



Scrum.org
The Home of Scrum

Professional Scrum PRODUCT OWNER



 @ScrumDotOrg

Luc St-Laurent



**Helping people and teams
solve complex problems.**

*“If you haven’t found it yet, keep looking.
Don’t settle. As with all matters of the
heart, you’ll know when you find it.”*

- Steve Jobs

1

Introductions

Agenda

- Agile Product Management
- Value-Driven Development
- Scrum Theory & Empiricism
- The Scrum Framework
- Product Backlog Management
- Releases and Forecasting

With joyful exercises along the way!

Professional Scrum at Scrum.org

www.scrum.org/courses



Scrum Team Members
Agile Leaders
Stakeholders



Scrum Masters
Scrum Team Members



Product Owners
Scrum Masters



Agile Leaders
Scrum Masters
Product Owners



Scrum Masters
Scrum Team Members



Scrum Masters
Scrum Team Members
Agile Leaders



Scrum Team Members
Developing Software



Experienced Scrum
Masters



Experienced Product
Owners



Experienced
Practitioners
Product Owners
Agile Leaders



Product Owners
Scrum Masters
UX Professionals



Scrum Masters
Scrum Team Members
Agile Leaders

Professional Scrum Competencies


www.scrum.org/professional-scrum-competencies

The Professional Scrum Competencies help guide an individual's personal development with Scrum.






Benefit from a common understanding of the competencies and focus areas to evaluate and balance your team's proficiencies based on your unique needs.

See how all Scrum.org courses map to the competencies and focus areas by visiting:

www.scrum.org/courses/professional-scrum-training-competency-mapping



PSPO

	 Understanding and Applying the Scrum Framework	 Developing People and Teams
	<ul style="list-style-type: none"> ✓ Empiricism ✓ Scrum Values ✓ Roles ✓ Events ✓ Artifacts ✓ Done ✓ Scaling 	<ul style="list-style-type: none"> Self-Organizing Teams ✓ Facilitation Leadership Styles Coaching & Mentoring ✓ Teaching
	 Developing & Delivering Products Professionally	 Evolving the Agile Organization
 Managing Products with Agility	<ul style="list-style-type: none"> ✓+ Emergent Software Development ✓ Managing Technical Risk Continuous Quality Continuous Integration Continuous Delivery Optimizing Flow 	<ul style="list-style-type: none"> Organizational Design & Culture Portfolio Planning ✓+ Evidence-Based Management™

✓ The Focus Area is covered in the class

✓+ The Focus Area has deep coverage in the class

Professional Scrum Product Owner Course

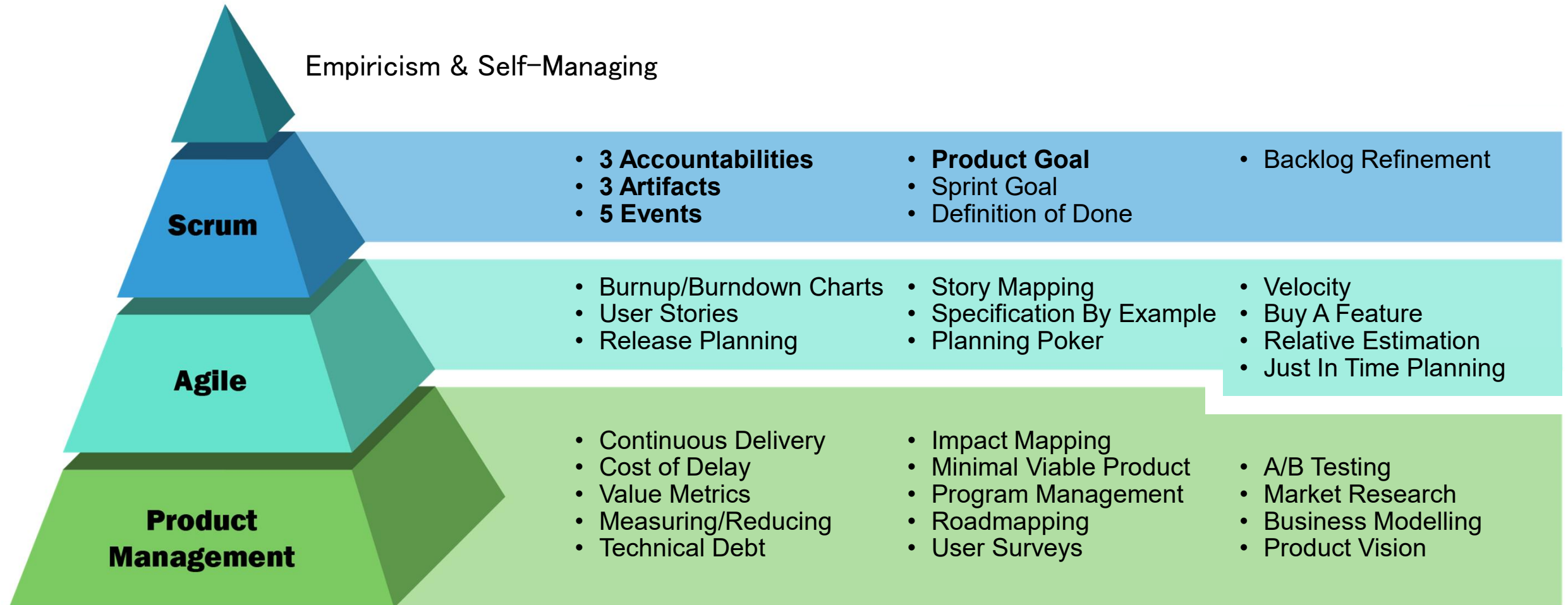
PURPOSE

- Teaches how to wring more value out of a product using agile product development with the Scrum framework.
- Understand the application of Scrum theory and principles to improve product management.

AUDIENCE

- For those responsible for the success of a software product or service by optimizing its value.
- *Ideally, attendees have passed the Scrum Open and the Product Owner Open assessments.*

Scrum Is Complemented by Many Practices



... and many, many more.

“Someone’s sitting in the shade today because someone planted a tree a long time ago.”

- Warren Buffett

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Agile Product Management

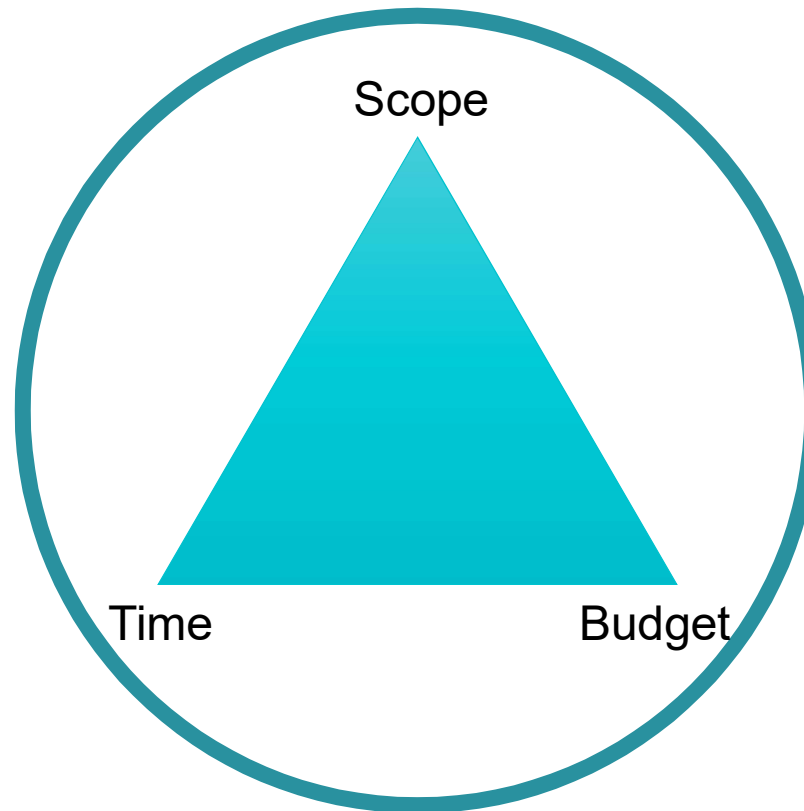
Product Owners Have a Product Mindset

Product Mindset Driven by outcome

Success *continuously* driven by *business metrics* outside in:

- User adoption/retention
- Revenue
- Cost savings per feature

Leads to less waste, more creativity, and more releases.



Project Mindset Driven by output

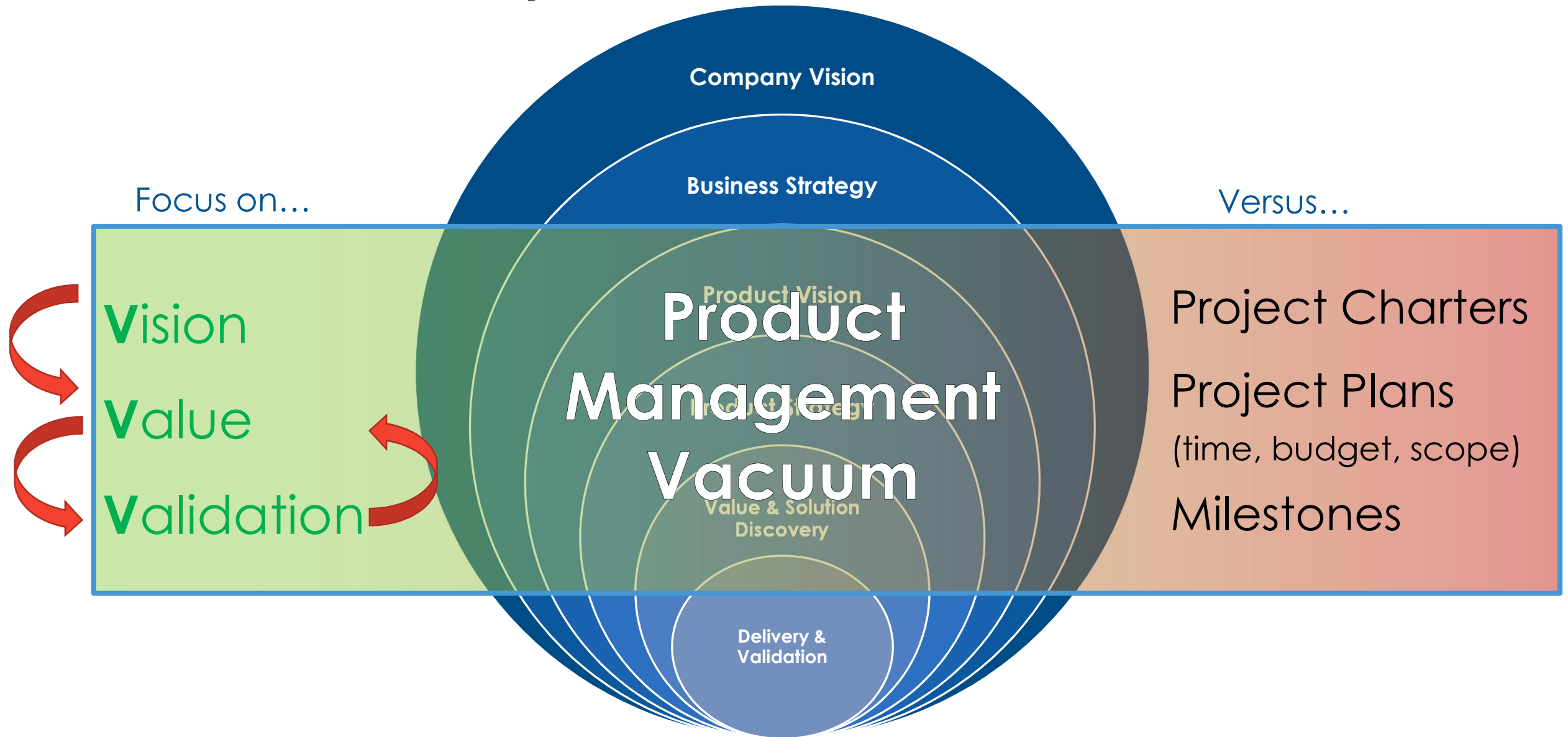
Success *upfront* defined inside out:

- Scope
- Time
- Budget

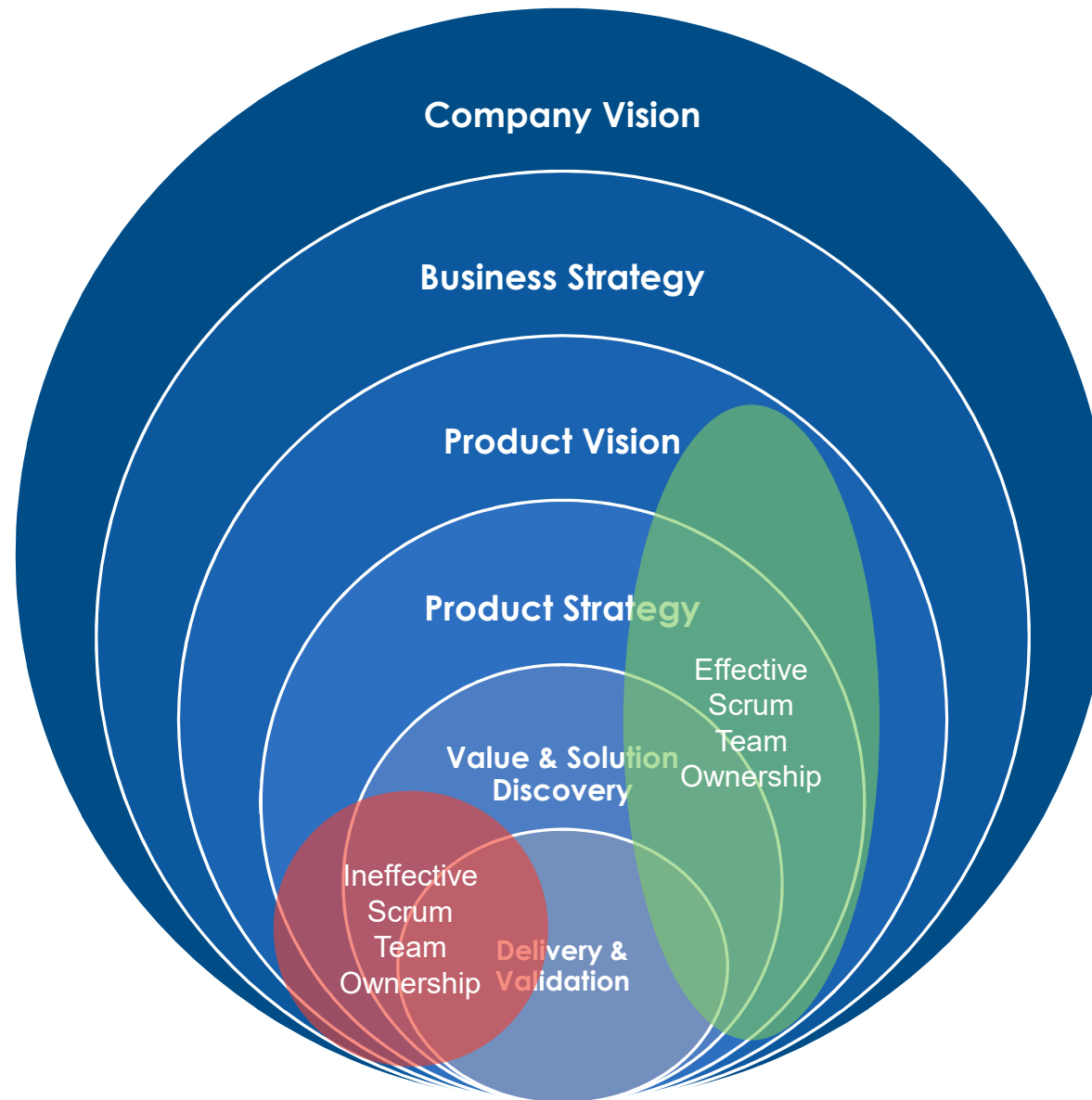
Leads to less business involvement, more task management.

On time, within scope, and within budget doesn't automatically equal product success

A Product Mindset requires a different focus

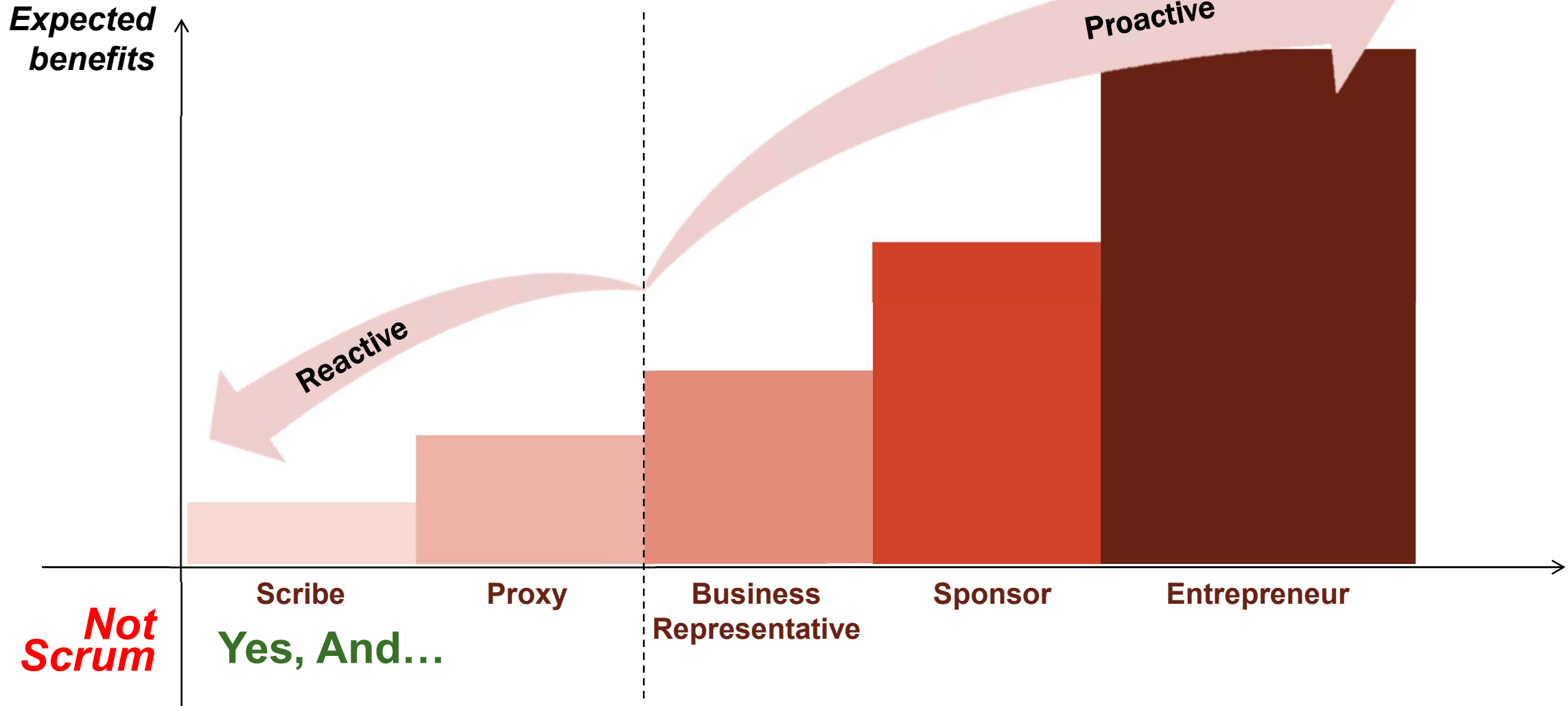


Product Development is a Strategic & Tactical Team Engagement



More Product 'Ownership' Leads to More Effectiveness

We have a product owner who is:



**Not
Scrum**

Yes, And...

There Is Always a Product

There is always a product.

Every product has a customer who is a:

Every product has a producer who receives a core benefit through:

- It may not always be obvious, but it is there, and it needs to be identified.

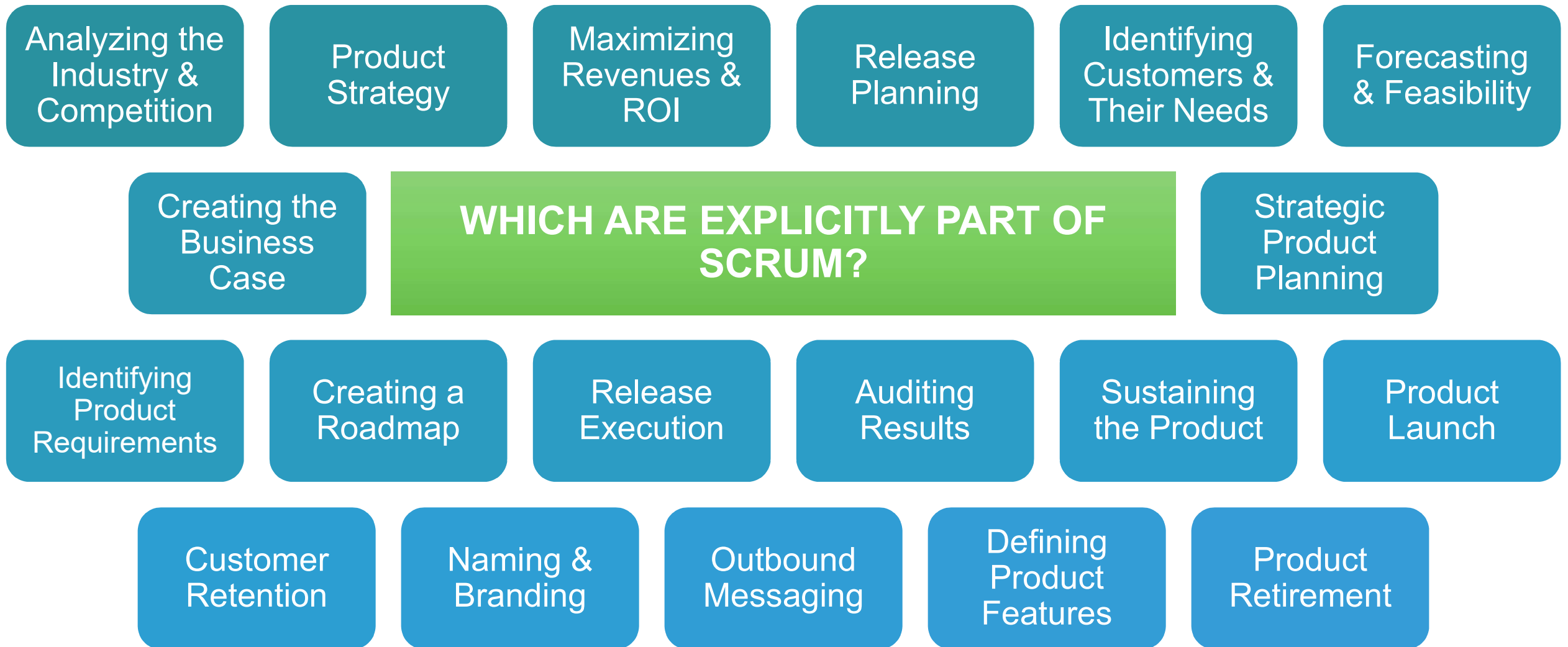
- **User**: Anyone who gets value from your product, whether or not they pay for it
- **Buyer**: Anyone who pays for your product, whether or not they use it
- **Both**

- Revenue increase
- Cost decrease or avoidance
- Societal benefit

I see products everywhere!

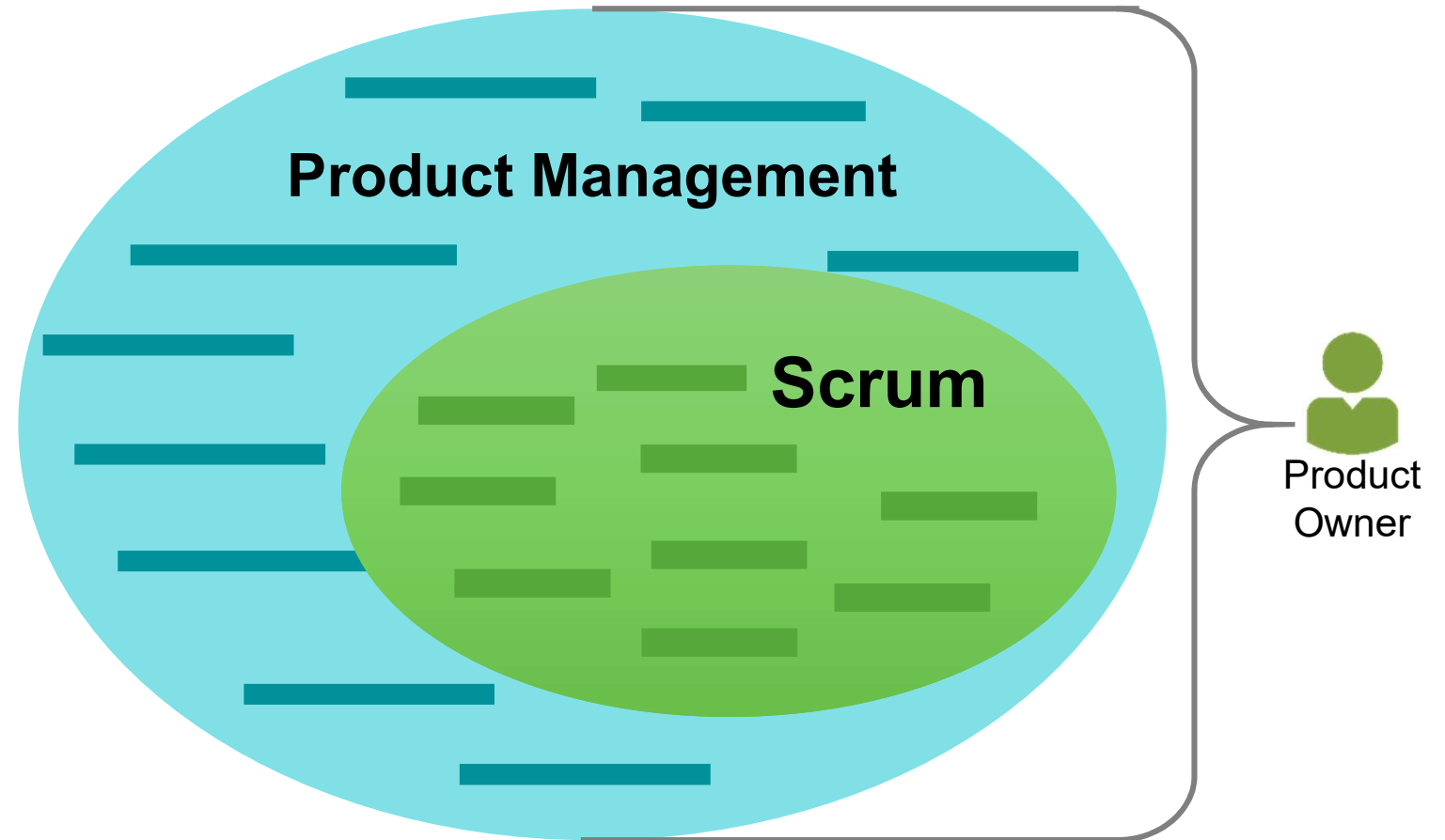


Product Management Encapsulates Many Things



Effective Product Owner Focuses on Product Management

- Approaches the product with a holistic product management mindset
- Creates shared understanding with *vision*, *product goal* and *value*
- Leverages Scrum for frequent product *validation* through inspection & adaptation

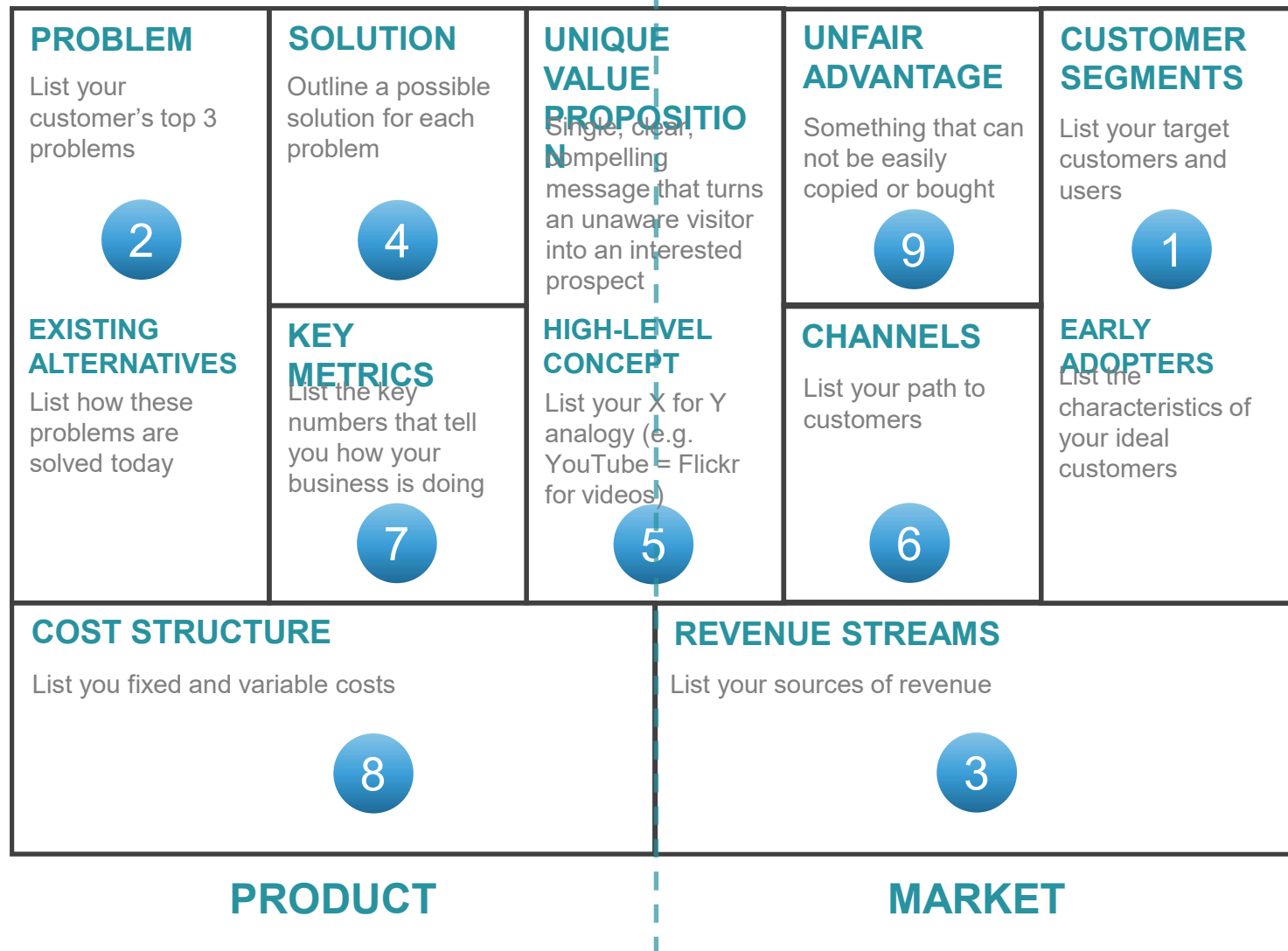


Business Model Canvas



KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
<ul style="list-style-type: none"> Who are our partners? Who are our key suppliers? Which key resources are we acquiring from our partners? Which key activities do partners perform? <p>MOTIVATION FOR PARTNERSHIP <i>Optimization and economy</i> <i>Reduction of risk and uncertainty</i> <i>Acquisition of particular resources and activities</i></p> <p>8</p>	<ul style="list-style-type: none"> What key activities do our value propositions require? Our distribution channels? Customer relationships? Revenue streams? <p>CATEGORIES 7 <i>Production</i> <i>Problem Solving</i> <i>Platform/Network</i></p> <p>✓</p> <hr/> <p>KEY RESOURCES</p> <ul style="list-style-type: none"> What key resources do our value propositions require? Our distribution channels? Customer relationships? Revenue streams? <p>6</p> <p>TYPES OF RESOURCES <i>Physical</i> <i>Intellectual (brand, patents, copyrights, data)</i> <i>Human</i> <i>Financial</i></p>	<ul style="list-style-type: none"> What value do we deliver to the customer? Which one of our customers' problems are we helping to solve? What bundles of products and services are we offering to each segment? Which customer needs are we satisfying? What is the minimum viable product? <p>CATEGORIES 2 <i>Newness</i> <i>Performance</i> <i>Customization</i> <i>"Getting the Job Done"</i> <i>Design</i> <i>Brand/Status</i> <i>Price</i> <i>Cost Reduction</i> <i>Risk Reduction</i> <i>Accessibility</i> <i>Convenience/Usability</i></p>	<ul style="list-style-type: none"> How do we get, keep, and grow customers? Which customer relationships have we established? How are they integrated with the rest of our business model? How costly are they? <p>EXAMPLES 4 <i>Personal assistance</i> <i>Dedicated Personal Assistance</i> <i>Self-Service</i> <i>Automated Services</i> <i>Communities</i> <i>Co-Creation</i></p> <hr/> <p>CHANNELS</p> <ul style="list-style-type: none"> Through which channels do our customer segments want to be reached? How do other companies reach them now? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines? <p>3</p>	<ul style="list-style-type: none"> For whom are we creating value? Who are our most important customers? What are the customer archetypes? <p>1</p> <p><i>Mass Market</i> <i>Niche Market</i> <i>Segmented</i> <i>Diversified</i> <i>Multi-sided Platform</i></p> <hr/> <p>CHANNEL PHASES 1. Awareness - How do we raise awareness about our company's product and services? 2. Valuation - How do we help customers evaluate our organization's Value Proposition? 3. Purchase - How do we allow customers to purchase specific products and services? 4. Delivery - How do we deliver a Value Proposition to customers? 5. After Sales - How do we provide post-purchase customer support?</p>
COST STRUCTURE		REVENUE STREAMS		
<ul style="list-style-type: none"> What are the most important costs inherent to our business model? Which key resources are most expensive? Which key activities are most expensive? <p>9</p> <p>SAMPLE CHARACTERISTICS <i>Fixed Costs (salaries, rents, utilities)</i> <i>Variable Costs</i></p> <p>Economics of Scale <i>Economics of Scope</i></p> <p>IS YOUR BUSINESS MORE <i>Cost driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)</i> <i>Value Driven (focused on value creation, premium value proposition)</i></p>		<ul style="list-style-type: none"> For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues? <p>TYPES <i>Asset sale</i> <i>Usage fee</i> <i>Subscription fees</i> <i>Lending/Renting/Leasing</i> <i>Licensing</i> <i>Brokerage fees</i> <i>Advertising</i></p> <p>FIXED PRICING 5 <i>List Price</i> <i>Product feature dependent</i> <i>Customer Segment dependent</i> <i>Volume dependent</i></p> <p>DYNAMIC PRICING <i>Negotiation (bargaining)</i> <i>Yield Management</i> <i>Real-time-Market</i></p>		

Lean Canvas



- 1 Identify and describe main customer/buyer
Who are the early adopters?
- 2 List top 1 to 3 problems
What are the existing alternatives?
How do they solve the problems today?
- 3 Come up with revenue stream but keep it simple
What is the product worth to your clients?
- 4 List solutions for each problem
How will you deliver value?
- 5 Create your UVP, the underlying 'Why'
How will you get noticed?
- 6 Identify a couple of possible channels
How will you build a path to customers?
- 7 Identify key value metrics
How will you measure success?
- 8 Identify your costs and break-even point
How will you afford your initiative?
- 9 Something that cannot easily be copied or bought
How will you defend against competition?

Lean Canvas is adapted from The Business Model Canvas (<http://www.businessmodelgeneration.com>) and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License

Value Proposition Canvas



D Product & Services:

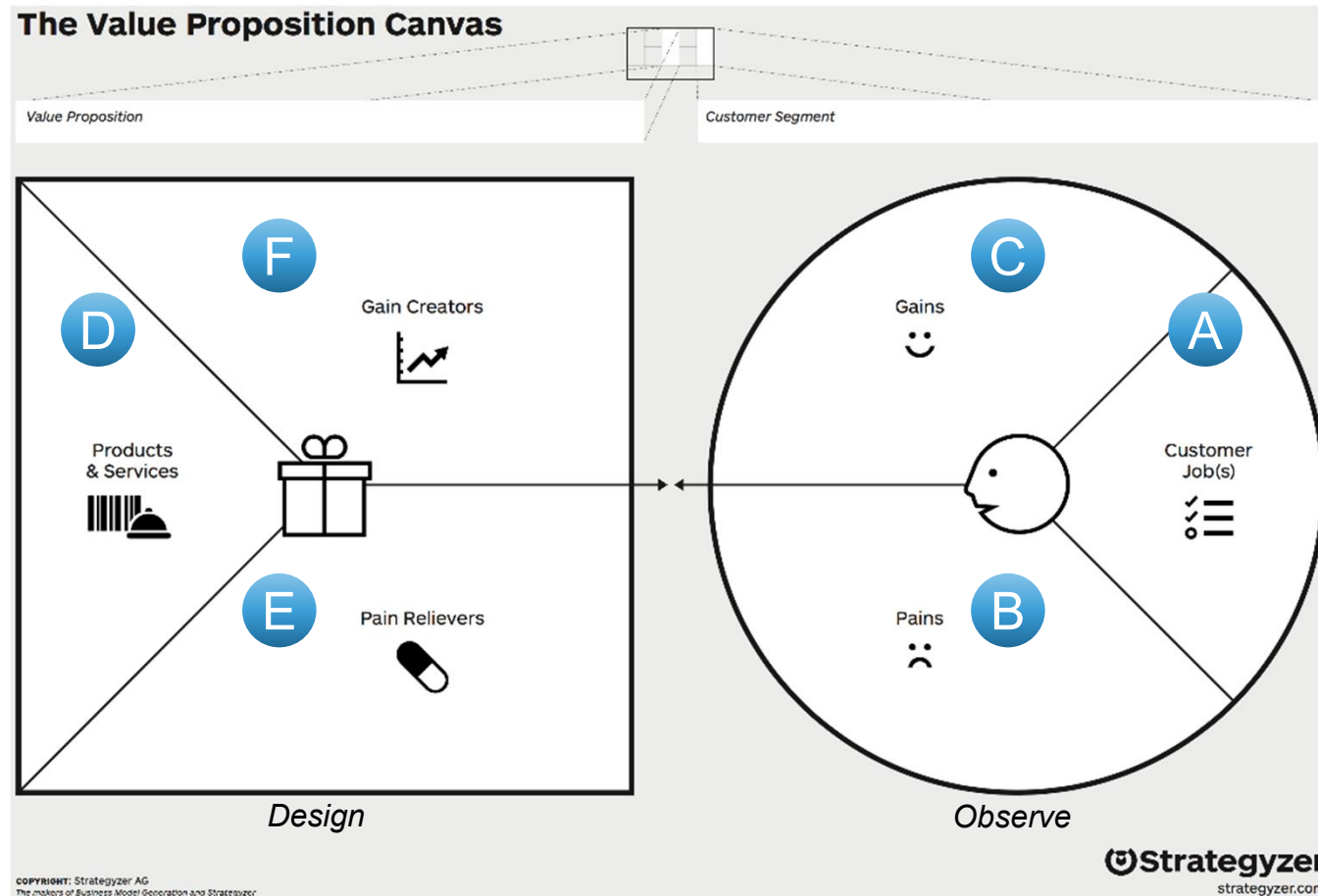
- Which specific products or services can we create to help this customer get their jobs (tasks) done?
- We do not need to fix it all, decide on one or two jobs that are the most important to address first.
- Is the customer the buyer, user or maybe a co-creator?

E Pain Relievers:

- Make your customer feel better?
- Produce Savings?
- Fix underperforming solutions?
- Eliminate risks your customers fear?

F Gain Creators:

- Produce outcomes your customer expects or even exceeds?
- Create saving which makes your customer happy?
- Make your customer's job life easier?
- Do something customers look for?



A Customer Job(s):

- What functional jobs are you helping your customer get done?
- What social jobs are you helping your customers get done?
- What emotional jobs are you helping your customer get done?
- What basic needs are you helping your customer satisfy?

B Pains:

- What makes your customer feel bad?
- What does your customer find too costly?
- How are current solutions underperforming for your customer?
- What are the main difficulties and challenges your customer encounter?

C Gains:

- What outcomes does your customer expect and what would go beyond his/her expectation?
- Which savings would make your customer happy?
- How do current solutions delight your customer?
- What could make your customer's job or life easier?

Exercise

Product Owner and Technology

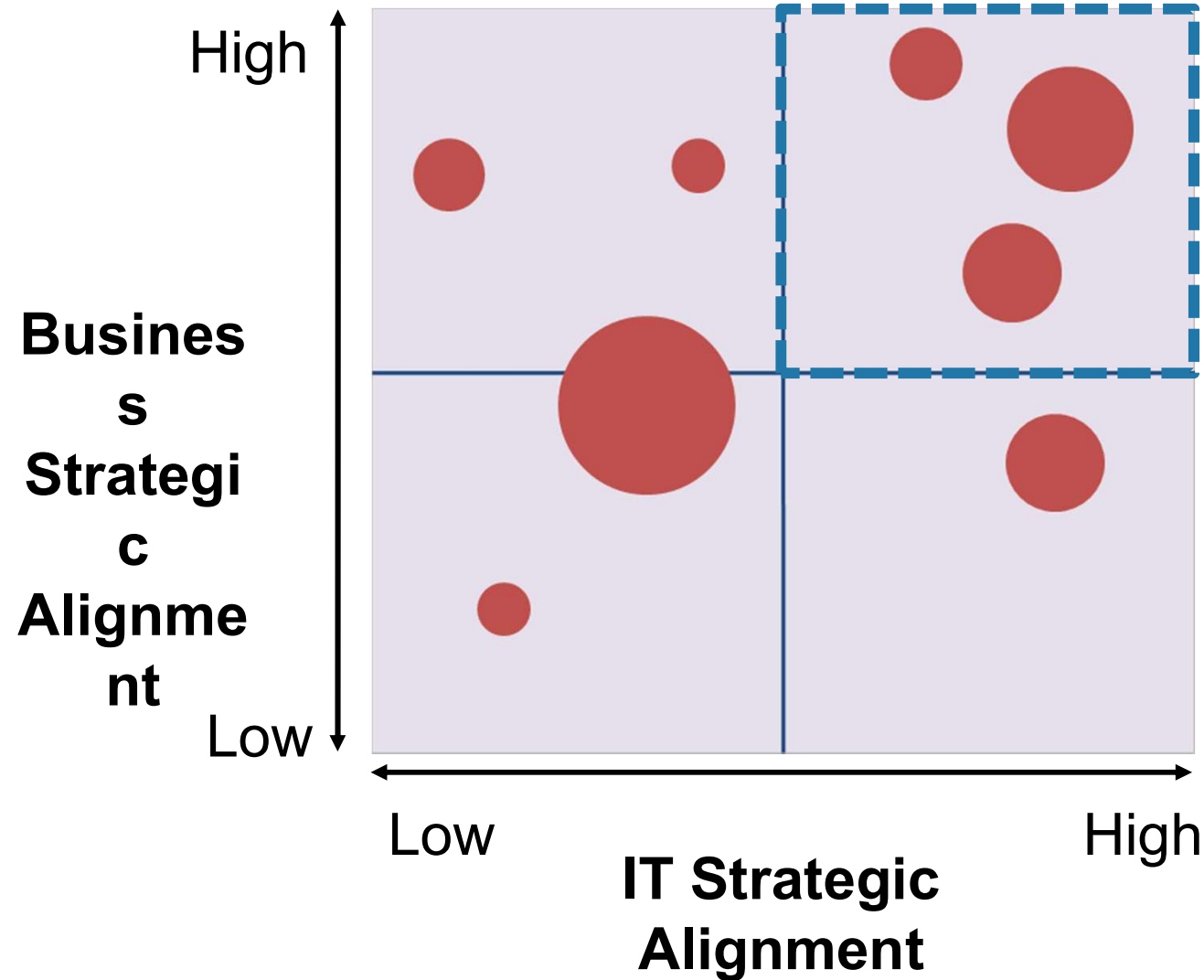
5

minutes

Should a Product Owner be technical?

PROS	CONS
Predict technical trends	Lose sight of business
Communication with developers	Too involved in solutions
Technical customer communication	Tactical, not strategic
Understand challenges & trade-offs	

Strategic Alignment Index



Highest benefits are most likely realized when building these products or features

Size of bubble = TCO

Total Cost of Ownership (TCO) and value are variables used in development prioritization.

Source: "Measuring the Business Value of Information Technology", Intel Press

Discontinuing Products Is Not What Kills You

Discontinuing a product is a healthy business decision (unless you rely on too few products)

- Apple Newton
- Apple iPod classic
- Google Glass
- Google Wave
- Google+
- iGoogle
- Google Reader
- Amazon Fire

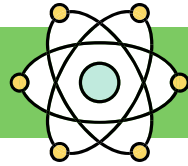


Agile Product Management Recommendations



TRY

- Try involving the whole Scrum Team early with value and validation
- Start learning and experimenting with early adopters
- Using the canvases to focus on customers needs, problems, or desires



FAVOR

- Making your business model assumptions explicit
- Seeing validation as ongoing – even after product delivery
- When defining product as components or suites, aligning toward consistent end user value



AVOID

- Building products without validating your most risky assumptions early on
- Building the canvases without team and stakeholder involvement
- Defining products around organizational structures

TAKE AWAY

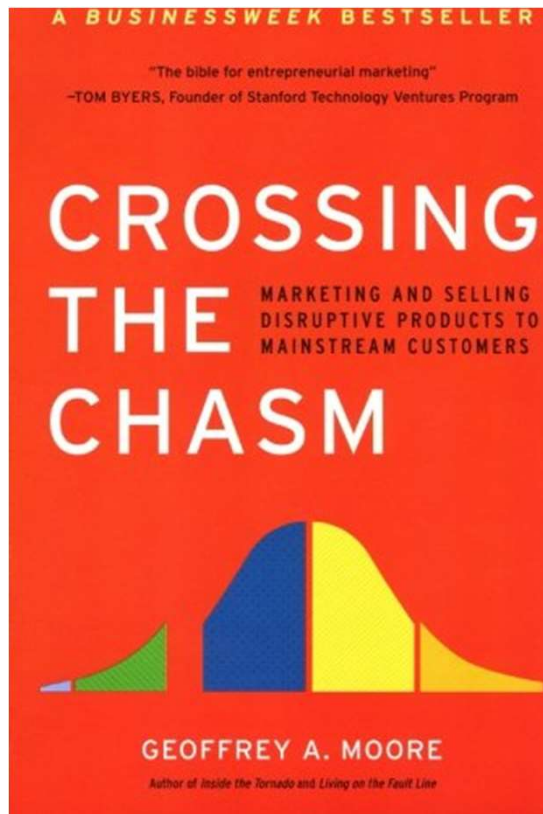
Agile Product Management

- Agility can be a competitive advantage for an organization.
- Product Management is an essential practice for Scrum Product Owners.
- Organizations should take on more of a Product Mindset over a Project Mindset.
- There are advantages to having a technical Product Owner in this Digital Age.
- Foundations of Product Management are an inspiring Product Vision, Strategy and entrepreneurial Mind-Set.

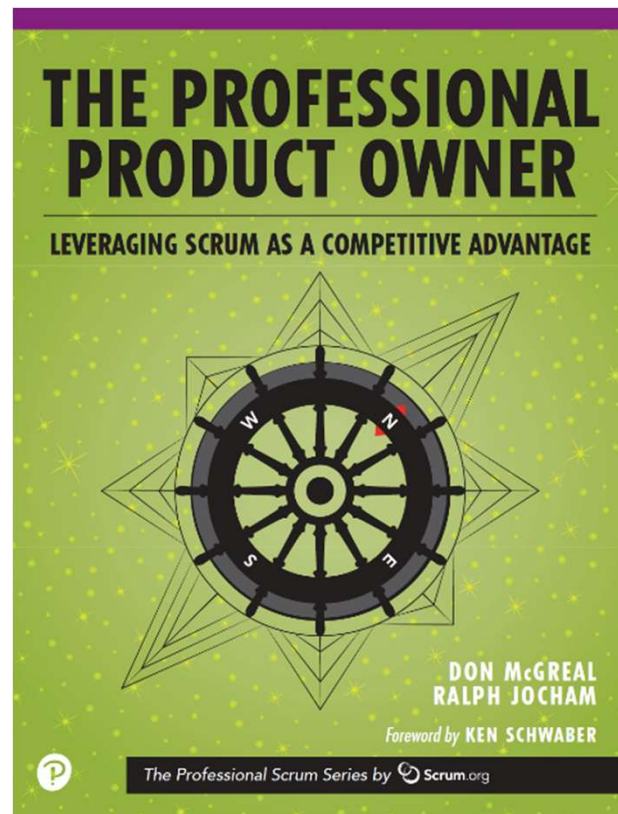


Suggested Reading

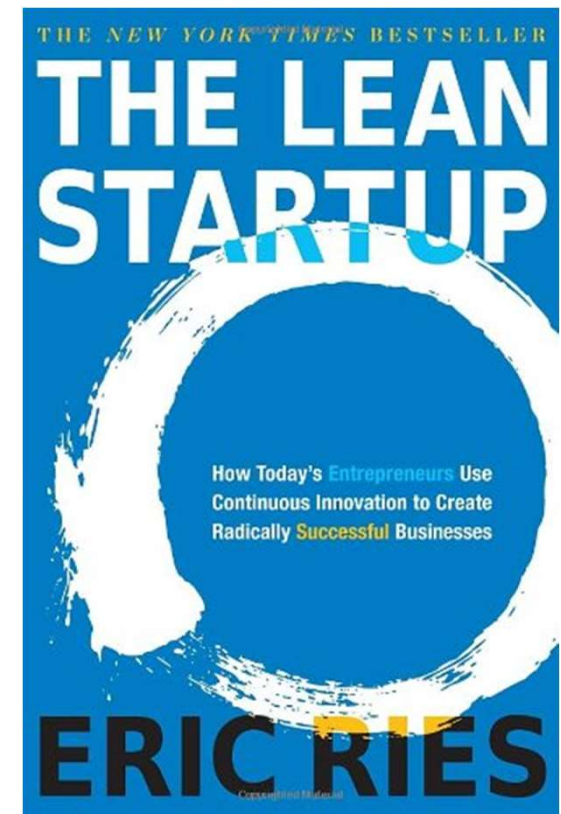
“Crossing the Chasm”
(Geoffrey Moore)



“The Professional Product Owner” (Don McGreal & Ralph Jocham)



“The Lean Startup”
(Eric Ries)



"Price is what you pay. Value is what you get."

- Warren Buffett

3

Value-Driven Development

For organizations, value is...

The benefit to the customer, represented in terms of **happiness**, that results from the use of a product or service.

The benefit to the organization, represented in **money** terms, that results from the use of a product or service.

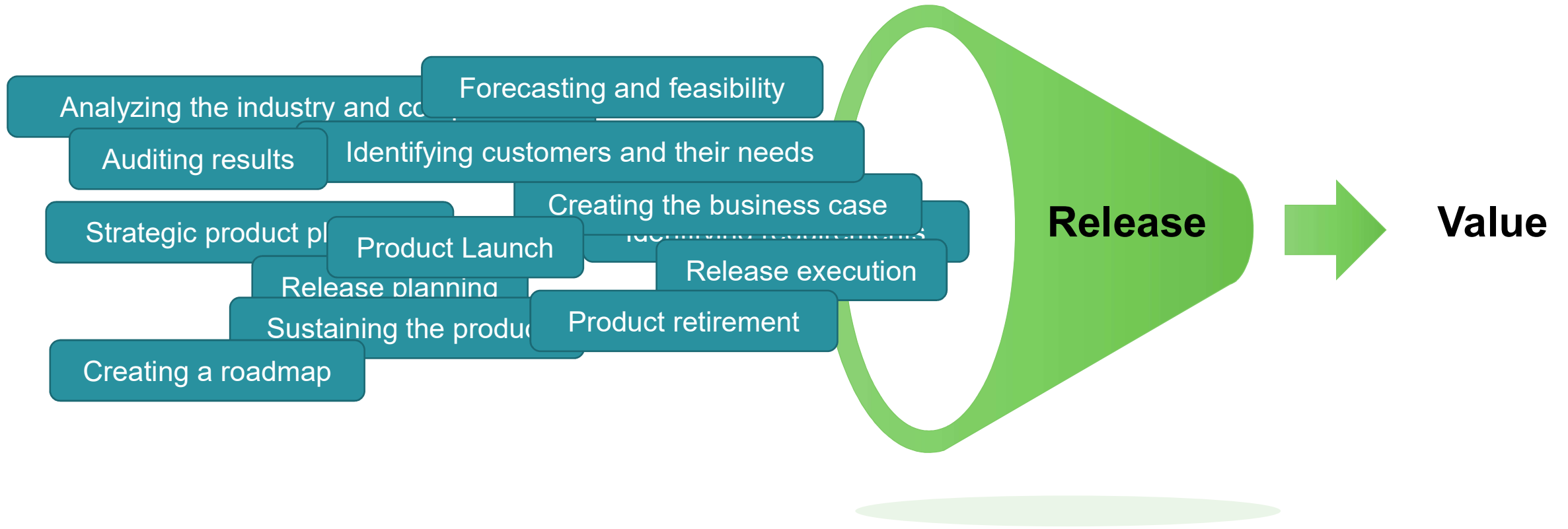
The **benefit to society**, not necessarily represented in money terms, that results from the use of a product or service.

Favor Value Creation over Revenue Extraction

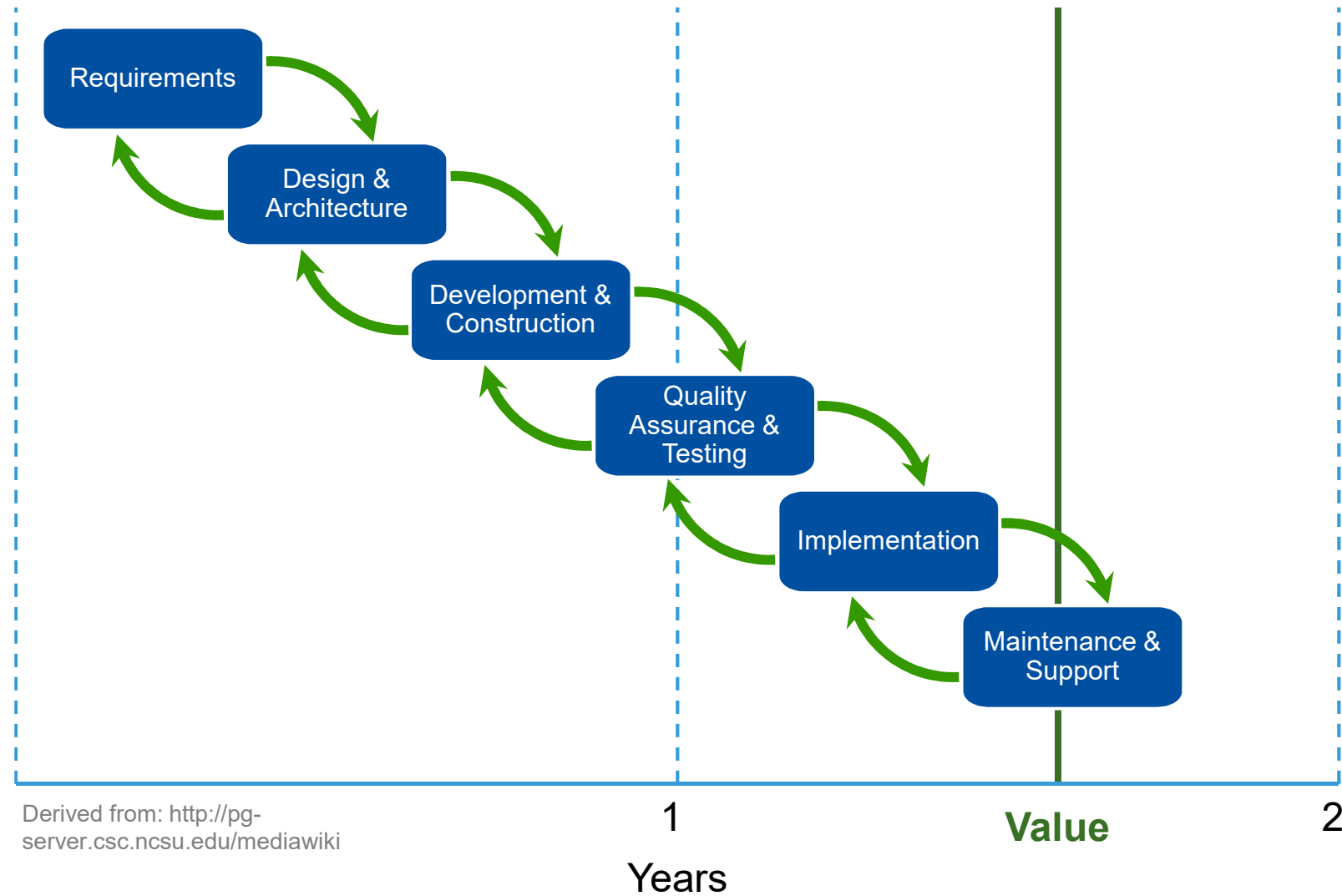
For more on
this topic



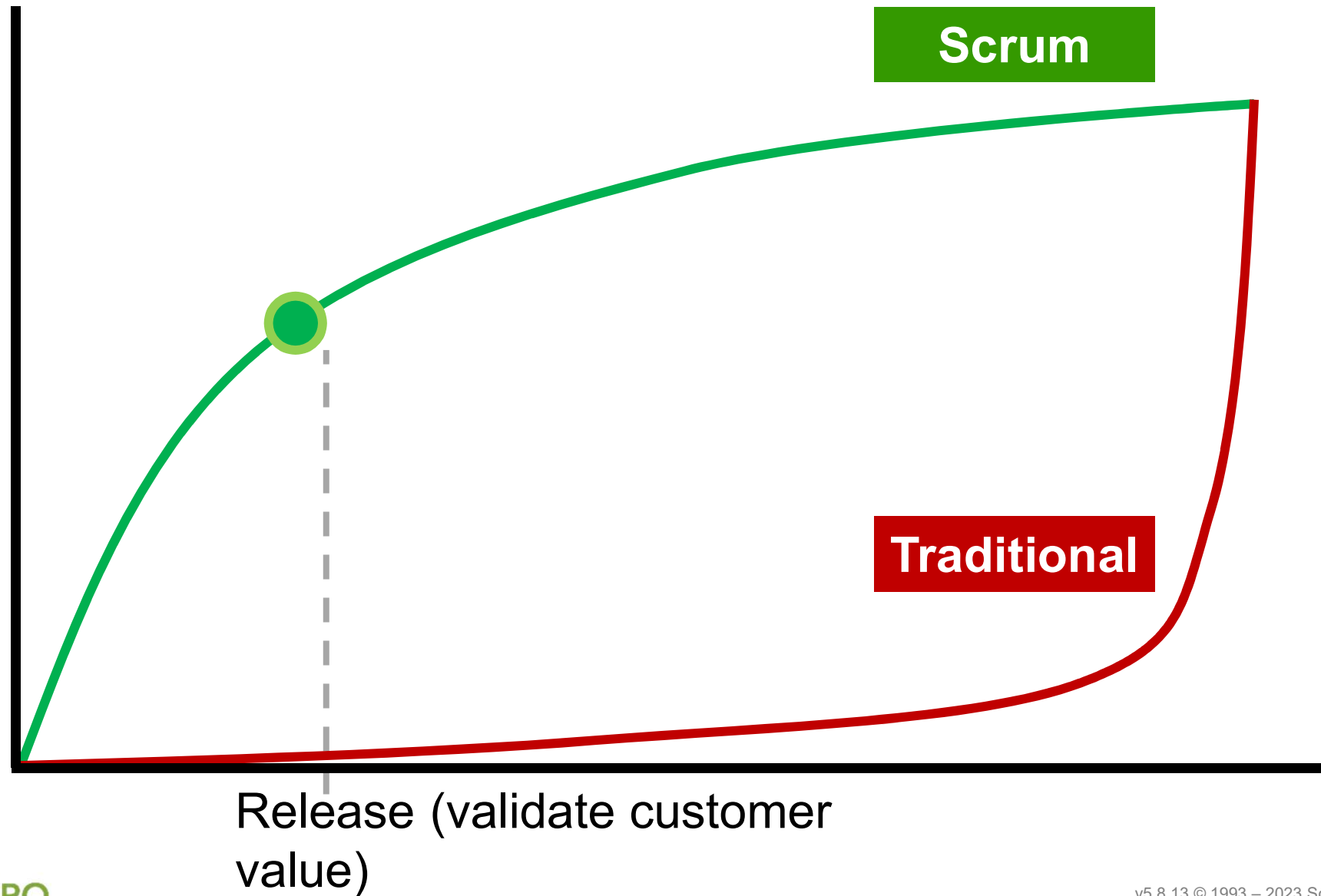
A Release Is Needed to Realize Value



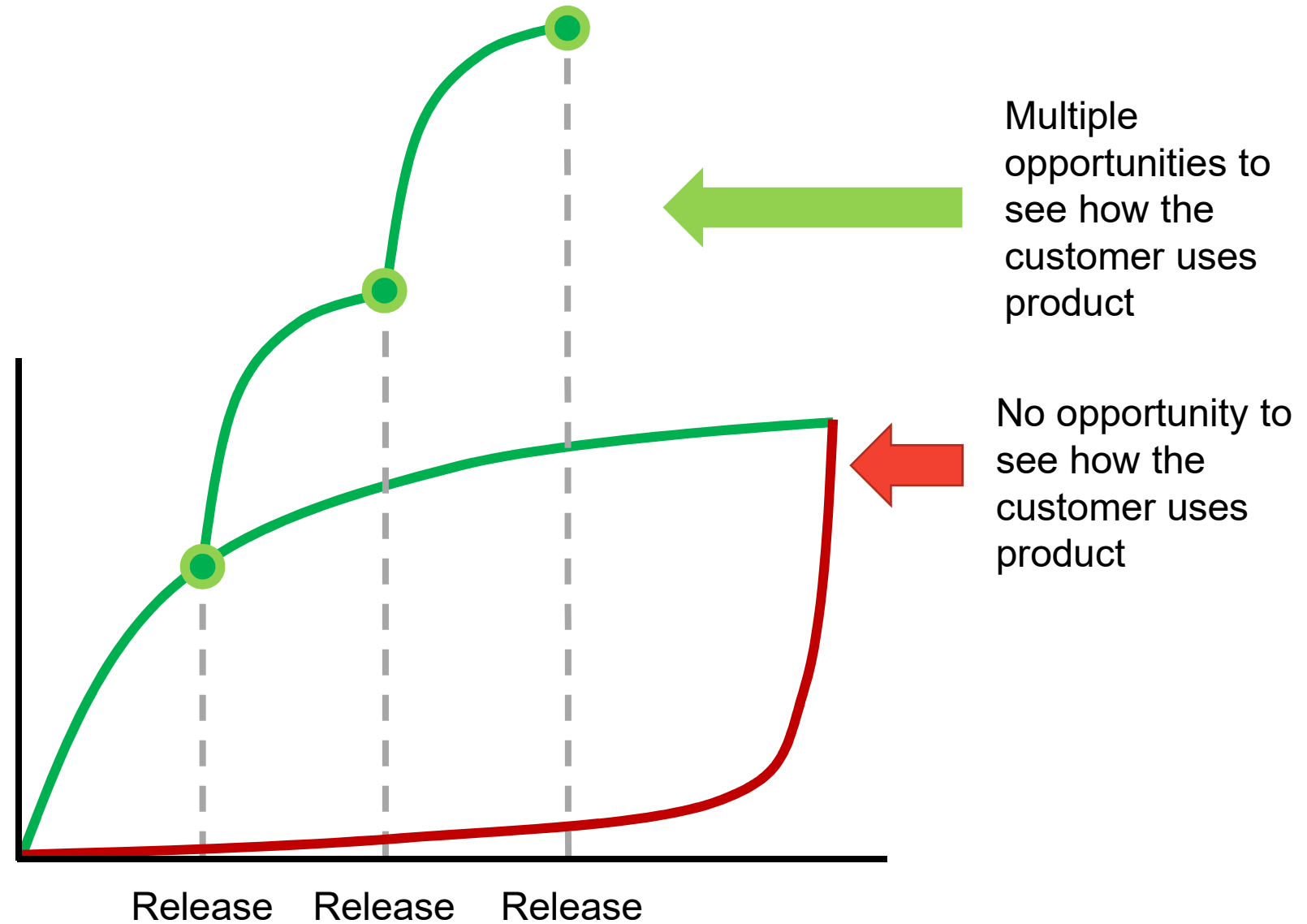
Traditional Development Delays the Realization of Value



Business Value Over Time

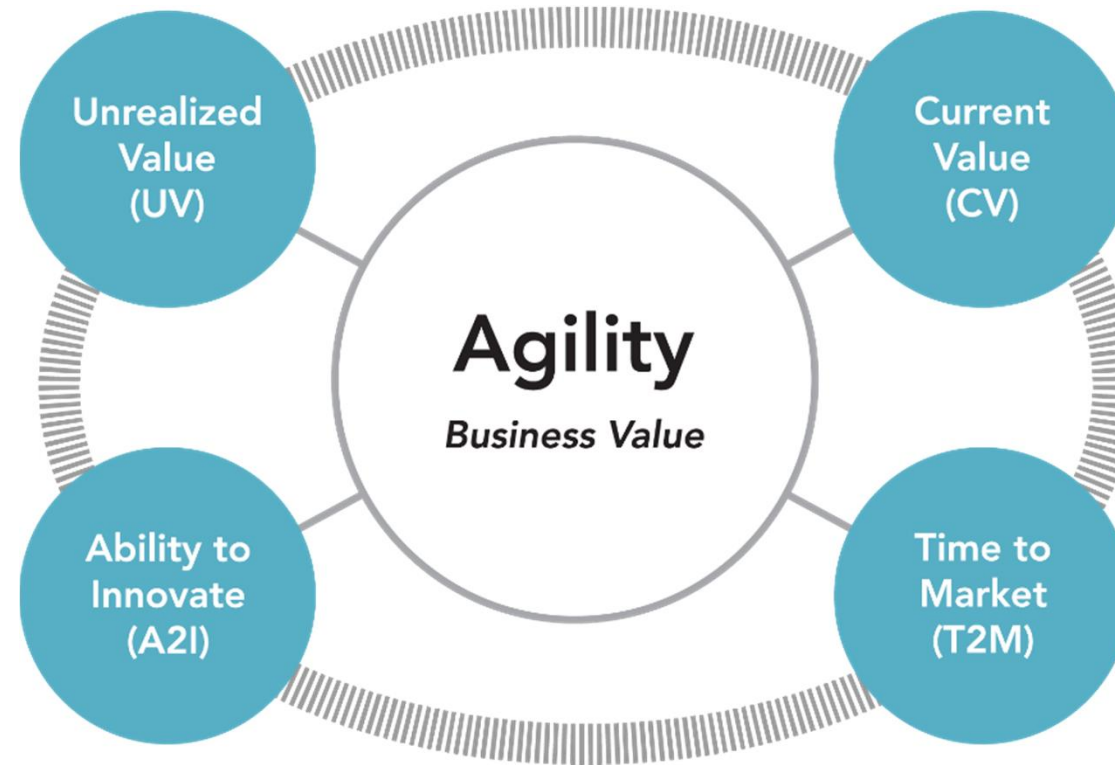


Business Value Over Time – Leveraging Feedback Through Releases



Candidate Value Measures

- Market Share
- Customer or User Satisfaction Gap
- **Innovation Rate**
- Time spent context switching
- **Installed Version Index**
- Technical Debt
- Defect Trends
- Production Incident Count
- **On-Product-Index**



- Revenue per Employee
- Product Cost Ratio
- Employee Satisfaction
- Customer Satisfaction
- **Usage Index**
- Build & Integration Frequency
- Release Frequency
- Release Stabilization Period
- Mean Time to Repair
- Cycle Time
- Lead Time
- Time to Learn

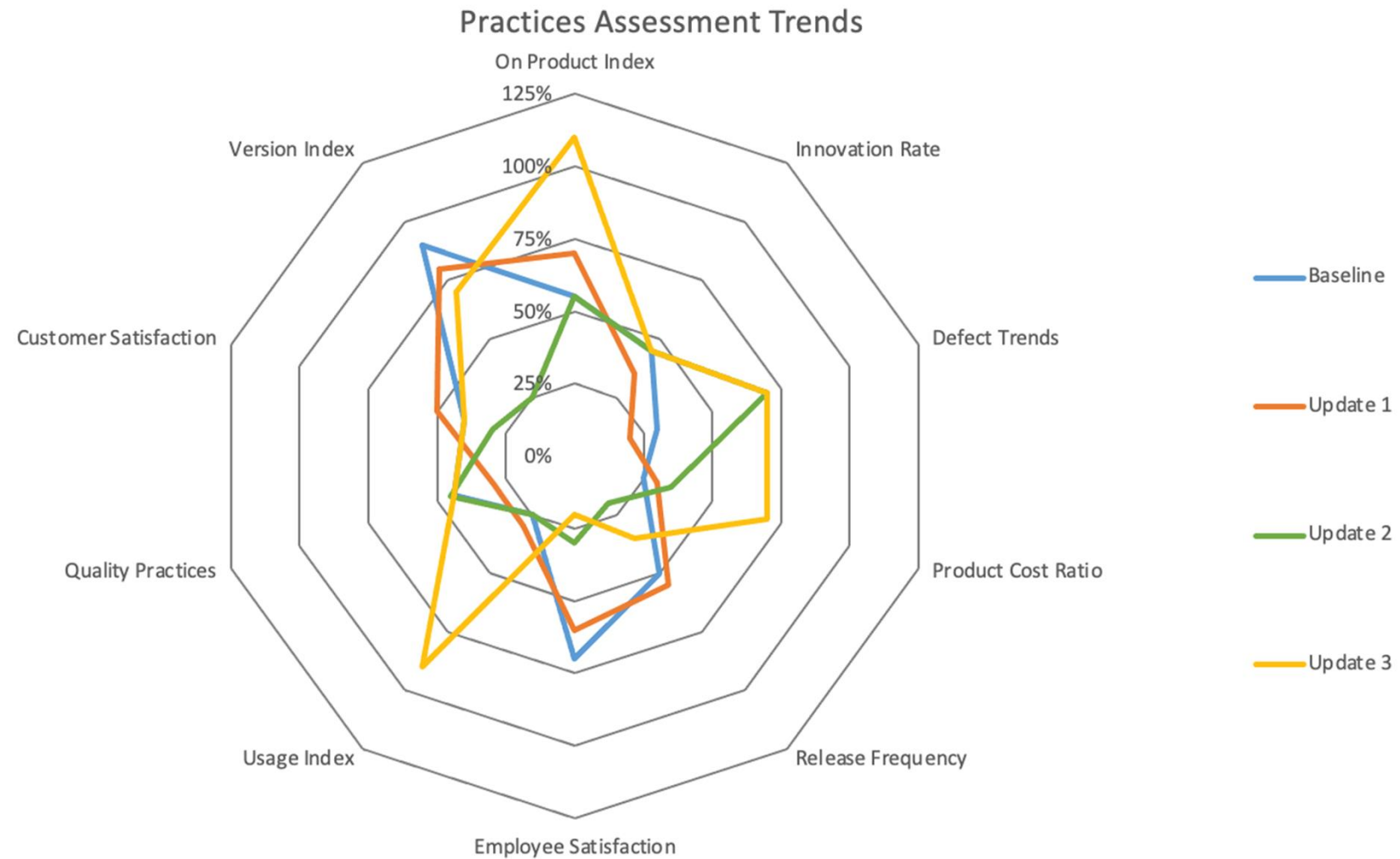
scrum.org
The Evidence-Based Management
Guide
Measuring Value to Enable Improvement and Agility
September 2020

Read the EBM Guide at:
scrum.org/ebm

**For more on
this topic**



Look at Trends and Interrelationships



Innovation Rate

What percentage of your budget is spent on:

- **New initiatives and projects**

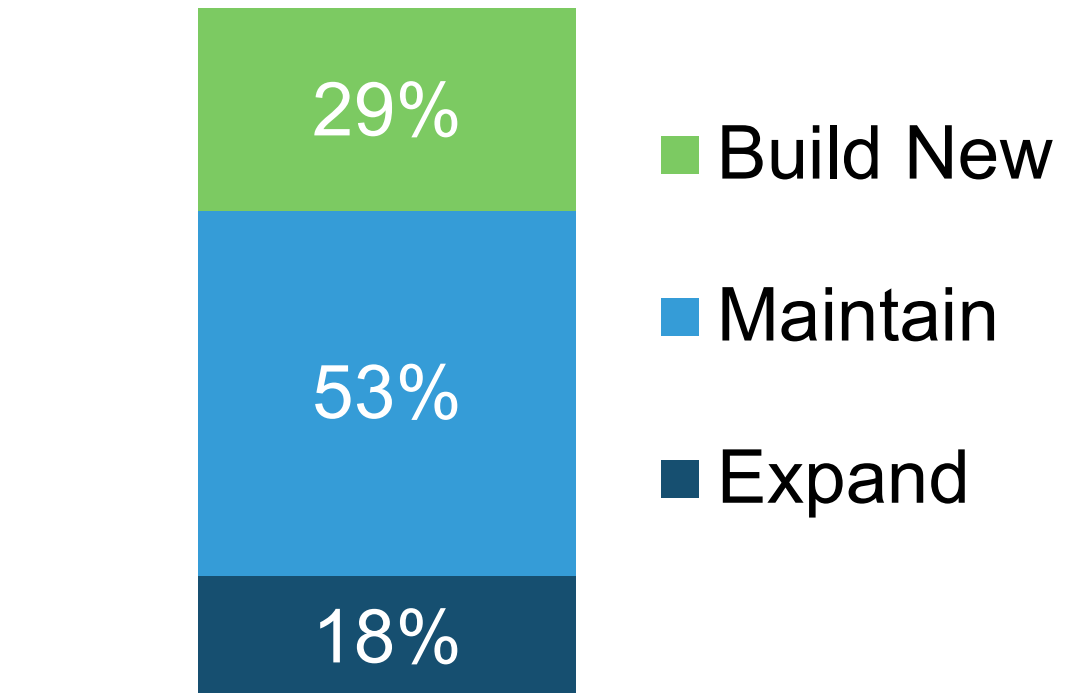
VS.

- **Ongoing operations & maintenance**

VS.

- **Expanding capacity to support business growth?**

Typical



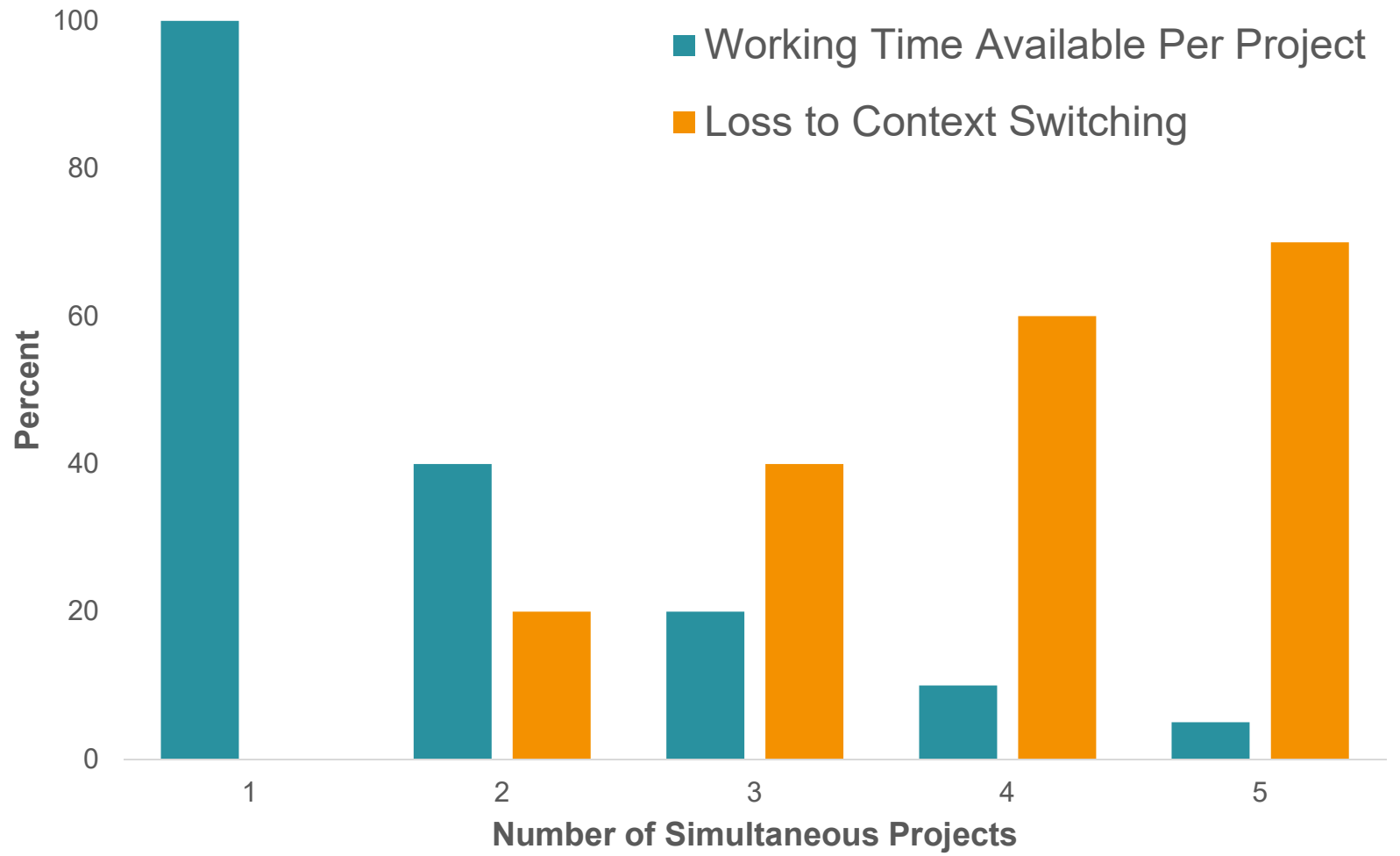
Source: Forrester, October 2010, *2011 IT Budget Planning Guide For CIOs*

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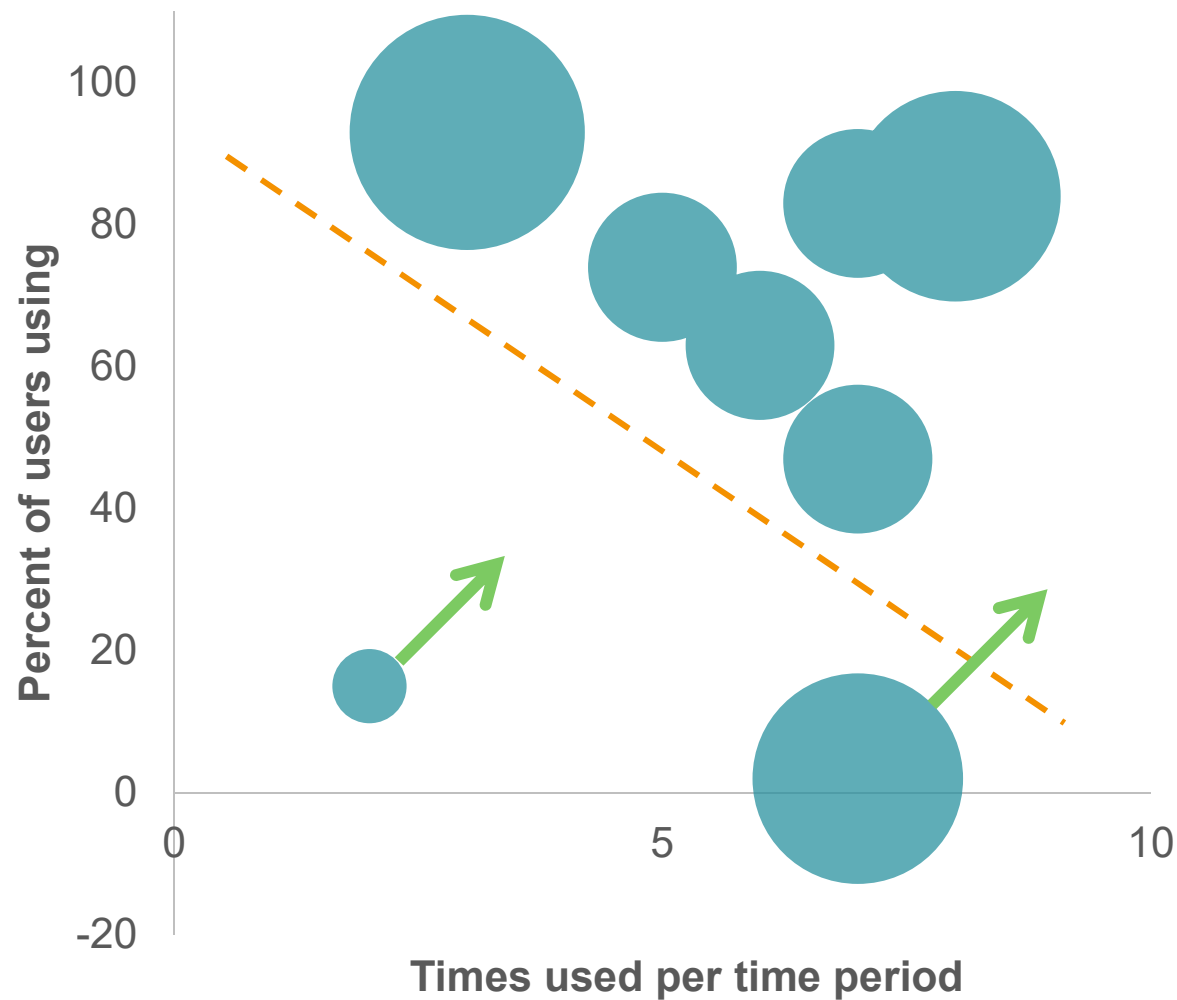
**Task Switching
Destroys
Efficiency and
Quality.**

On-Product Index

Percentage of time team spends working on the product



Usage Index



- Build features that people use
- Unused features should be removed or made more valuable



Higher tends to be better

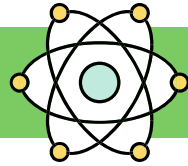
Size of bubble = Time spent using

Value-Driven Development Recommendations



TRY

- Finding patterns and relationships in metrics that help understand how to improve value delivery
- Managing value direction by using leading and lagging indicators
- Starting customer and stakeholder discussions with outcomes



FAVOR

- Linking goals to value
- Using additional tools such as impact mapping to link outcome to possible output
- Using the definition of value in Backlog Refinement, Sprint Planning, and Sprint Review
- Differentiating Customer segments, and what they consider as valuable
- Using trends in metrics, not absolutes



AVOID

- Defining features as value
- Accepting business value as an organizationally dictated number without analysis and understanding
- Believing you know value without data
- Mistaking velocity (output) and value (outcome)

TAKE AWAY

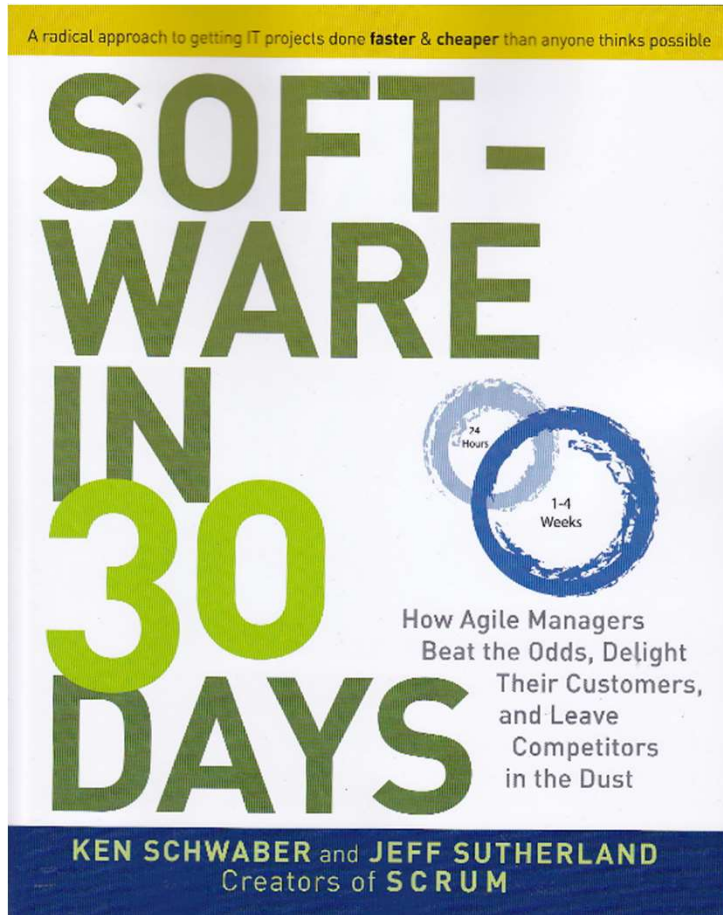
Value-Driven Development

- Value in itself is difficult to quantify.
- Value remains an assumption until validated by the marketplace.
- Leverage metrics that provide you with insights about whether value is being delivered.
- Favor Value Creation over Revenue Extraction



Suggested Reading

“Software in 30 Days” (Ken Schwaber, Jeff Sutherland)



“The Elements of Value” (Almquist, Senior, Bloch)



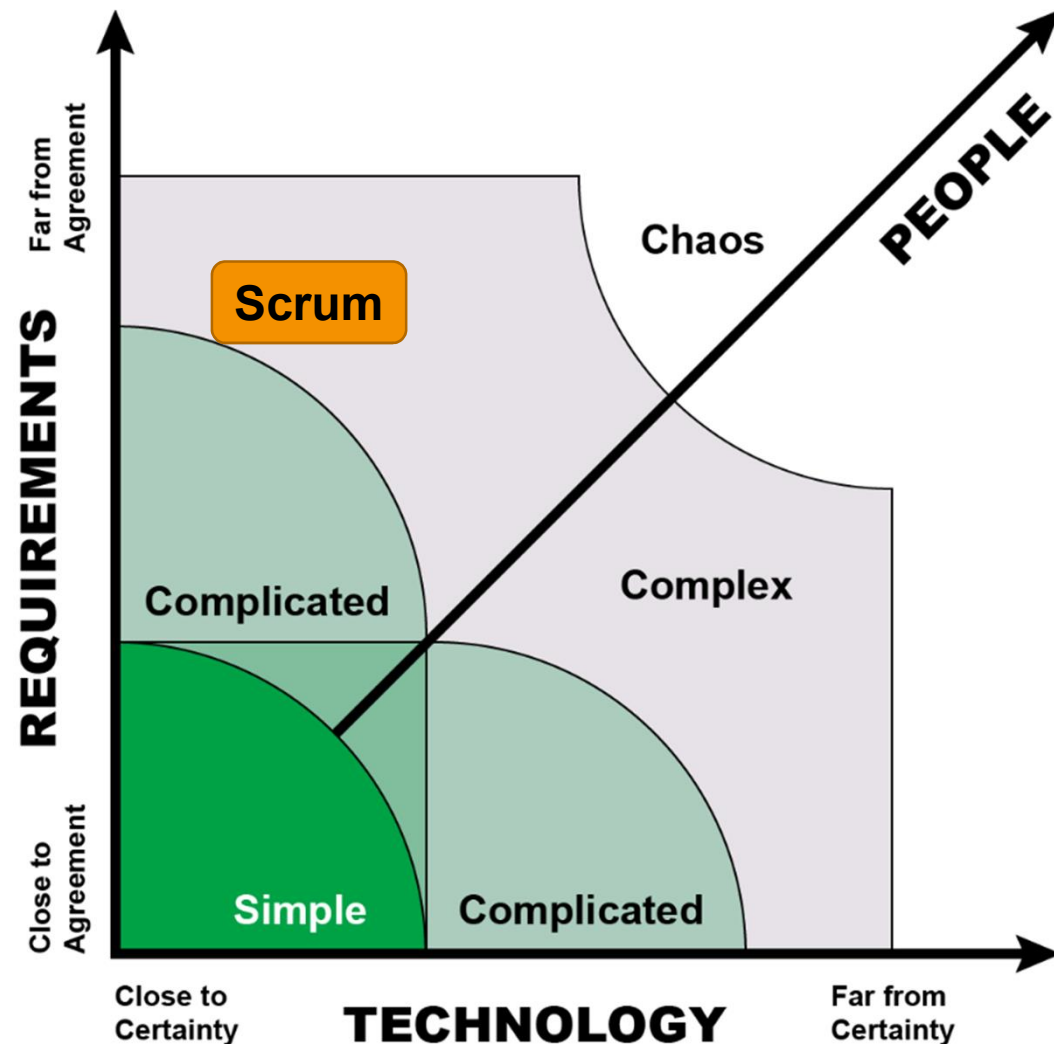
Insanity: Doing the same thing over and over again and expecting different results.

- Albert Einstein

4

Scrum Theory & Empiricism

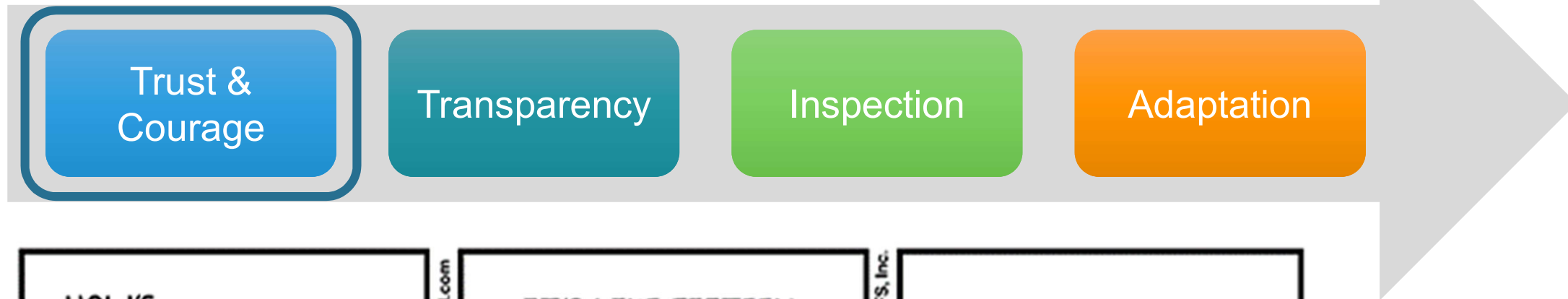
The Complexity of Product Development



- Simple
everything is known
- Complicated
more is known than unknown
- Complex
more is unknown than known
- Chaotic
very little is known

Based on the original chart by Ralph Stacey
(source: **Strategic Management and Organisational Dynamics**, Pearson, 2015)

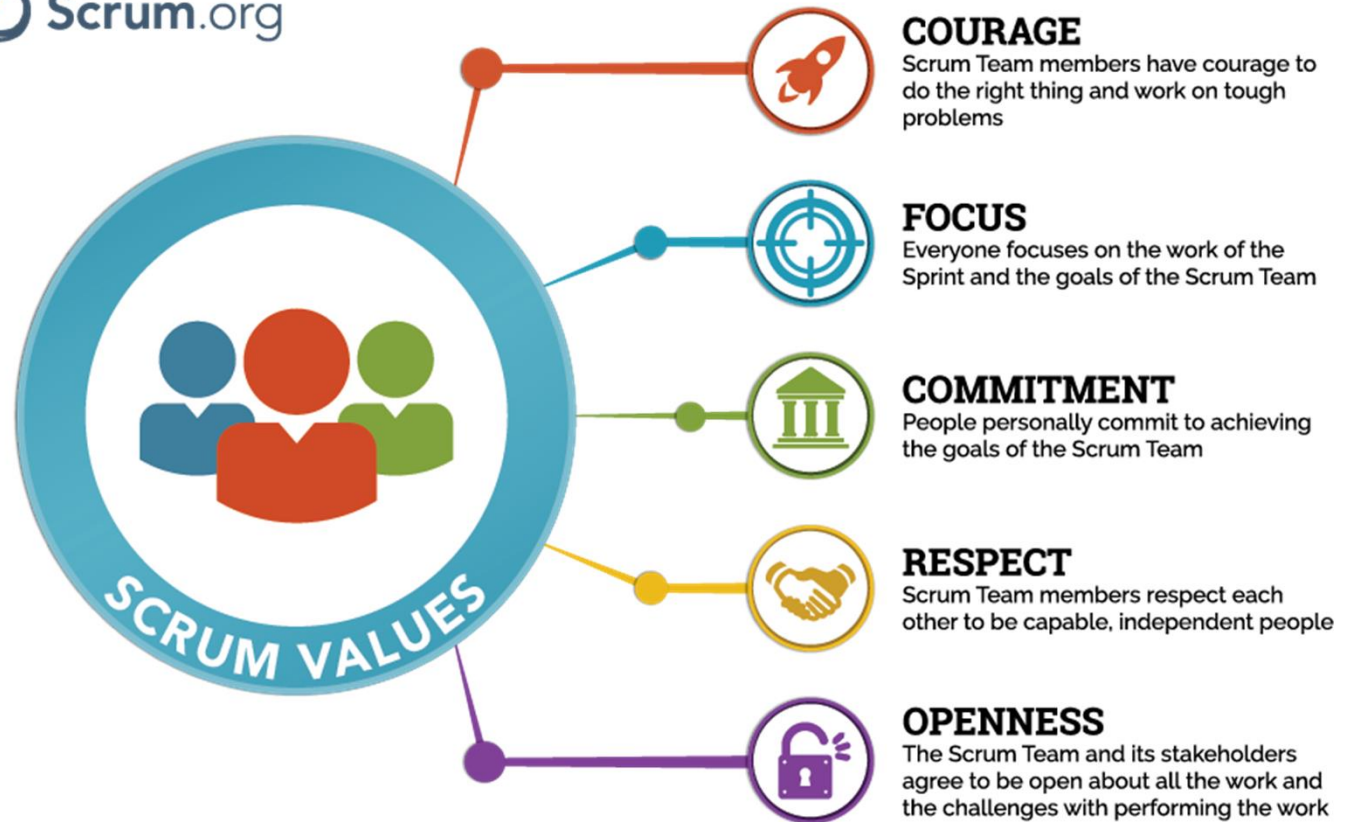
Empirical Processes Require Trust & Courage



© Scott Adams, Inc./Dist. by UFS, Inc.

Scrum Values

- The Scrum Values are the foundation for behavior and practices in Scrum.
- They are closely related to the theory and first principles of Scrum and support teams in their work.
- The Scrum Team can always fall back on these essentials.



© Scrum.org

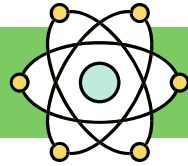
Scrum Values are the life blood of the Scrum Framework.

Scrum Theory Recommendations



TRY

- Allowing details to emerge as needed instead of detailing everything upfront
- Steering clear of giving guarantees or promises about when something will be delivered



FAVOR

- Having the courage to be transparent and respect others
- Understanding the impact and reasons of complexity
- Embracing empiricism as a mindset
- Fostering faster feedback loops for more complex and risky endeavors



AVOID

- Seeing creative work as simple
- Trying to drive complex or complicated work to become simple
- Looking for best practices for non-simple work

TAKE AWAY

Scrum Theory & Empirical Process Control

- Product development resides in the complex domain.
- The best fit for complexity is the empirical process.
- The 3 pillars of empiricism are transparency, inspection, and adaptation.
- Transparency requires trust and courage.



Suggested Reading

“The New New Product Development Game”
(Takeuchi, Nonaka)

The New New Product Development Game

by Hirotaka Takeuchi and Ikujiro Nonaka

 Harvard Business Review

Reprint 86116

“A Leader’s Framework for Decision-Making”
(Snowden, Boone)

Harvard Business Review 
www.hbr.org

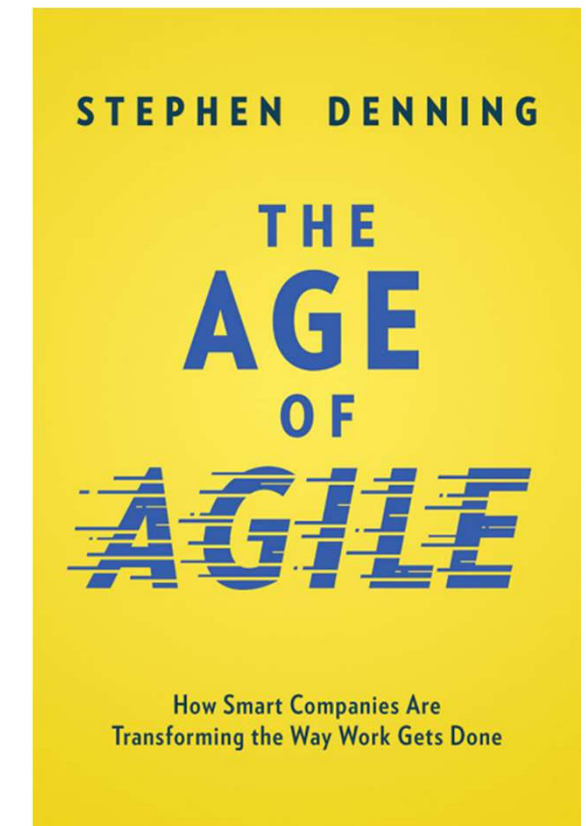
Wise executives tailor their approach to fit the complexity of the circumstances they face.

A Leader’s Framework for Decision Making

by David J. Snowden and Mary E. Boone

Reprint R0711C

“The Age of Agile”
(Stephen Denning)



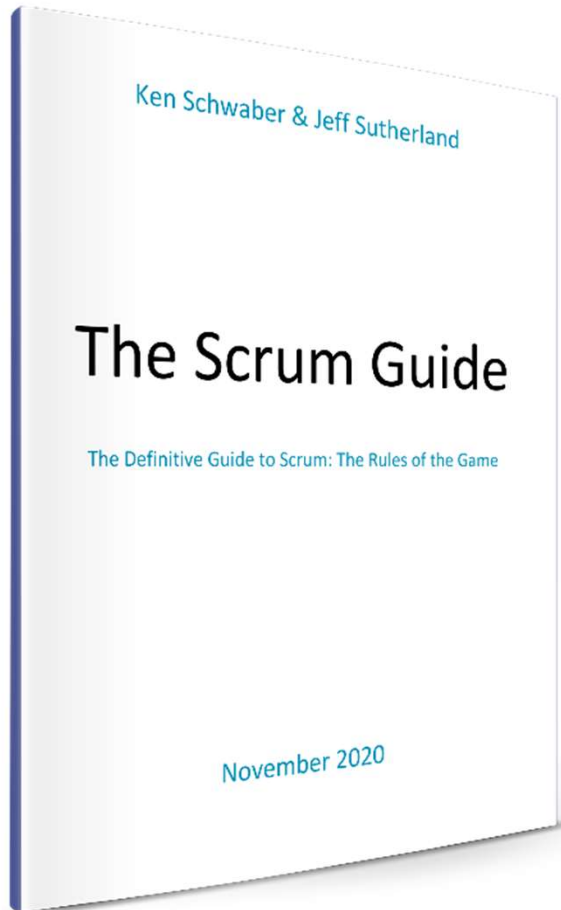
*“If you haven’t found it yet, keep looking.
Don’t settle. As with all matters of the
heart, you’ll know when you find it.”*

- Steve Jobs

5

The Scrum Framework

Definition of Scrum



www.scrumguides.org

Scrum (*noun*):

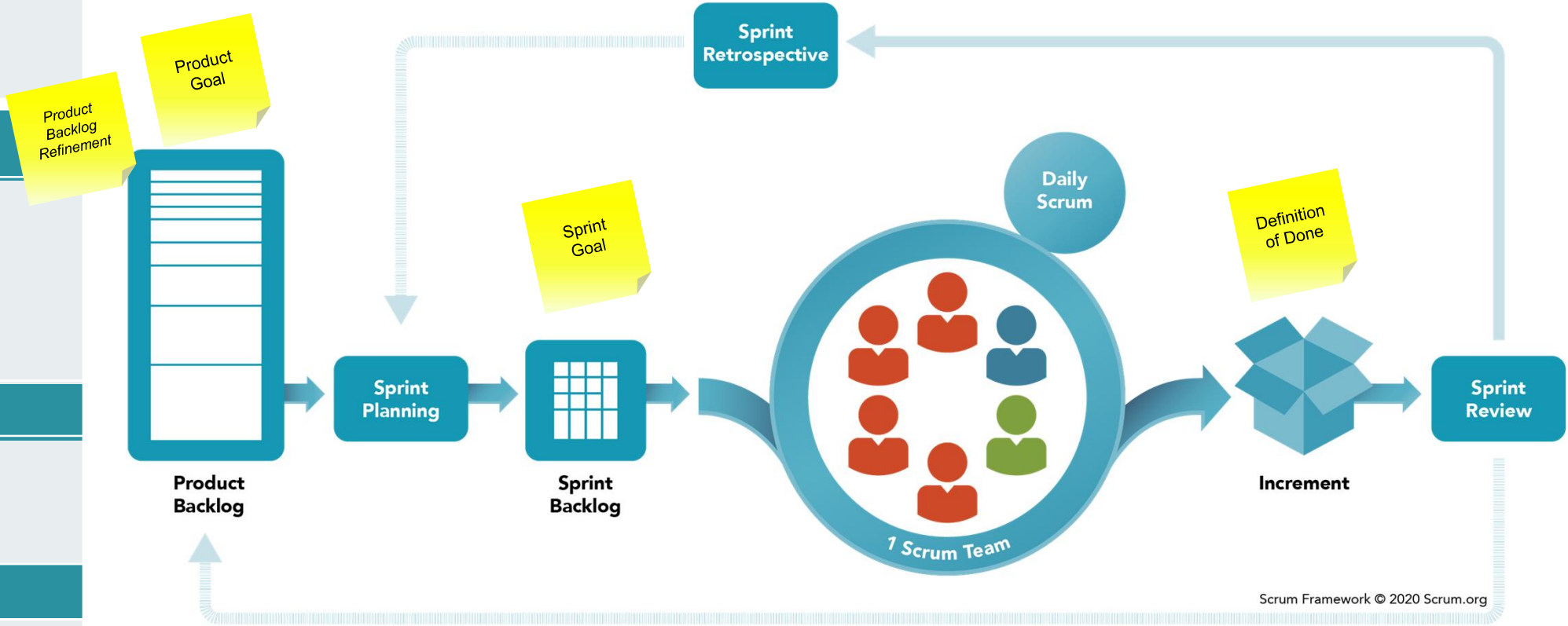
A lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems.

Scrum is

- Lightweight tool for enabling business agility
- Simple and purposefully incomplete

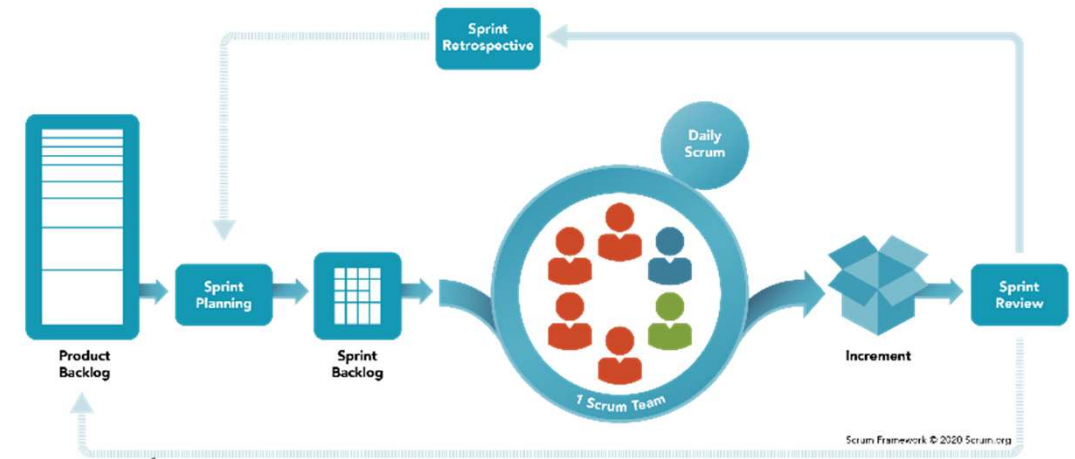
Accountabilities, Artifacts, Events, Commitments, and Other Concepts

Accountabilities
<ul style="list-style-type: none"> Product Owner Developers Scrum Master
Artifacts
<ul style="list-style-type: none"> Product Backlog Sprint Backlog Increment
Events
<ul style="list-style-type: none"> Sprint Sprint Planning Daily Scrum Sprint Review Sprint Retrospective
Commitments
<ul style="list-style-type: none"> Product Goal Sprint Goal Definition of Done
Other
<ul style="list-style-type: none"> <i>Product Backlog Refinement</i>



Scrum Framework © 2020 Scrum.org

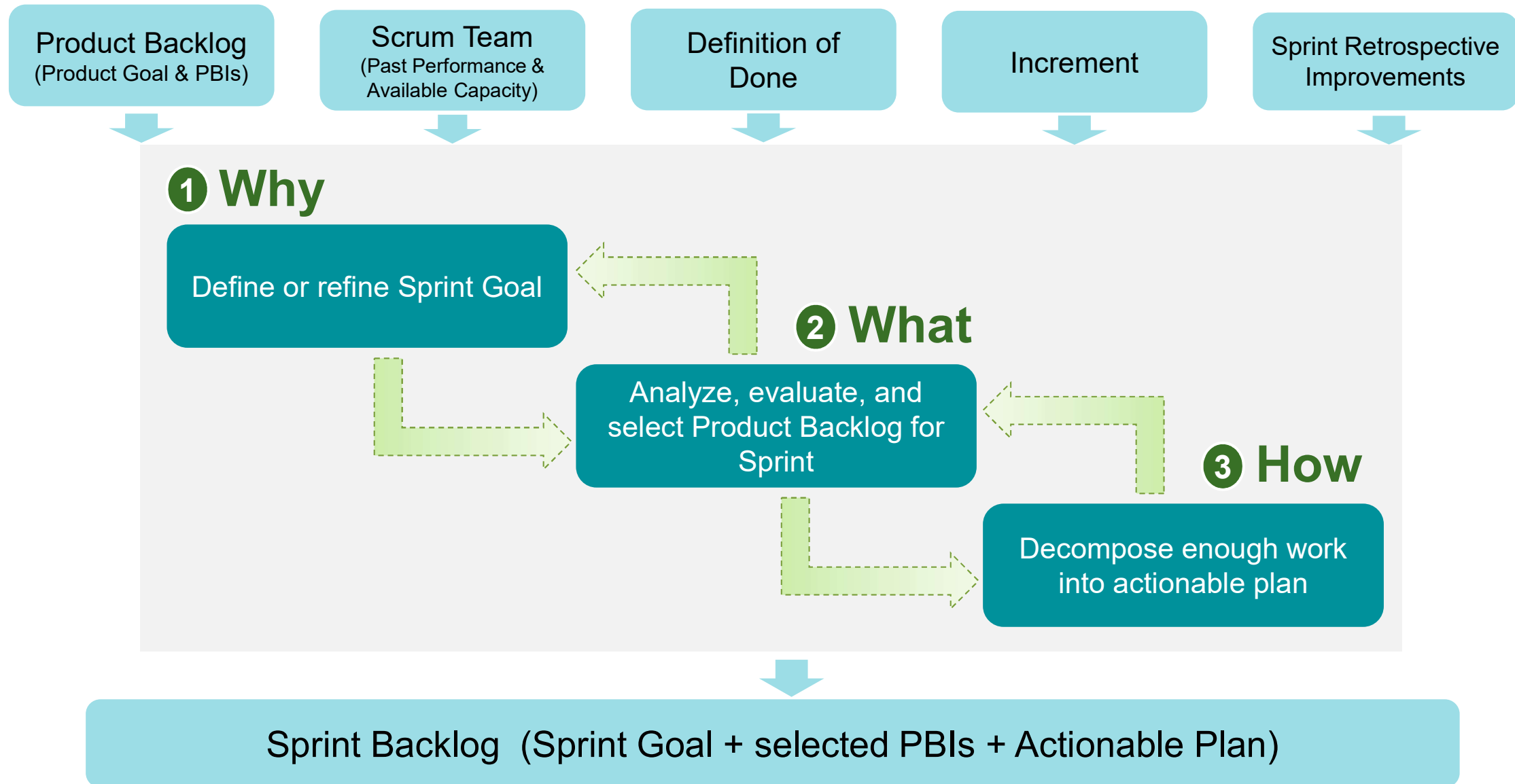
What Is a Sprint in Scrum?



Sprints serve iterative-incremental development.

- All development is done within a Sprint
- A Sprint has a consistent duration of 1 month or less
 - Sprint length is determined by acceptable planning horizon, risk, and unknowns
 - Sprint length is NOT set by the number of items, but by the factors above
- Scrum knows no phases, only Sprints
 - No testing, hardening, analysis Sprints

Sprint Planning Meeting Flow



Some Sprint Goals

An **objective** to be met in the Sprint

- Through the implementation of the PBIs selected in Sprint Planning
- Providing guidance to the Scrum Team
- Acts as a step towards the Product Goal

Allows **flexibility** in delivering the Increment

- Allows flexibility for exact implementation of PBIs
- Although the Sprint Goal is fixed

Is **sacrosanct** throughout the Sprint

- As the Scrum Team works, it keeps this goal in mind
- Each Daily Scrum assesses the Team's progress toward meeting the Sprint Goal

Additional reading: <https://www.scrum.org/resources/blog/10-powerful-questions-create-better-sprint-goals>

Cancelling a Sprint

- Sprints may be cancelled early, i.e. before the time-box expires.
 - Only by the Product Owner
 - Prefer adjusting Sprint Scope
- A Sprint would be cancelled if the Sprint Goal becomes obsolete.
- Reasons to cancel may include changes in competition, business, or technology feasibility.
- After a Sprint cancellation, re-plan the Sprint.

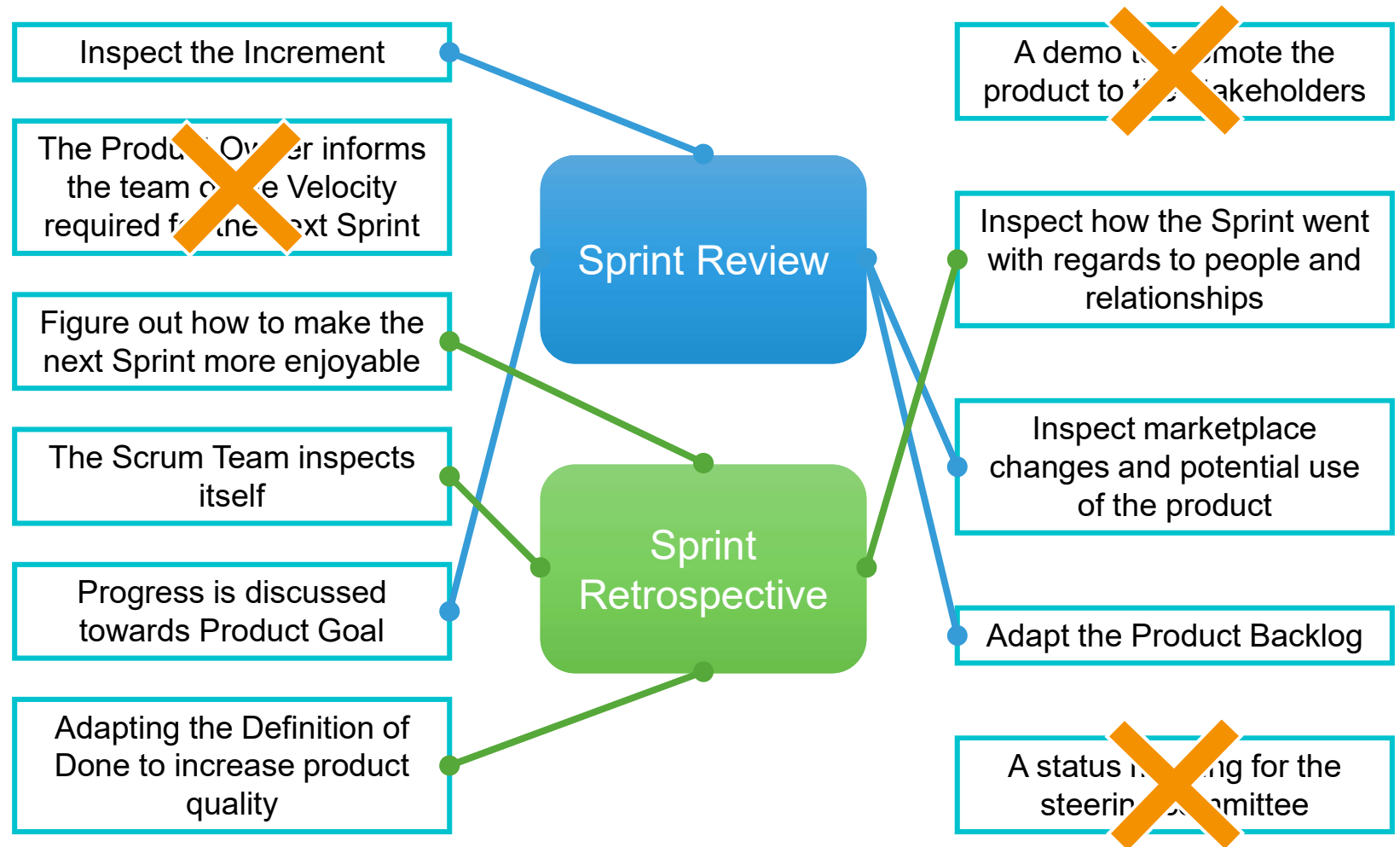


Exercise

A Sprint Is a Feedback Loop

5
minutes

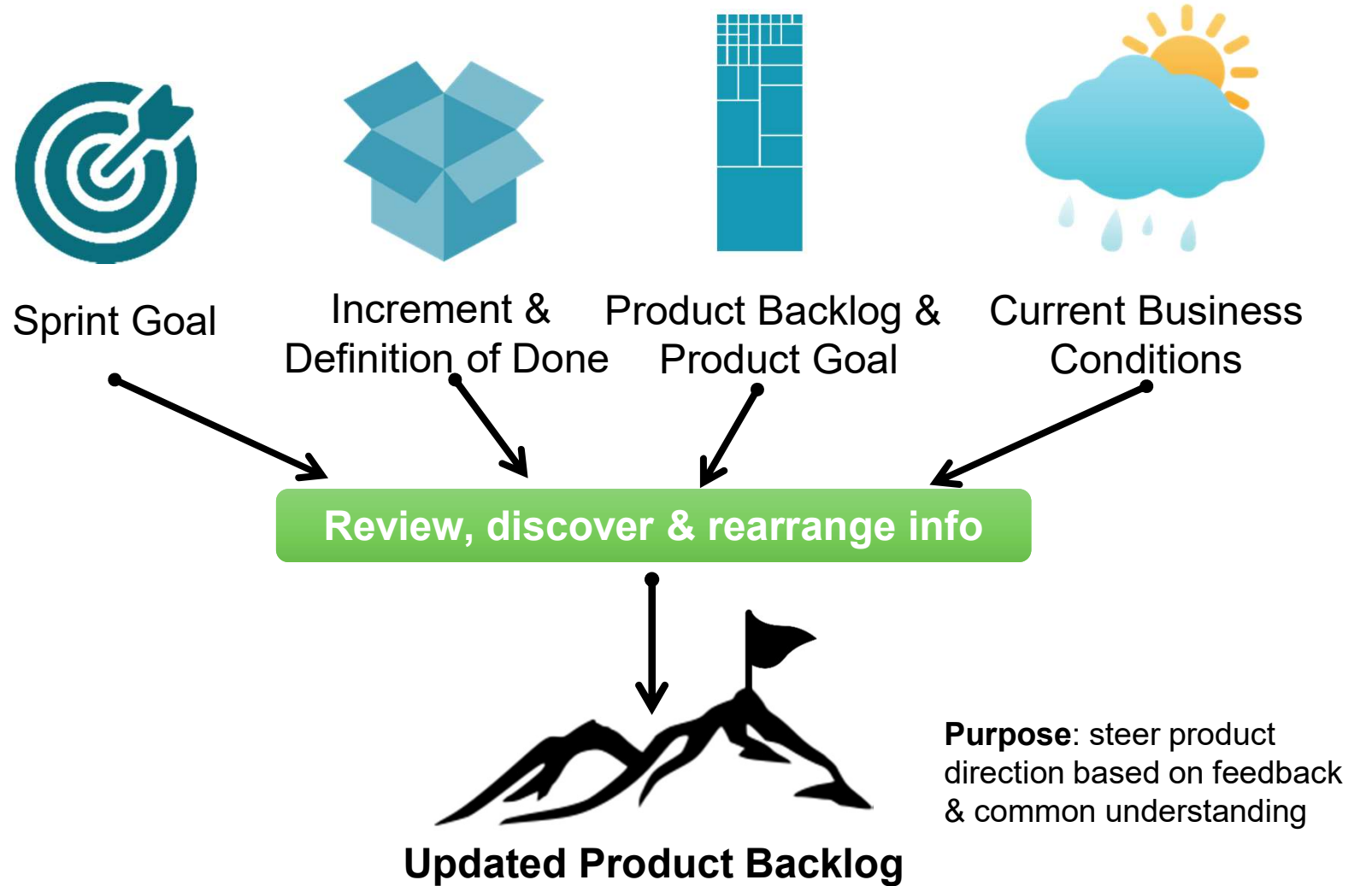
Connect the statements to the Scrum events.
Cross out incorrect statements.



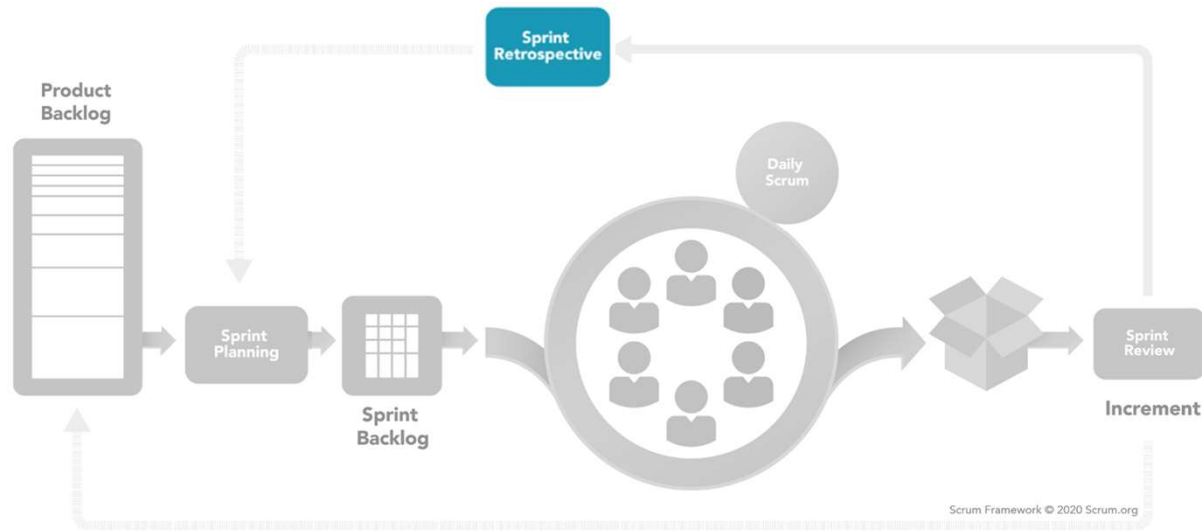
This is a collaborative working session, not a demonstration



Flow of the Sprint Review Meeting



Sprint Retrospective

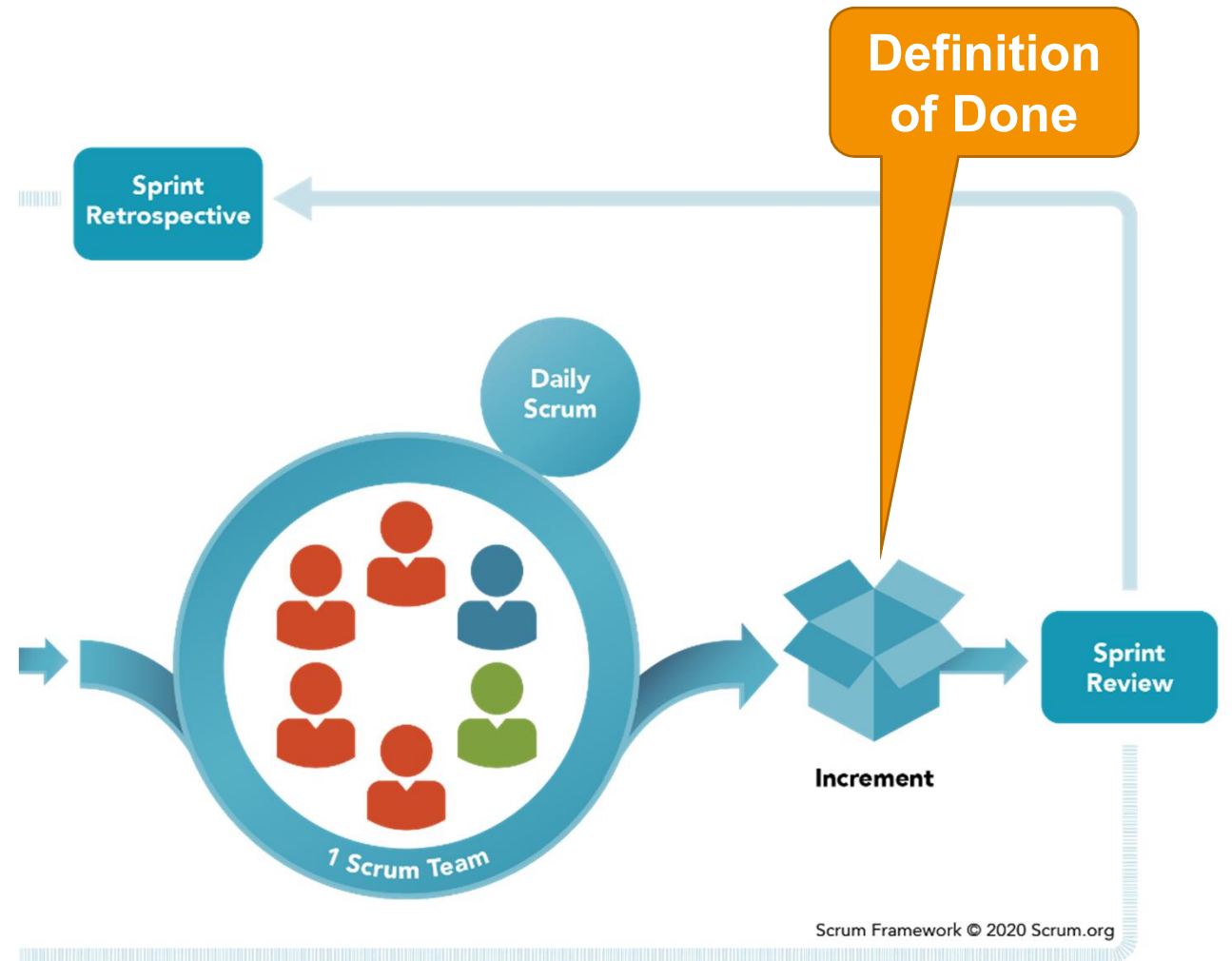


The Product Owner is required to attend

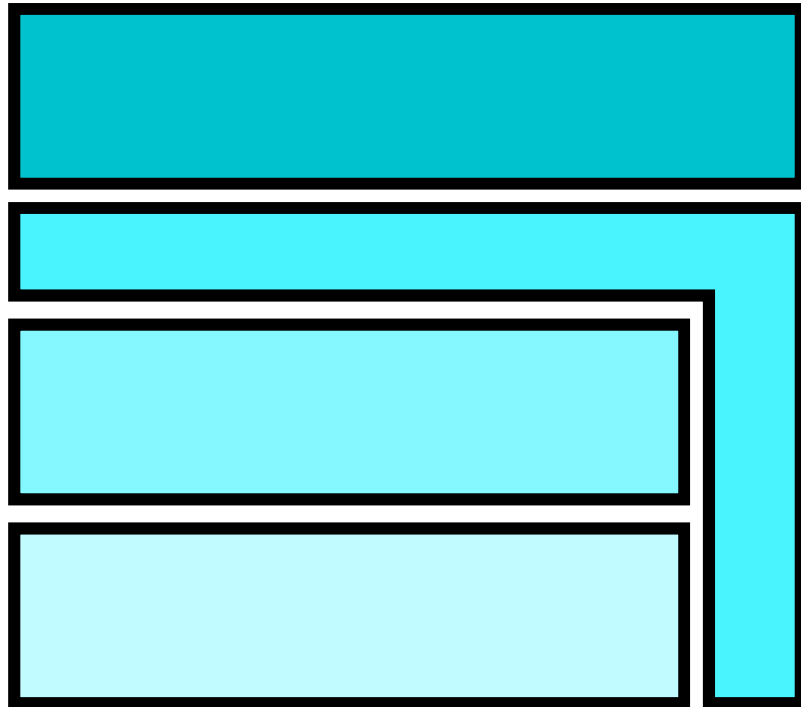
- Scrum Team inspects how the last Sprint went
 - People & Relationships
 - Process
 - Environment (tools)
 - Quality
- Adapt the Definition of Done if appropriate
- Scrum Team selects the most impactful improvements are addressed as soon as possible.

Incremental Requires Transparency

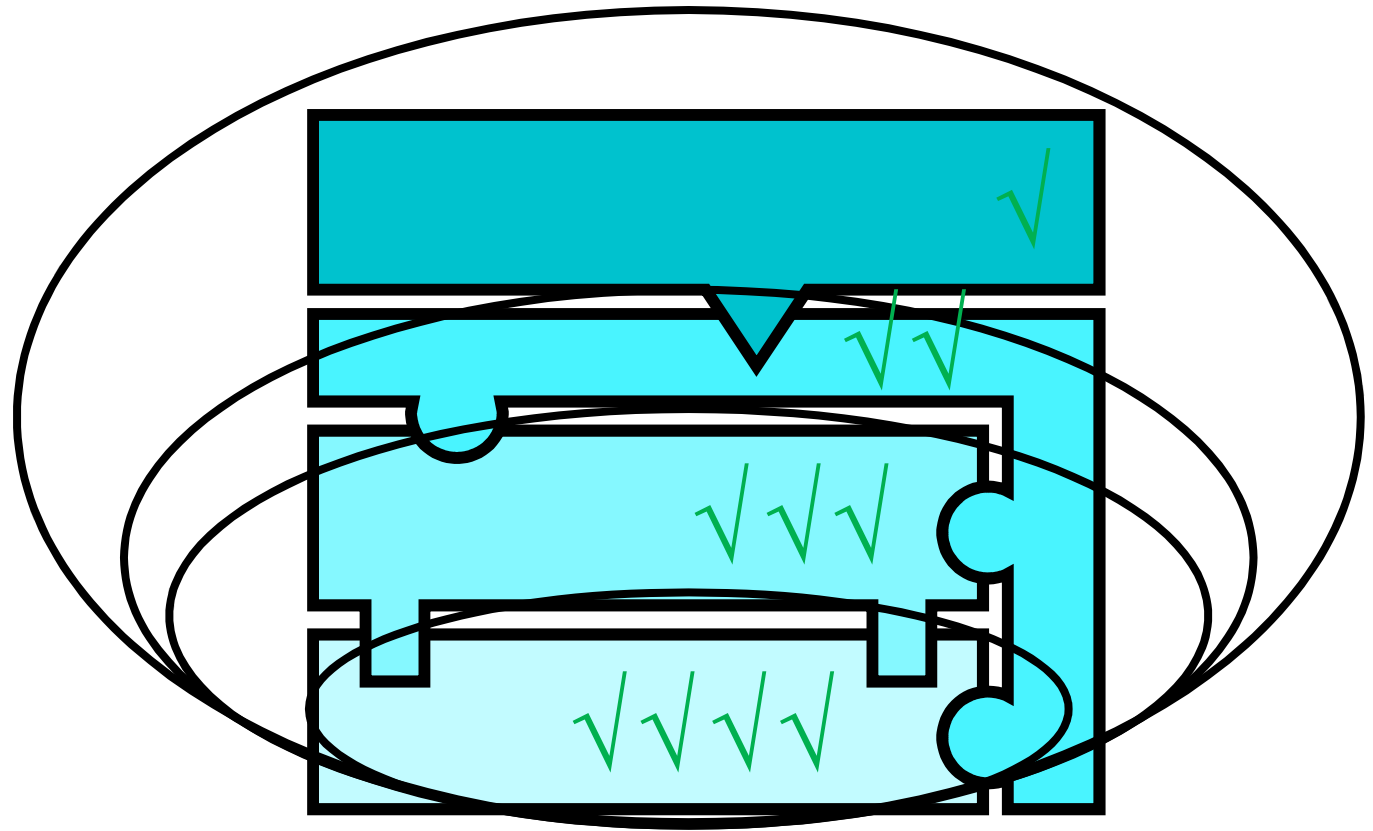
- Increment must be transparent to Product Owner and stakeholders
- Increment must be “Done” in adherence with the Definition of Done
- Increment must be potentially releasable, or usable by stakeholders



Increment Grows Over Time Iteratively – Always Done



Incremental



Iterative & Incremental

Scrum Events Quick Reference

Event	Inspection	Adaptation	Who Attends	Timebox for 1 Month
Sprint Planning	Product Backlog, Product Goal, Definition of Done	Sprint Backlog, Sprint Goal	Scrum Team	8 hours
Daily Scrum	Progress toward Sprint Goal	Sprint Backlog	Developers	15 minutes (always)
Sprint Review	Increment, Sprint, Product Backlog, Progress toward Product Goal	Product Backlog	Scrum Team Stakeholders	4 hours
Sprint Retrospective	Sprint, Definition of Done	Actionable improvements, Definition of Done	Scrum Team	3 hours

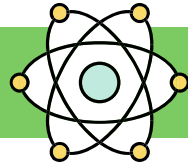
Every element of Scrum serves empiricism.

Scrum Framework Recommendations



TRY

- Picking Sprint work driven by the Sprint Goal
- Relating Sprint Goal to Product Goal



FAVOR

- Focus on communicating value with the scrum team in the Scrum events
- Conceptualizing a Sprint as a risk box, not a feature box
- Making a single cohesive Sprint Goal for a sprint



AVOID

- Using only comfortable parts of Scrum
- Using Sprint Review as a showcase or educational session for stakeholders
- “Managing” the Scrum Team
- Not using Scrum Values as guides
- Bowing out of retrospectives
- Consistently carrying work over from Sprint to Sprint

TAKE AWAY

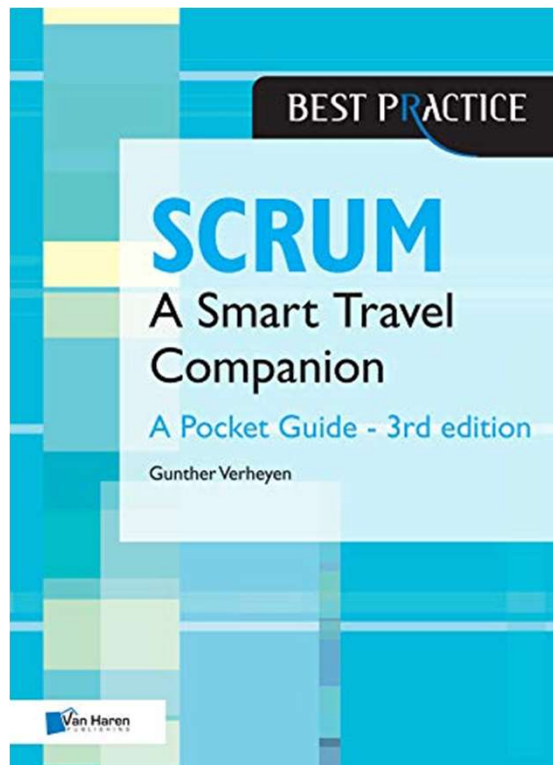
The Scrum Framework & Product Owner

- Scrum enables empiricism for an agile business.
- A Sprint is a window of opportunity.
- The length of the Sprint controls risk
- Every Scrum Team member has clear accountability.
- The Product Owner is the value optimizer.

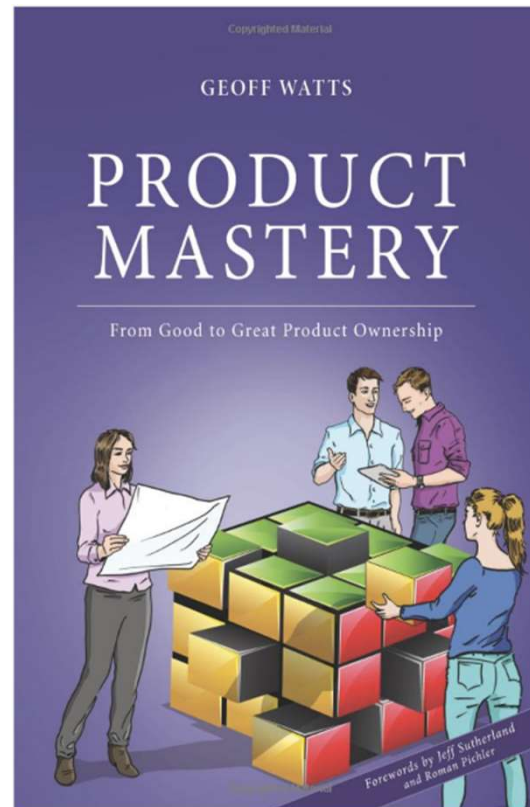


Suggested Reading

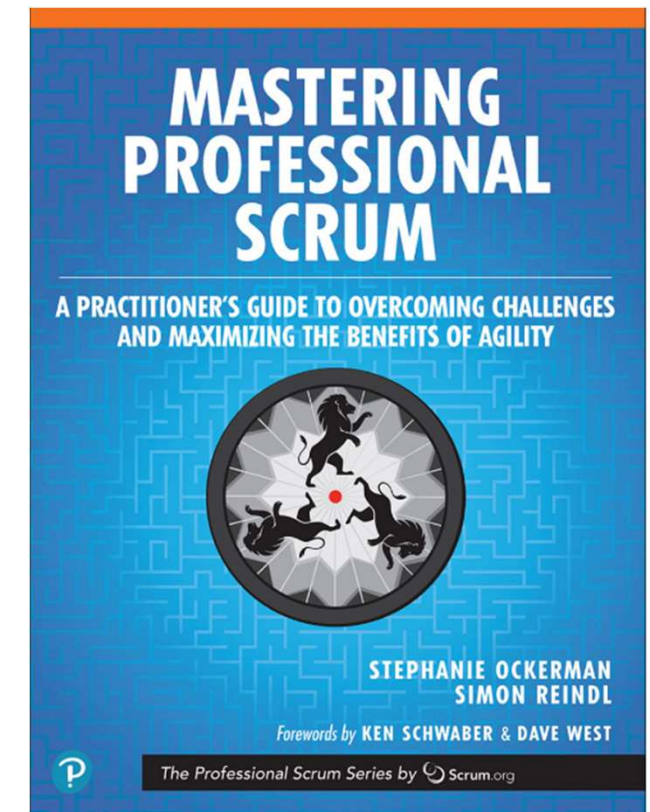
“Scrum – A Pocket Guide”
(Gunther Verheyen)



“Product Mastery”
(Geoff Watts)



“Mastering Professional Scrum” (Ockerman and Reindl)



“If you pick up a starving dog and make him prosperous, he will not bite you. This is the principal difference between a dog and a man.”

- Mark Twain

6

Product Backlog Management

Exercise

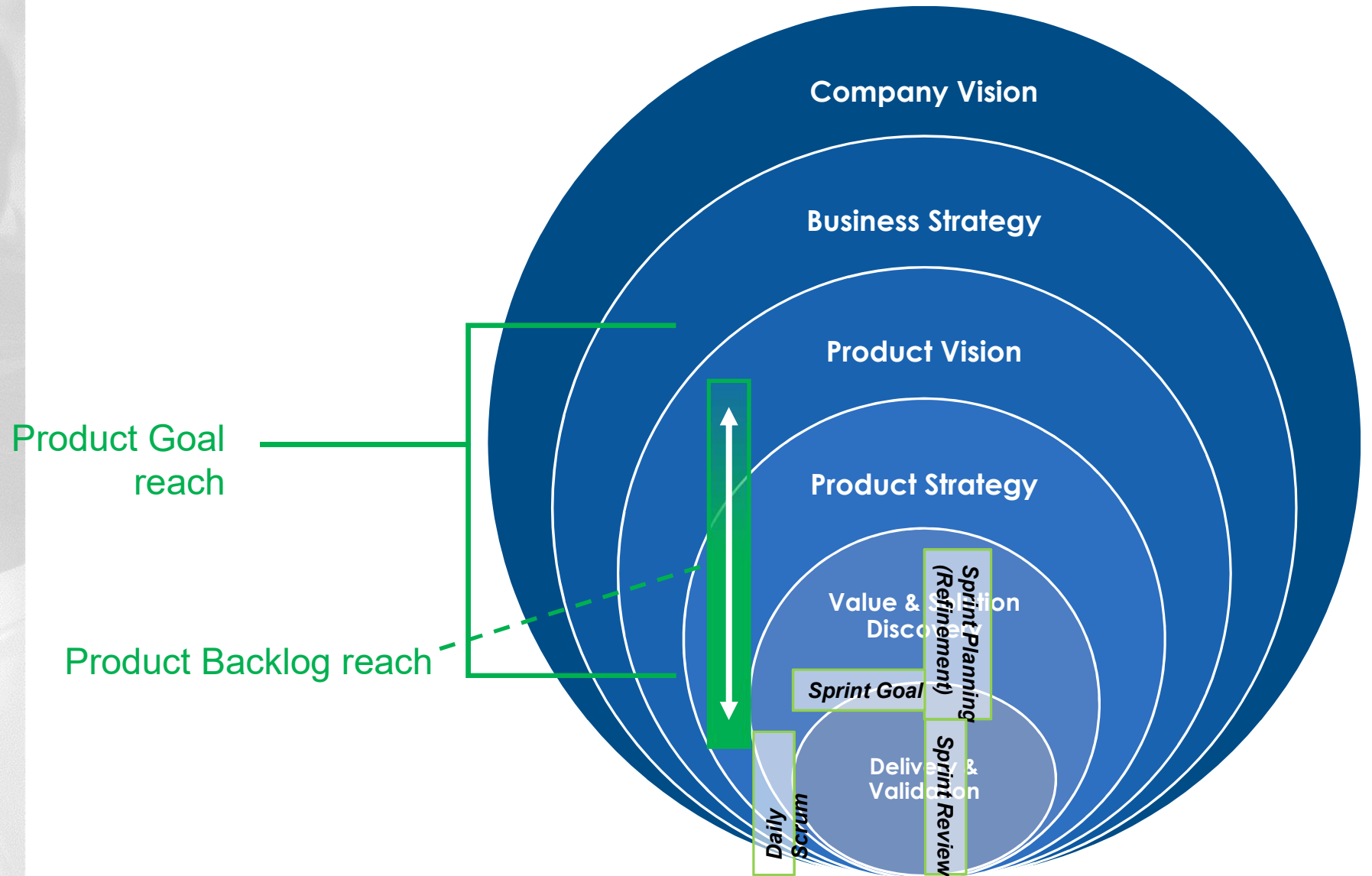
The Bigger Picture Revisited

What tools, techniques, and practices would you use to tie the layers together?

Examples:

- Business model canvas
- Vision statement
- Product roadmap
- User Stories
- Acceptance criteria
- User survey
- Impact mapping
- User story map

5
minutes



Product Goal

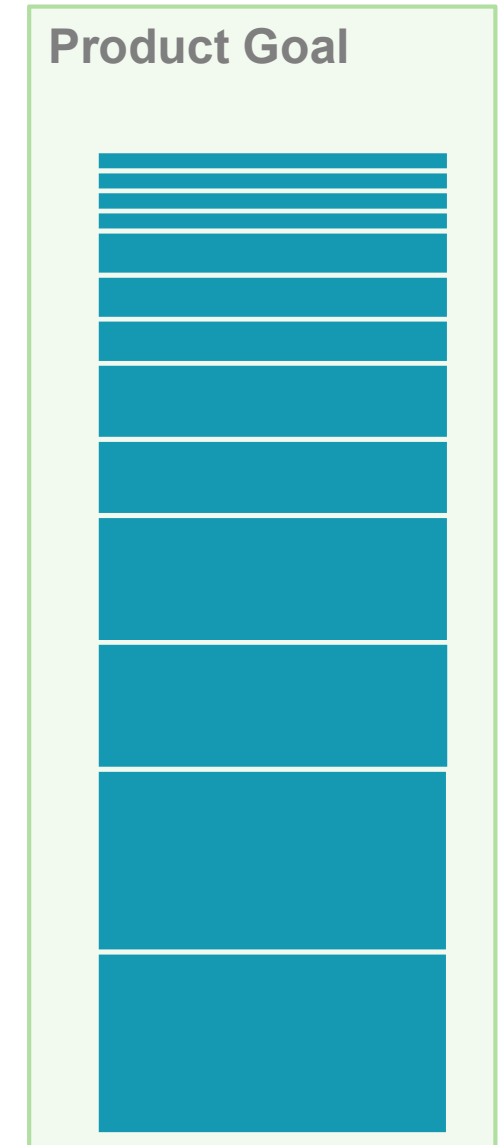
- Strategy to achieve the vision can be expressed in goals for the Product
- Product Goals are measurable and serve to focus the work of the team over a longer period
- There can be only one Product Goal (at a given time)

A Good Product Goal

1. If we have many items in the Product Backlog that don't contribute towards the Product Goal, do we have the right Product Goal?
2. If we wouldn't have another release after this one, what would be a Product Goal to support and drive this release in order to return optimal value?
3. If we were paying for this Product with our own money, what Product Goal would give us the highest chance to get that money back?
4. When we achieve this Product Goal, what has clearly changed or improved from the perspective of customers?
5. Is the least amount of work required to achieve our Product Goal feasible?
6. With our current Product Goal, can we reduce the possibility of abandoning it later?
7. Does our Product Goal excite you and your customers with opportunities?
8. Can we use the Product Goal to prevent increasing risk or wasting time and money?
9. Given our current Product Goal, what would indicate that you should abandon it?

Characteristics of a Product Backlog

- Based on a Product Goal – but not constrained by it
- Single source for valuable items to deliver
- Transparent to Scrum Team & Stakeholders
- Ordered based on value, dependencies, and risk
- Product Backlog items are sized
- A vehicle for starting conversations
- May reference other artifacts like:
 - Specifications, Mockups, Architecture Models



Valid Product Backlog Items

Feature Requests

Non-Functional Requirements

Experiments

User Stories

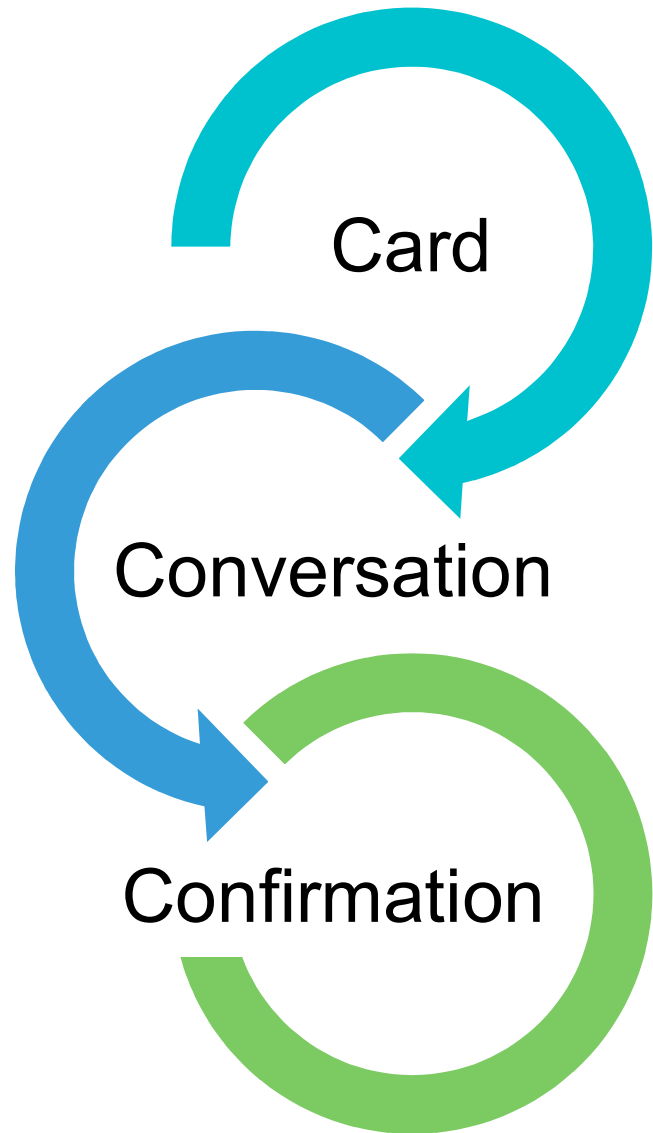
Bugs/Defects

Use Cases

Capabilities

...

The Three C's of User Stories



Stories are **about the shared understanding**
NOT about documentation

TITLE: Derive Racing Time
As a casual Runner
I want to be able to derive the race time for a new distance based on past times
So that I can better plan my training

As a user
I want to book a hotel reservation
So that I can be sure to have a room

As a frequent traveler
I want to book a recurrent room in a hotel
so that I can spare time in administration

As a father
I want to book connecting room in a hotel
so that I can be sure my children are next to my room

TITLE: Derive Racing Time
As a casual Runner
I want to be able to derive the race time for a new distance based on past times
So that I can better plan my training

- Acceptance Criteria**
- *Calculated time is rounded to next half or full minute for all distances of less than 1 hour racing time*
 - *Calculated time is rounded to next minute for all distances of more than 1 hour racing time*
 - *Time of calculation is < 1 second*
 - *Maximal allowed distance is a Marathon*
 - *Shortest allowed distance is 1km*

Build Experiments Into the Process

Customer testing



TITLE: Flash Design Experiment



<https://www.scrum.org/resources/psu-support-nordstrom-video>

A/B Testing

TITLE: Upfront Postage increases Sale

Determine if showing the postage for each preselected catalog item increases sales compared to only showing the total postage on the order confirmation page.

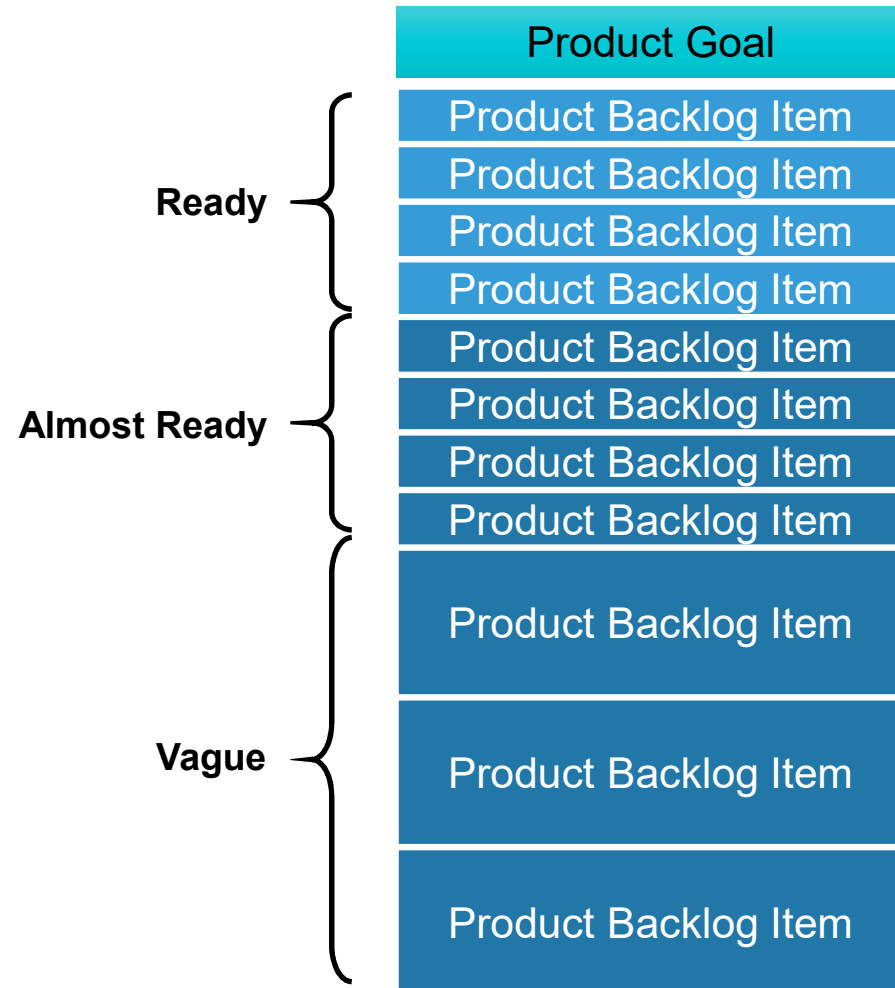
Technical Spike

TITLE: Does library XYZ meet our needs

Implement library XYZ as a proof of concept to see if it:

- has Right data precision
- it meets our performance requirements
- is threadsafe

Refining the Product Backlog



- Product Backlog is continuously refined to increase understanding, granularity and transparency.
- Larger Product Backlog Items are broken down into consumable pieces of value.
- Product Backlog Items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.

Story Mapping

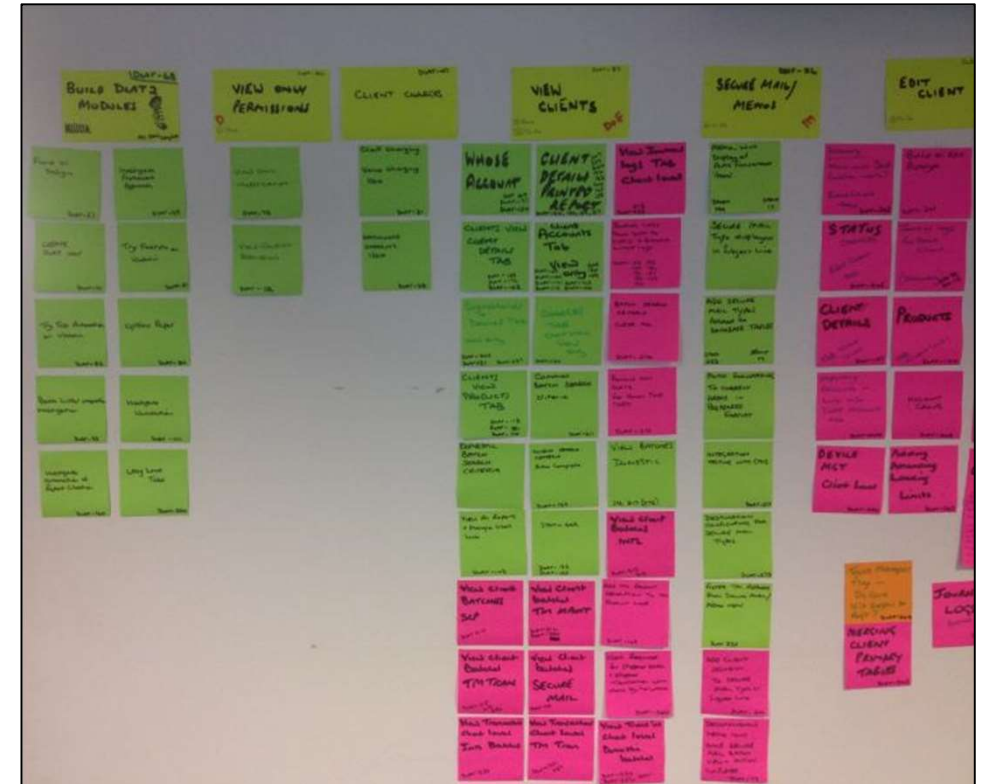


Product Backlogs are one-dimensional

- This makes it difficult to see the workflow, relationships, and dependencies

Story maps help visualize and plan upcoming work

- They foster collaboration by providing a different perspective

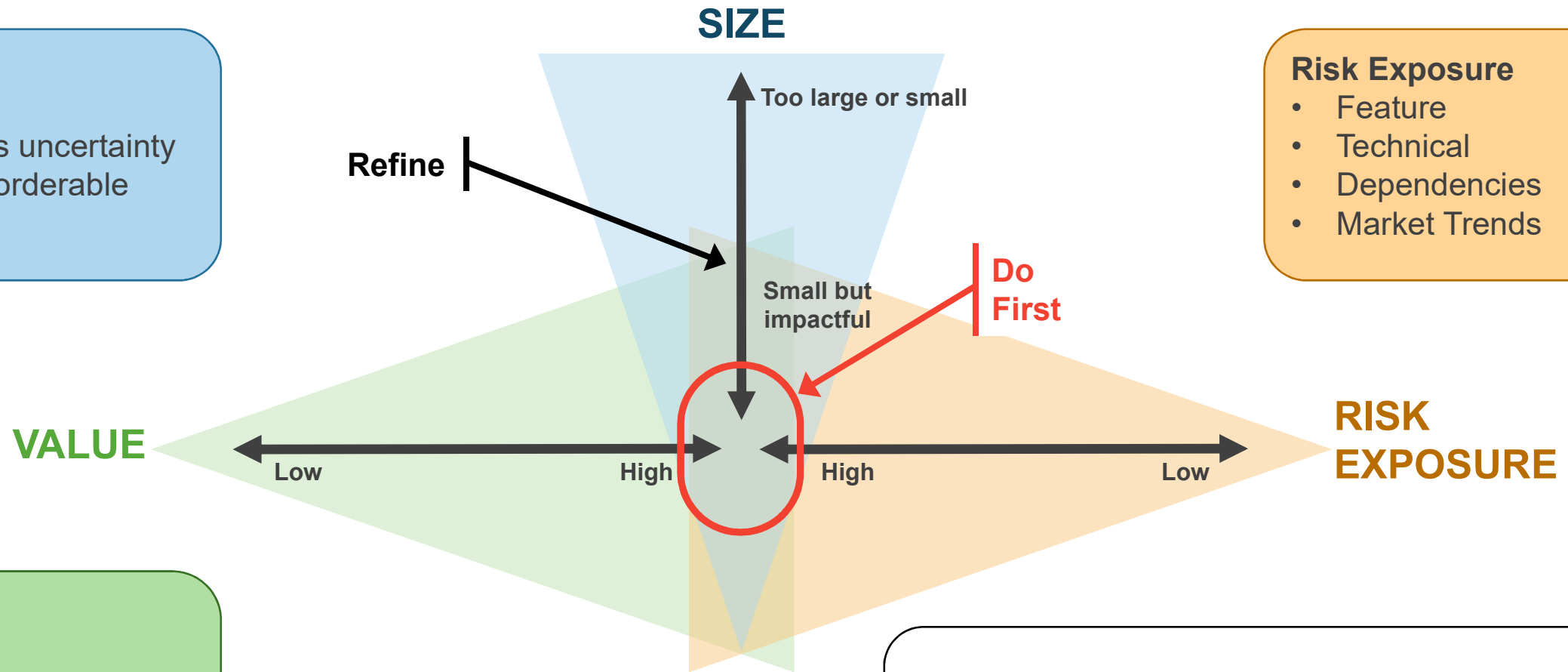


Product Backlog Order Influenced by Many Factors

- Size**
- Smaller
 - Less uncertainty
 - Re-orderable

- Risk Exposure**
- Feature
 - Technical
 - Dependencies
 - Market Trends

- Value**
- ROI
 - Existing Customers
 - Prospects
 - Cost of Delay
 - Discovery



$$\frac{\text{Value} + \text{Risk Exposure}}{\text{Size}} \approx \text{Order Rank}$$

Techniques for Product Backlog Ordering & Value



Business Value Poker (aka Planning Poker)

Assign relative value points (instead of size)

Buy a Feature

Innovation Game using money

20/20 Vision

Innovation Game for simple ordering

Thirty Five

Collaboration activity for ordering

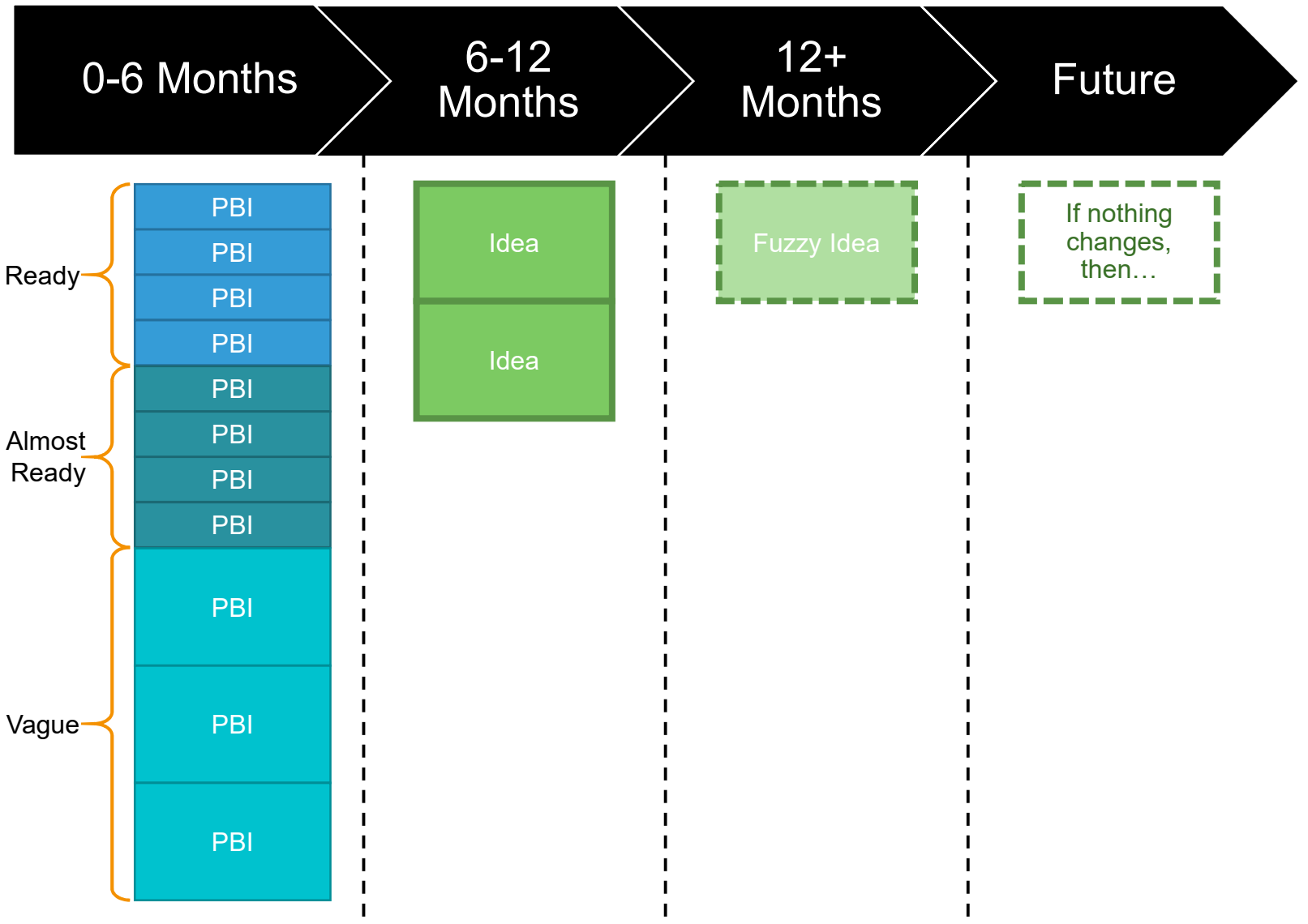
RICE Score

Simple technique to quickly assess priorities

**Have you used
any others?**

Use Product Backlog to Create a Quick Roadmap

Roadmaps help align with key stakeholders

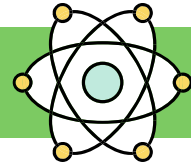


Product Backlog Management Recommendations



TRY

- Delegating the detailing of PBIs, and/or refining PBIs in multiple rounds, with various audiences
- Deleting PBIs that haven't been touched in the past 9-12 months
- Resolving dependency root causes



FAVOR

- Seeing “Problems to solve” over “Solutions to implement” narrative
- Having Developers assist in ordering the product backlog
- Using tools from this class, help others see the reasons for the Product Backlog order
- Considering more than just value when ordering the product backlog



AVOID

- Making PBIs tasks or component layers
- Using one complementary practice for everything (e.g., User Story)
- Thinking success is completing a full feature
- Having a separate “backlog” for defects, architecture, or other non-functional work

TAKE AWAY

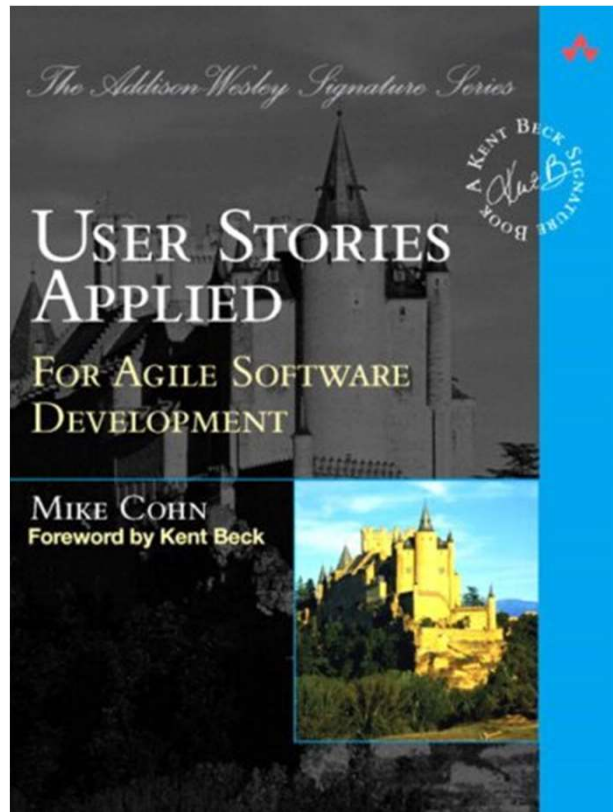
Product Backlog Management

- Product Backlog holds all the work for the Product.
- Product Backlog gives transparency.
- Product Backlog is a living artifact.
- There are many techniques beyond Scrum to help create and order Product Backlogs.

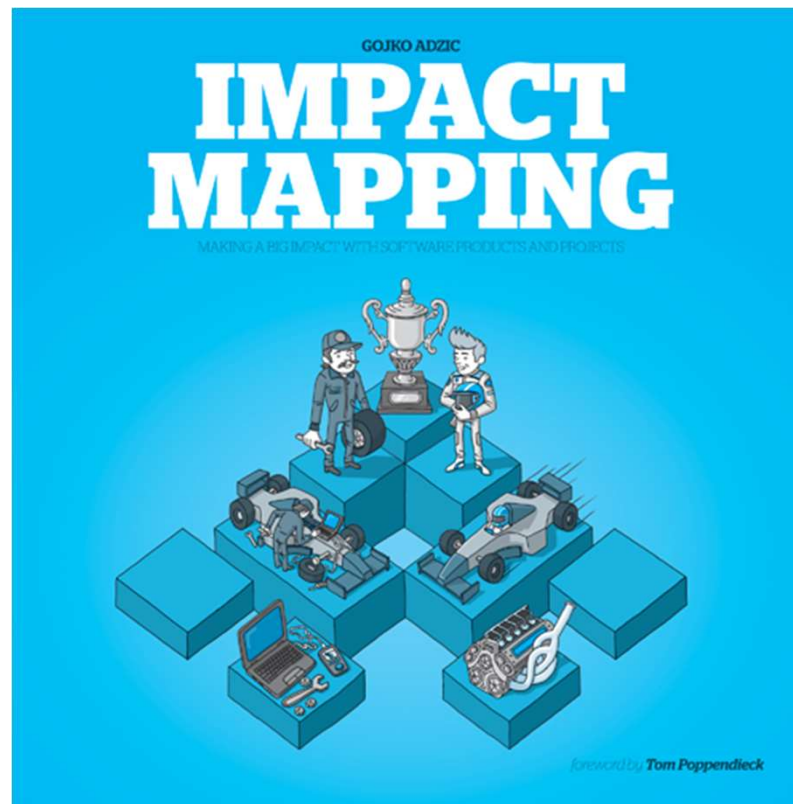


Suggested Reading

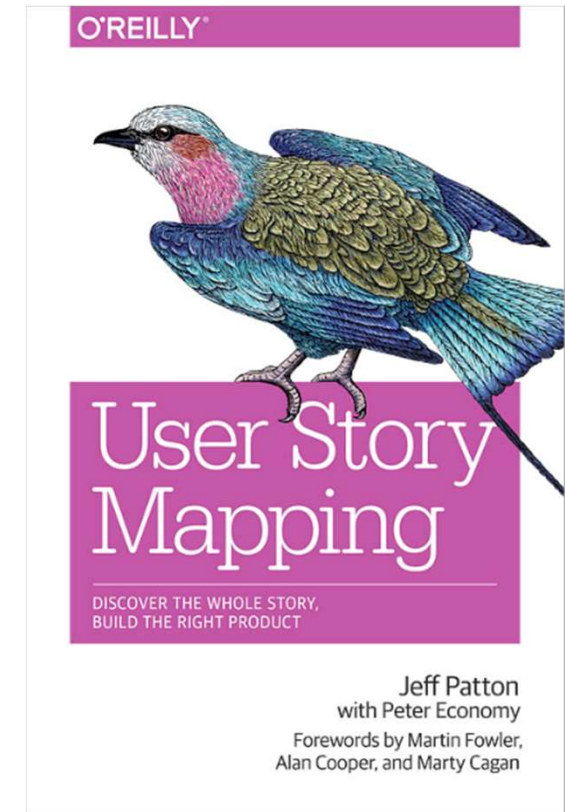
“User Stories Applied”
(Mike Cohn)



“Impact Mapping”
(Gojko Adzic)



“User Story Mapping”
(Jeff Patton)



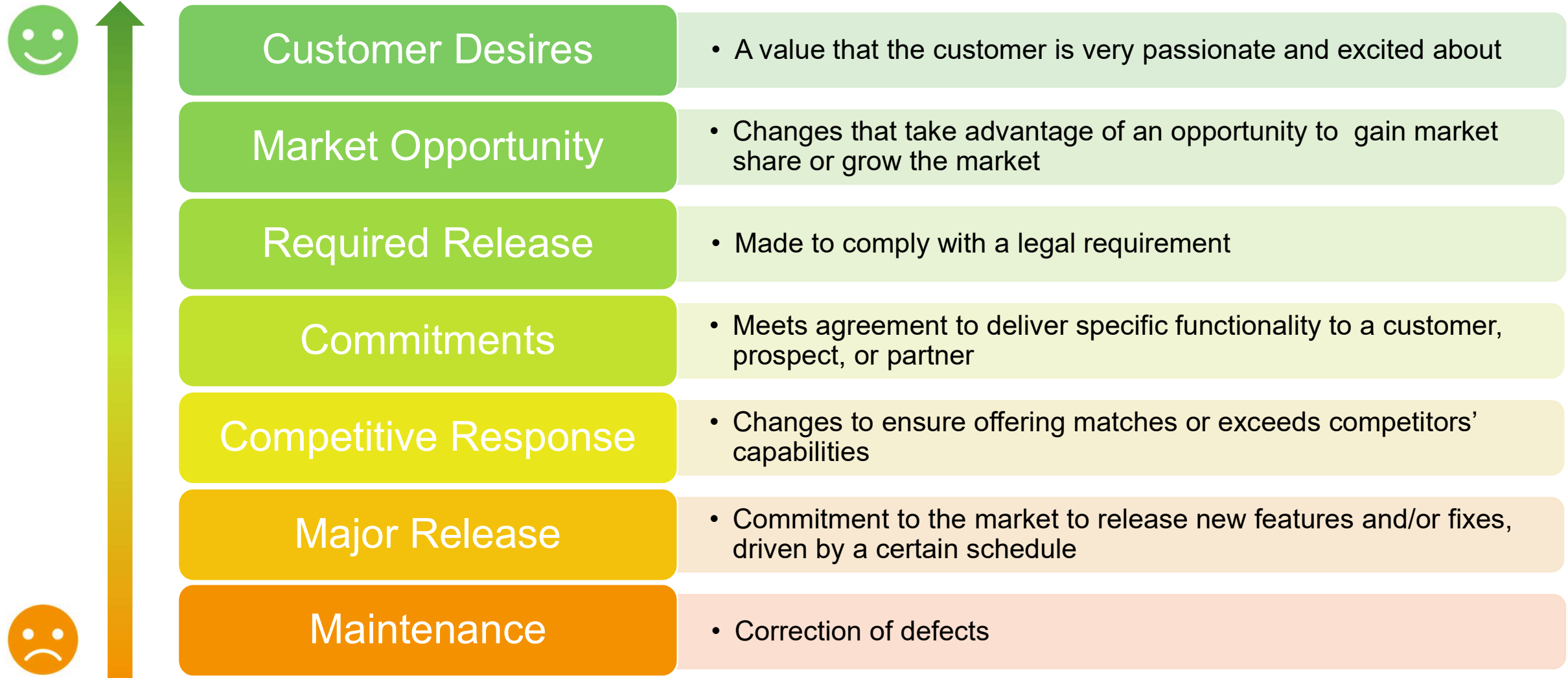
“The most reliable form of self-marketing is to have a long history of stunningly great work, shipped.”

- Seth Godin

7

Releases & Forecasting

Not All Releases are of Equal Desirability ...



Release Strategies

MAJOR



- Many large changes
- Infrequent (often aligns with organization timelines)
- Freezes other work
- High customer absorption costs
- High business risk

MINOR



- Broad changes
- Pre-scheduled (often aligns with Sprint boundaries)
- Often not cohesive
- Often bug fixes and patches
- Less business risk

FUNCTIONAL



- Individual functionality
- Continuous delivery (often during a Sprint, even daily)
- Immediate value
- Low customer absorption costs
- Minimal/no business risk

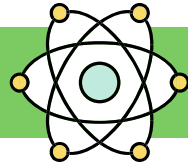
Different release processes involve different investment into testing

Releases Recommendations



TRY

- Considering a release an experiment and validation (possibly with feature flags)
- Adopting a flow-based approach to releases and cadence
- Plan follow up of a release to validate the value



FAVOR

- Releasing inspectable product increments frequent
- Explicitly communicating a customer centered reason for the release
- Using technology and practices to help release early and often
- Decoupling releases from Scrum cadence



AVOID

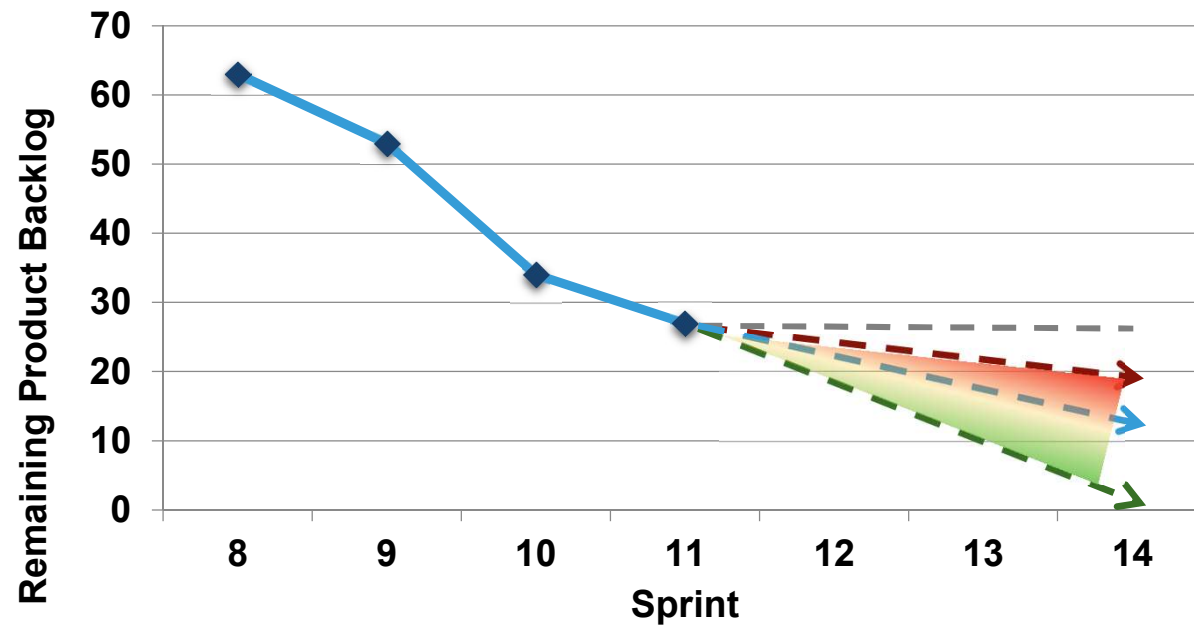
- Assuming your customers can adopt continuously
- Planning too far ahead
- Not having a goal for your release
- Using upfront release plans with fixed scope **and** fixed date
- Not answering questions around delivery

A Product Owner Should Be Able to Measure Progress Against Goals



Different ways for visualizing progress can be used. Some are better than others. Consider forecasting the number of items, story points, or other techniques.

Cone of Uncertainty
(Release burndown chart)



Probabilistic Forecasting
(Monte Carlo Simulation)

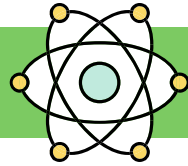
Feb 2018						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
						50%
4	5	6	7	8	9	10
			70%			
11	12	13	14	15	16	17
					95%	
18	19	20	21	22	23	24
25	26	27	28			

Forecasting Towards Stakeholders



TRY

- Setting an achievable, valuable Product Goal and Sprint Goals per Sprint that don't depend on meeting the velocity.
- Using a bandwidth when doing forecasting (instead of using averages).
- Using visualization techniques (e.g., burn-up or burn-down charts).



FAVOR

- Talking to stakeholders about the goals to be achieved, and the value to be delivered (instead of the work to be done).
- Visualizing and defining your workflow around delivering valuable work, using both Flow and Outcome metrics
- Communicating in degrees of certainty with Stakeholders

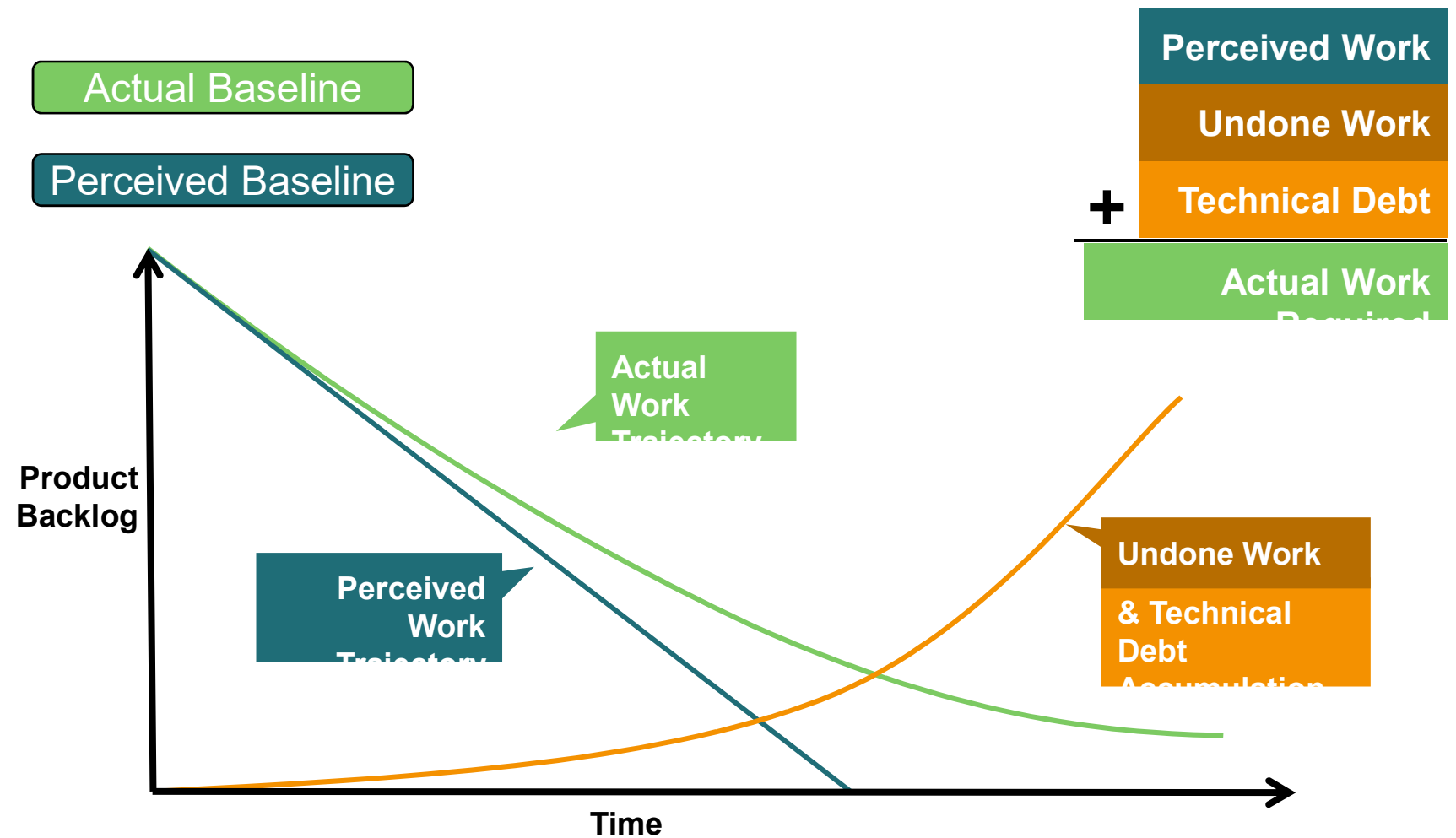


AVOID

- Treating Velocity as a stable, predictable measure of progress.
- Using averages for forecasting.
- Adding-up all the work in the Product Backlog and dividing it by the (average) velocity.
- Talking only about deadlines and delivery dates of work.
- Treating a forecast like a promise or commitment. (It is what it is, a forecast).

Remember:
Undone Work
& Technical
Debt do not
accumulate
linearly

Undone Work & Technical Debt Increase the Actual Work



TAKE AWAY

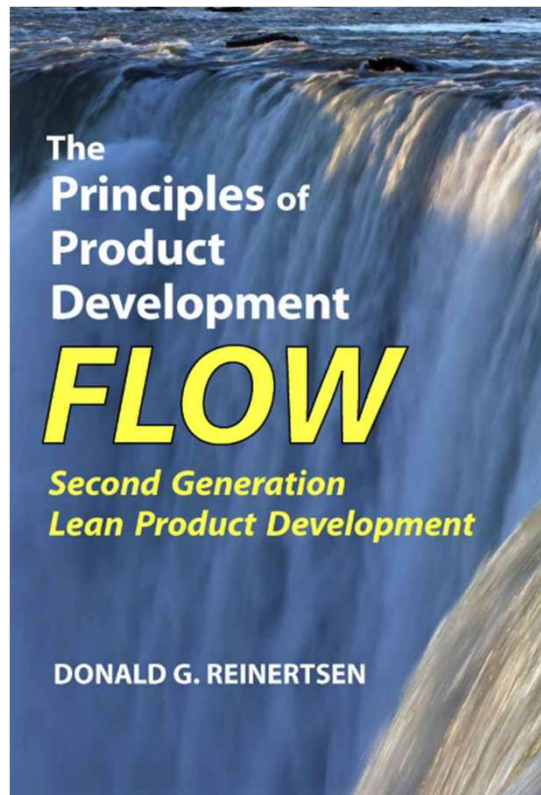
Releases & Forecasting

- Product Backlog holds all information needed for forecasting, planning, and reporting.
- Increasing release frequency of new features or enhancements is a competitive advantage.
- Everything in the Product Backlog is a hypothesis of value. We must validate those hypothesis through releases and effective customer/user feedback mechanisms.

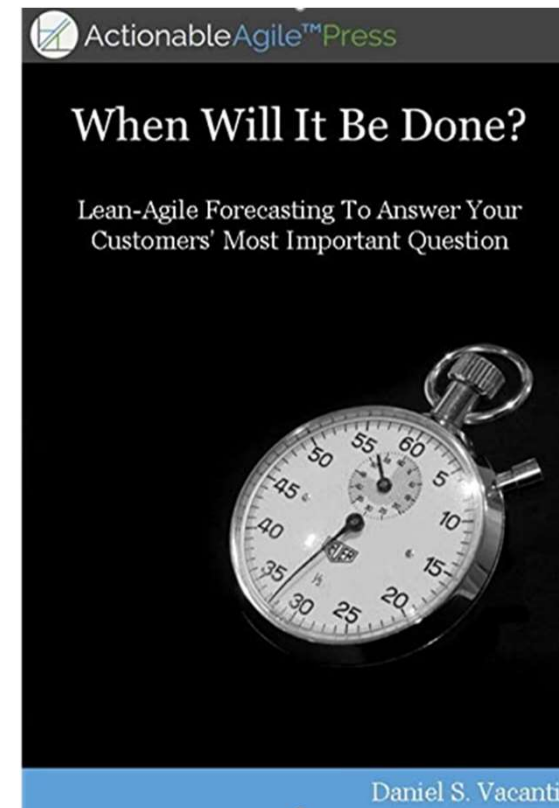


Suggested Reading

“The Principles of Product Development Flow” (Donald Reinertsen)



“When It Will Be Done?” (Daniel Vacanti)



“The journey of a thousand miles begins with a single step”

- Lao Tzu

8

Closing

Want to take your next steps as a PO?

- A Product Owner needs to be versatile in their approach of engaging with many different people and in many different situations.



**The
Visionary**



**The
Collaborator**



**The Customer
Representative**



**The Decision
Maker**



**The
Experimenter**



**The
Influencer**



Inspect Your Knowledge – Feedback in 14 Days or Less!



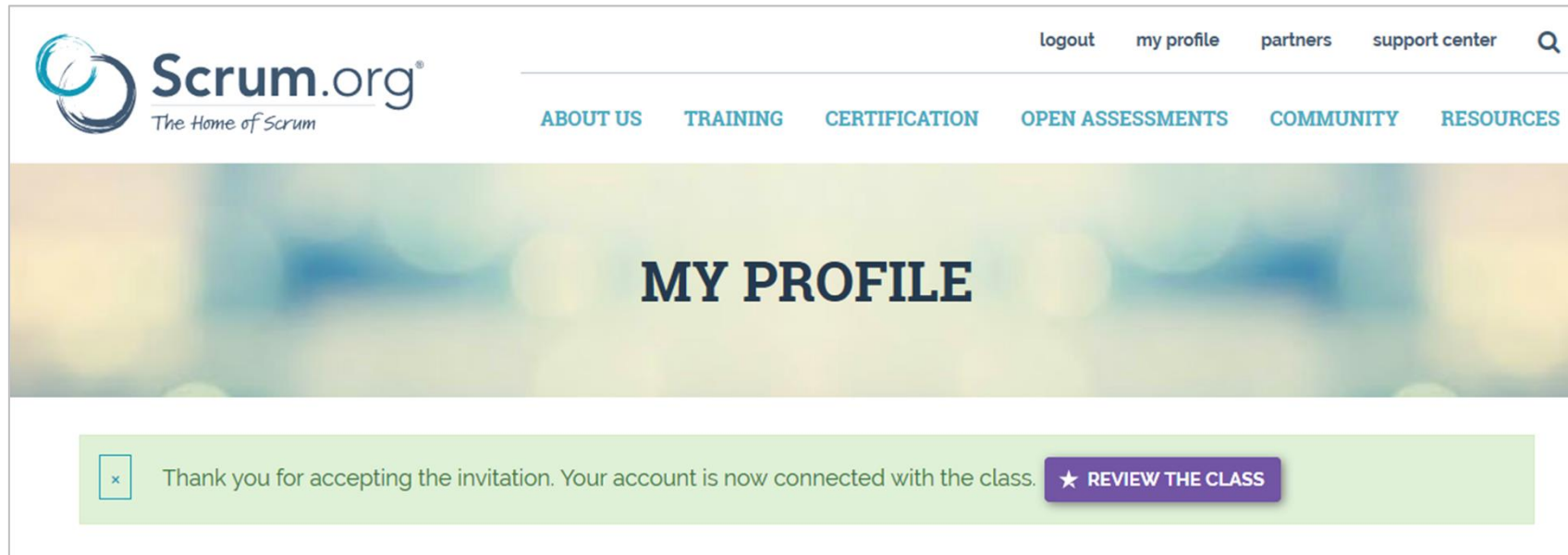
Over the past 2 days, you have learned the importance of inspection, adaptation, and fast feedback cycles. To reinforce these concepts, if you attempt the Professional Scrum Product Owner I (PSPO I) certification assessment within 14 days and do not score at least 85%, you will be granted a 2nd attempt at no further cost.



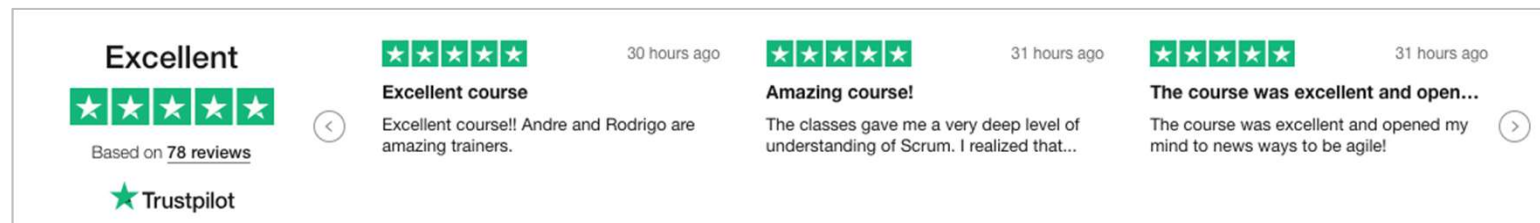
- Test your basic knowledge of Scrum and learn from immediate feedback by taking an Open assessment:
www.scrum.org/assessments/open-assessments
- Use the Open assessments to prepare for Level I assessments

Review Your Class Experience Using Trustpilot

Share your experience with other potential students!



Your review will be visible on our website:



Your Scrum.org Profile

The screenshot shows a user profile on Scrum.org. At the top left is the Scrum.org logo with the tagline "The Home of Scrum". To the right are navigation links: "logout", "my profile", "partners", "support", and a search icon. Below this is a horizontal menu with "ABOUT", "TRAINING", "CERTIFICATION", "COMMUNITY", "INNOVATIONS", and "RESOURCES". The profile header features a dark blue background with a profile picture of Kimberly Wolf on the left. To the right of the photo, her name "Kimberly Wolf" is displayed in bold, followed by "(she/her/her)" and "ABC Company". Social media icons for LinkedIn, Twitter, Facebook, and others are visible. Below the header is a section titled "Kimberly's Certifications" which contains two circular icons for "PSM I" and "PSM II". Underneath is a section titled "Classes Attended by Kimberly" which contains two entries, each with a circular icon and text: "Professional Scrum Master Ken Schwaber Oct 6-7, 2015" and "Professional Scrum Master II Ken Schwaber Nov 6-7, 2018". A red rectangular box highlights the "Classes Attended" section.

Feedback

Feedback is important, and we take it seriously. Your feedback helps us to continually inspect and adapt our courses.

Share your feedback on the class you attended at:

www.scrum.org/feedback

Connect with the Scrum.org community



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Linkedin.com/
company/
scrum-org



Facebook
Facebook.com/
scrum.org



RSS
Scrum.org/RSS



Thank You!

