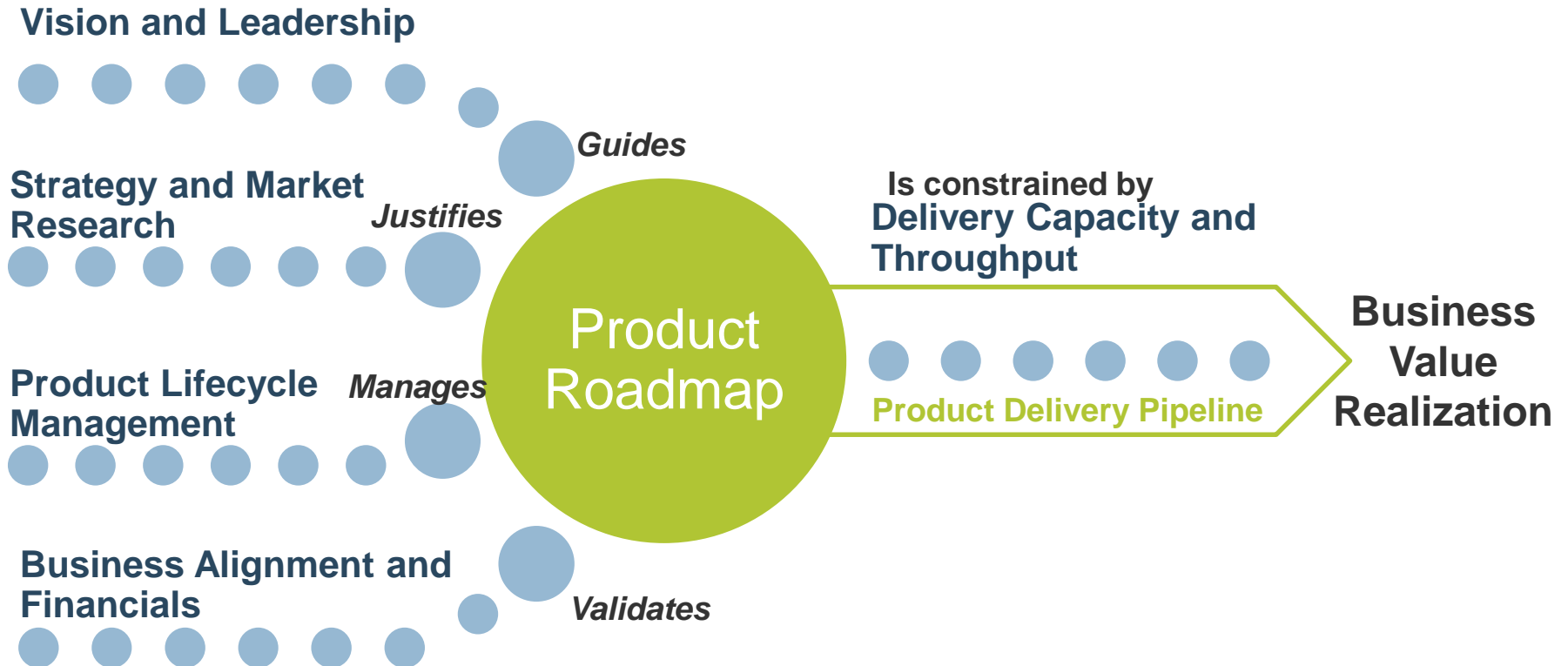


Legend	
	Most likely transition
	Possible options

Info-Tech Insight

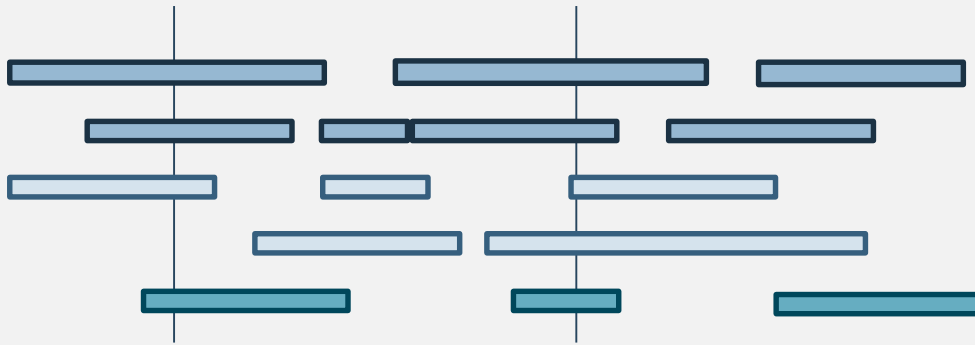
- Be aware of conflicting interests
- Rotate Scrum Masters
- Keep the team size to 5-9 members

Product Roadmaps are Key to Product Delivery



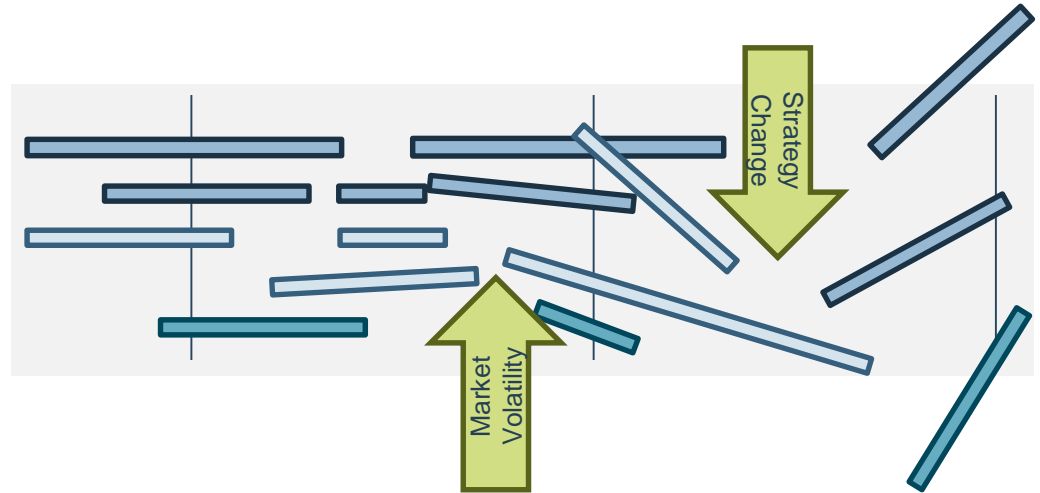
Adapted From: [Roman Pichler, 2014](#)

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?***

Focus on the Right Opportunities



“Pushing on a
Rope”

Avoid these.



“Pushing on a
Tank”

Break up these.



“Pushing on a
Swinging Door”

Find these!

Source: SunTrust Bank, 2014-2017