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# Scrum, Measurement, and Continuous Improvement

**Kurt Bittner**  
Scrum Day Denmark

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Meanwhile, in Japan...



**You might think that Scrum is  
a Product Delivery Framework...**

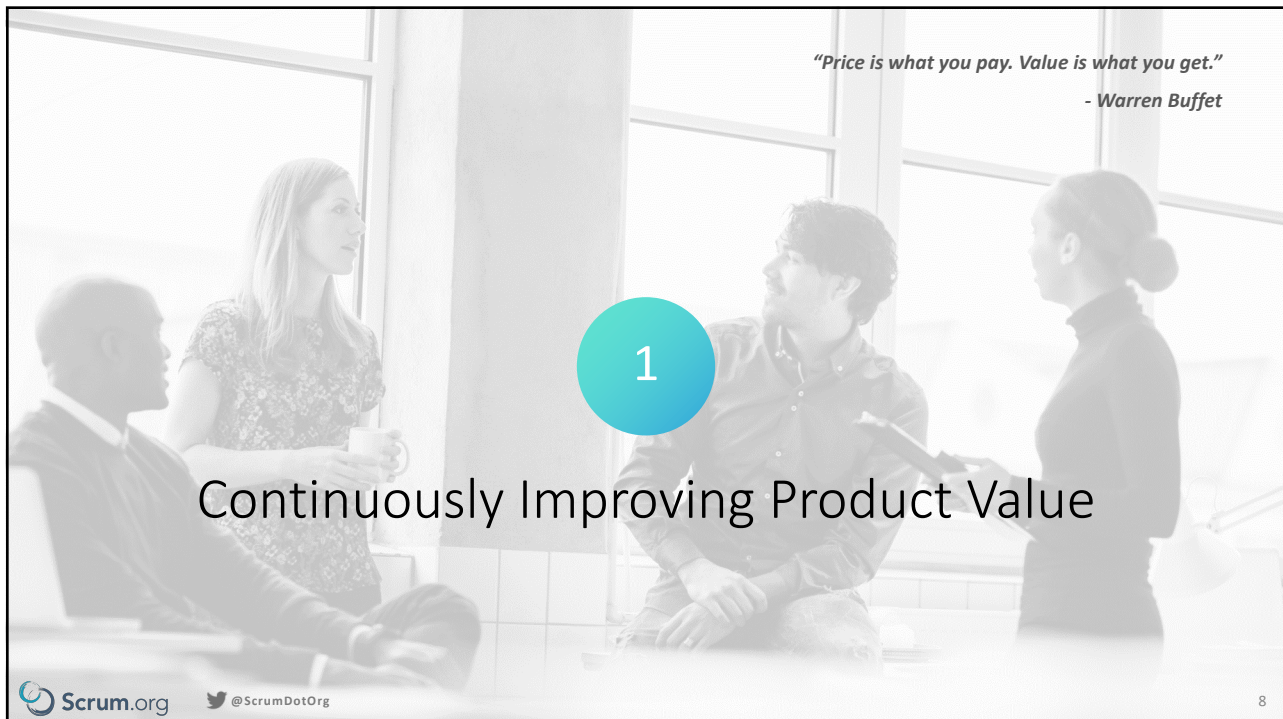
**It is,  
but it's not just about  
Products...**

**It's really  
a Continuous Improvement  
Framework ...**

... with three dimensions:

**Product Value**  
**Team Capability**  
**Organizational Performance**



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*"Price is what you pay. Value is what you get."*  
- Warren Buffet

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Continuously Improving Product Value

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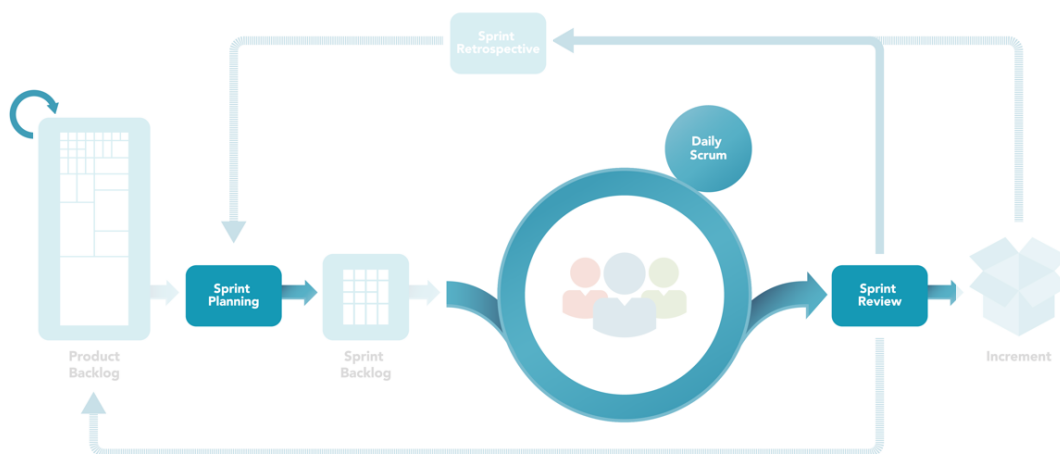
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# Every Sprint is an opportunity to Improve Product Value

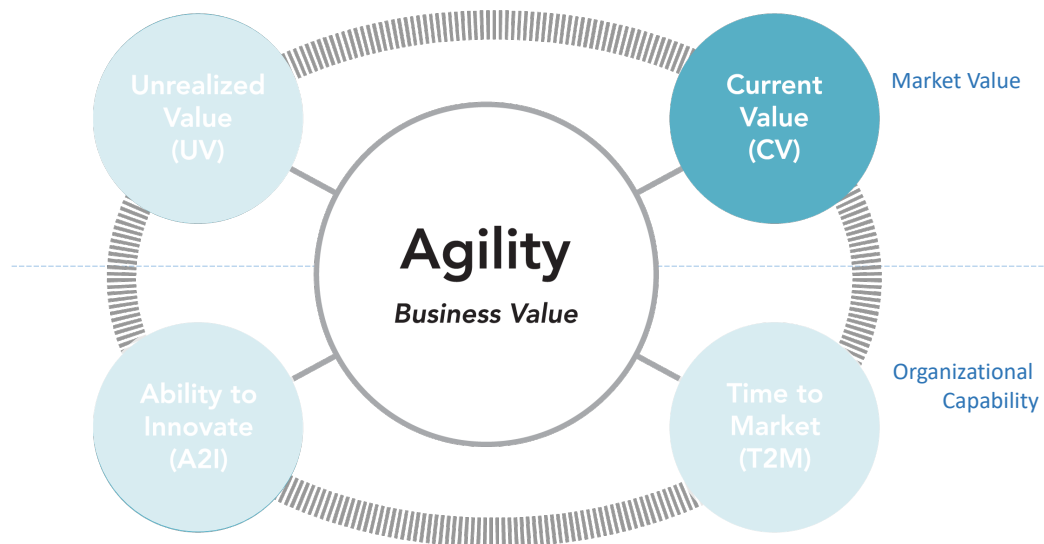
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## Scrum Events Focused on Improving Product Value



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## Evidence Based Management Framework



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### Key Value Area

## Current Value (CV)

reveals the value that the organization delivers to customers, today.

**Goal:** to maximize the value that an organization delivers to customers and stakeholders at the present time; it considers only what exists right now, not what it *might* do in the future.

### Questions:

- How happy are customers today? Is their happiness improving or declining?
- How happy are your employees? Is their happiness improving or declining?
- How happy are your investors and other stakeholders? Is their happiness improving or declining?

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Every PBI is really an experiment about value

We believe [doing this] for [these people] will achieve [this outcome]. We will know that this is true when we see [this measurement] changed

**PBI**

**Persona**

**Outcome**

**Measure**

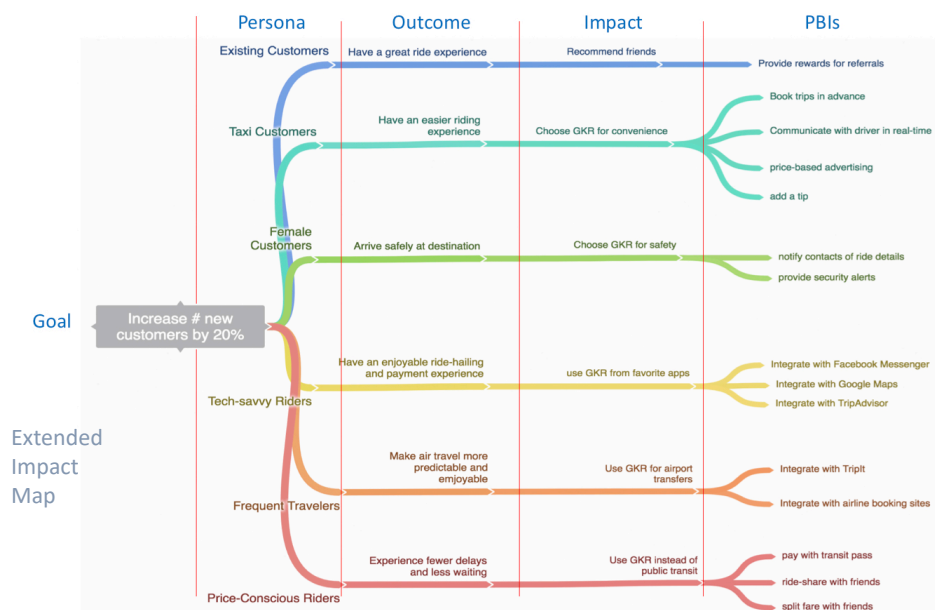
Adapted from Gothelf and Seiden: *Lean UX*

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## Alignment



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<https://www.scrum.org/resources/blog/extending-impact-mapping-gain-better-product-insights>

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# What measures can you think of that would tell you something about Current Value?

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## Measuring Current Value

Discussion

### Example measures - Current Value

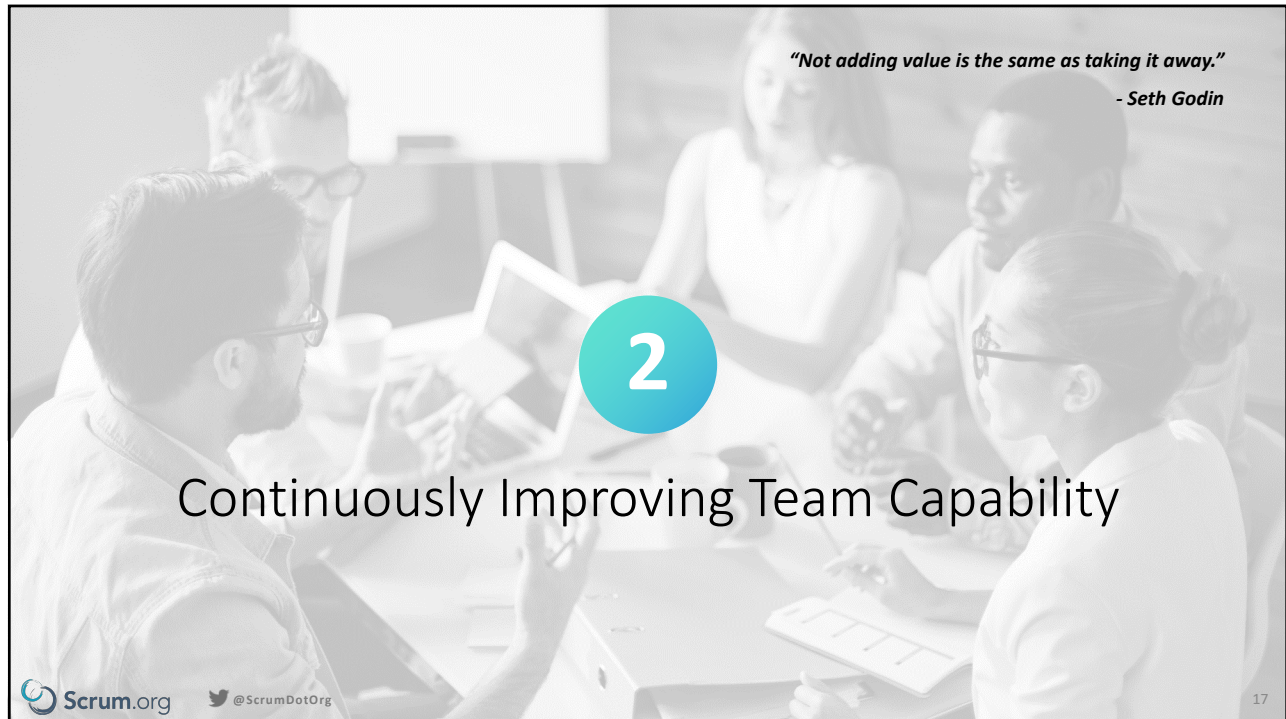
#### Leading indicators

- Release download
- Feature usage
- “Office vibe”
- Incident rates
- Support calls
- ...

#### Lagging indicators

- Product Revenue
- NPS
- Trustpilot reviews
- Employee satisfaction
- Glassdoor reviews
- Incident rate trends
- Support call trends
- ...

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*"Not adding value is the same as taking it away."*  
- Seth Godin

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Continuously Improving Team Capability

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**Every Sprint is *also* an opportunity to  
Improve the Scrum Team's Capability  
to deliver Value**

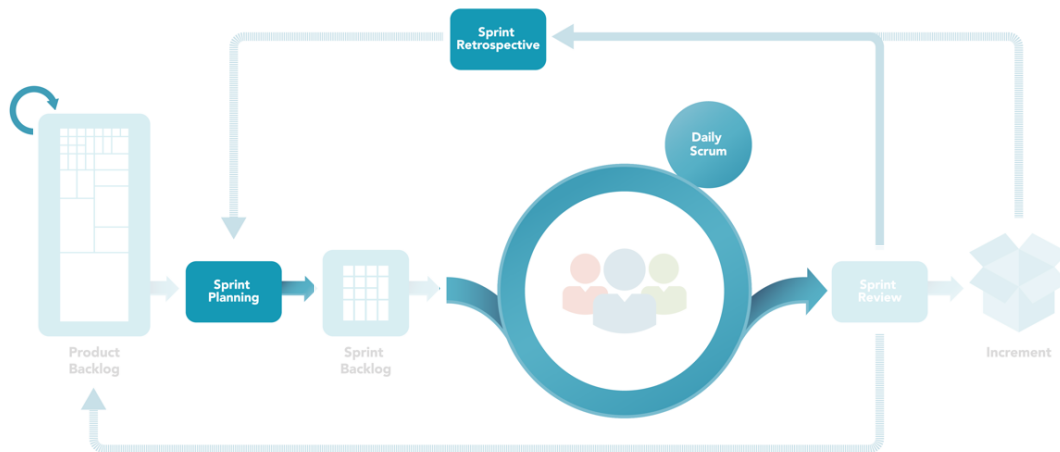
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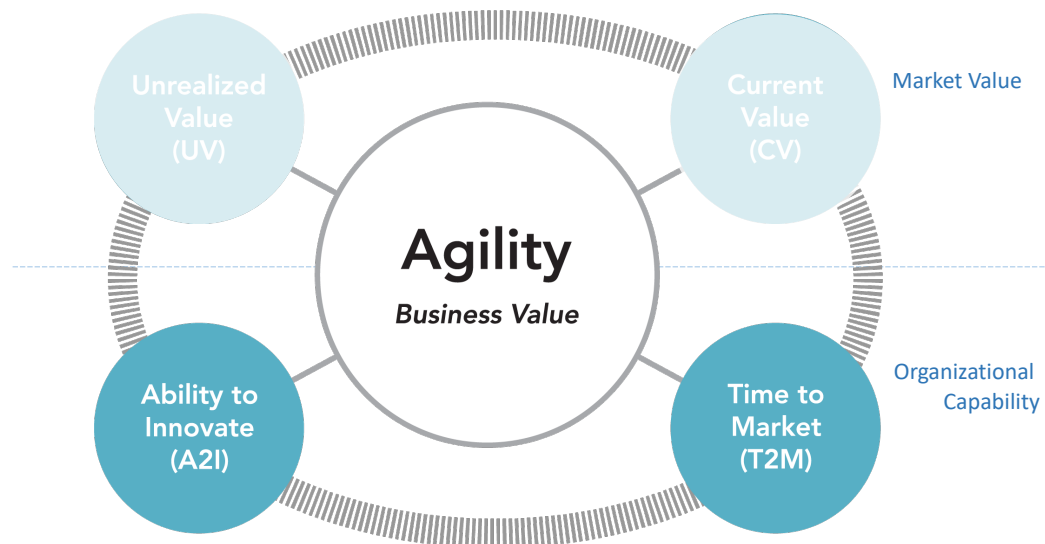


## Scrum Events Focused on Improving Team Capability



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## Evidence Based Management Framework



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## Time to Market (T2M)

the organization's ability to quickly deliver new capabilities, services, or products

**Goal:** to minimize the amount of time it takes for the organization to deliver value.

**Questions:**

- How fast can the organization learn from new experiments?
- How fast can you learn from new information and adapt?
- How fast can you deliver new value to customers?

**What measures can you think of that  
would tell you something about  
Time to Market?**

Case Study

## Measuring Time to Market

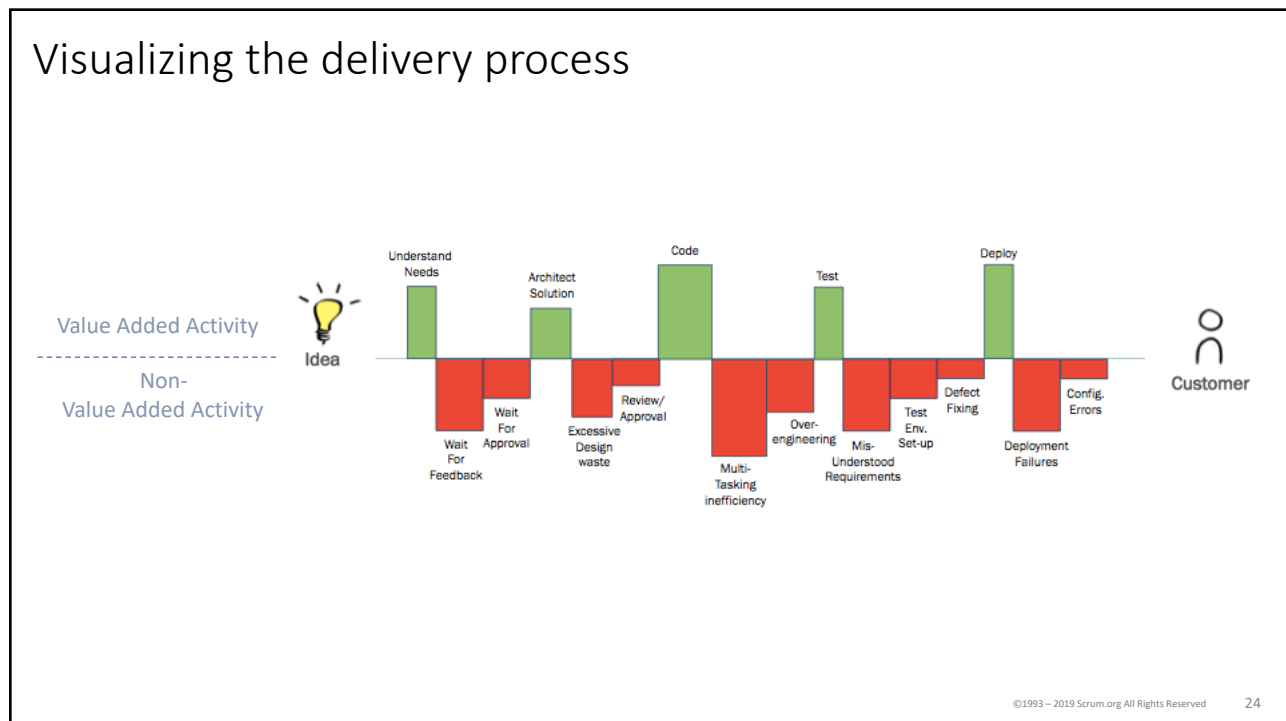
Discussion

## Example measures – T2M

Leading indicators	Lagging indicators
<ul style="list-style-type: none"> <li>Frequency of Build Success</li> <li>Build pass/fail trends</li> <li>Release Stabilization trends</li> <li># Interruptions or context switches</li> <li># meetings</li> </ul>	<ul style="list-style-type: none"> <li>Cycle Time</li> <li>Release Frequency</li> <li>Lead Time</li> <li>Time to Learn</li> <li>MTTR (Mean time to repair)</li> </ul>

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## Ability to Innovate (A2I)

the ability of a product development organization to deliver new capabilities that *might* better meet customer needs.

**Goal:** to maximize the organization's ability to deliver new capabilities and innovative solutions.

**Questions:**

- What prevents to organization from delivering new value?
- What prevents customers or users from benefiting from that innovation?

**What measures can you think of that  
would tell you something about  
Ability to Innovate?**

## Measuring Ability to Innovate

Discussion

### Example measures – A2I

#### Leading indicators

- Technical Debt trends
- Architectural Coupling
- Defect trends
- Production incident trends
- Downtime trends
- Number of active branches, time spent merging
- Time spent context-switching
- Velocity trends

#### Lagging indicators

- Innovation Rate
- Installed Version Index
- Usage Index

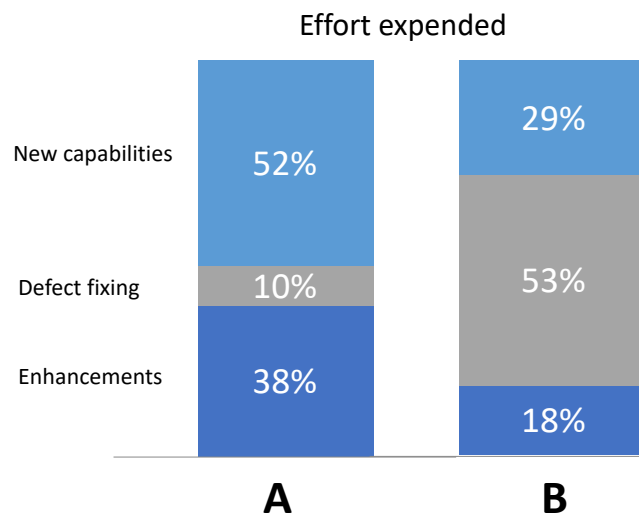
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## Innovation Rate

The percentage of money or effort spent *delivering new capabilities*



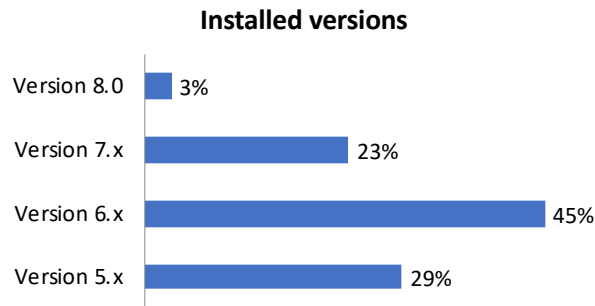
Which is better?

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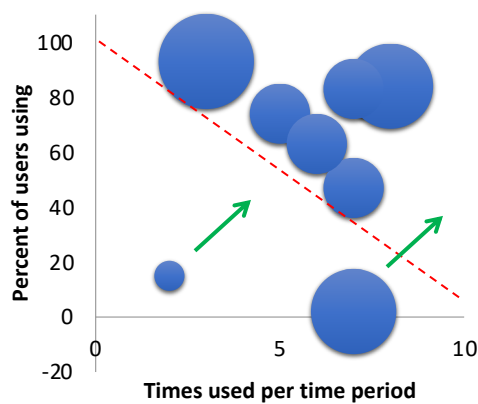


# Installed Version Index

What percentage of your customers are on your latest release?  
What prevents them from using the latest release?



# Usage Index



Size of bubble = Time spent using

Do people actually use the functionality you build? How can you find out?

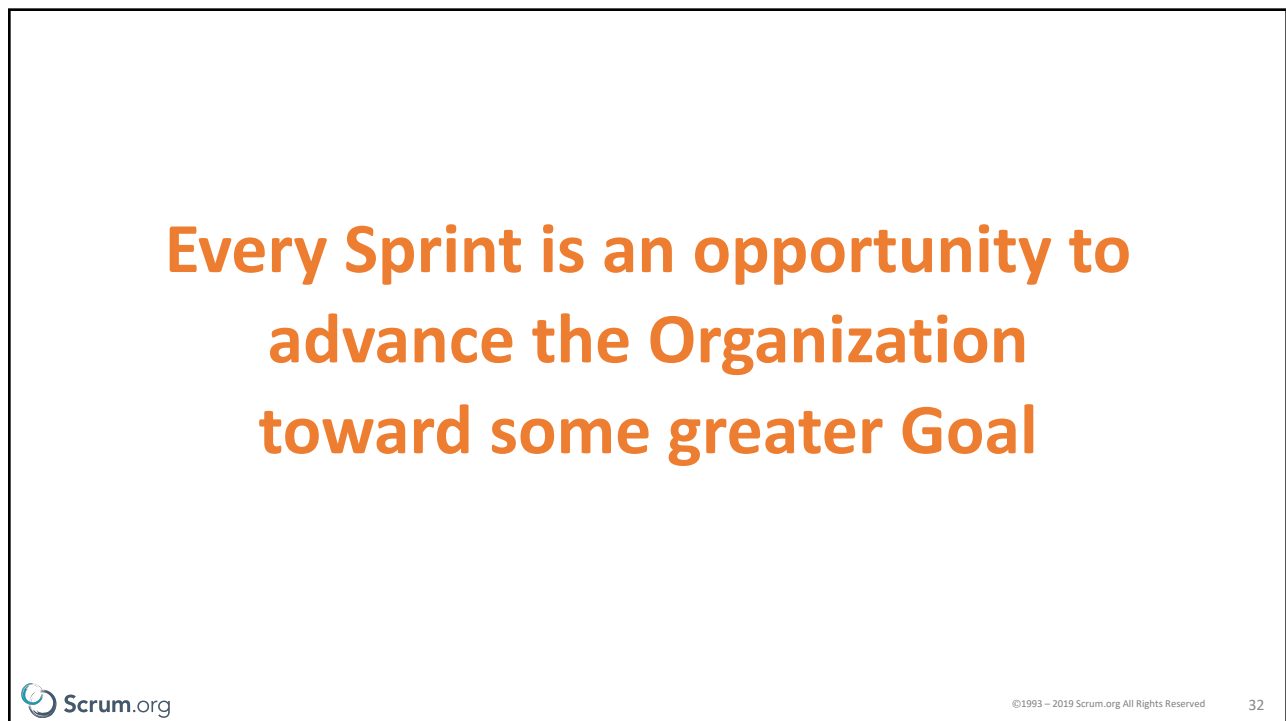
If not, why?

- Can you improve it to achieve the desired outcome?
- If you can't improve usage, can you stop investing?

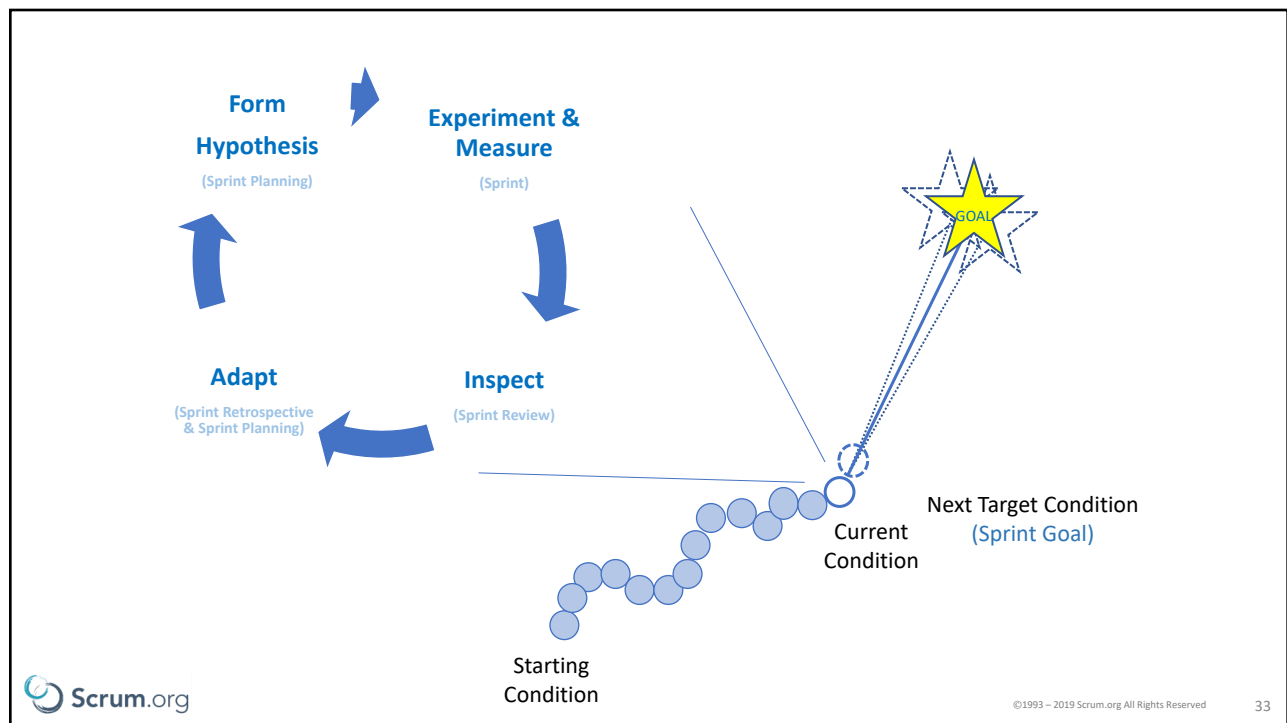
But... sometimes frequency of use is not the only indicator; how many times a year do you file your taxes?



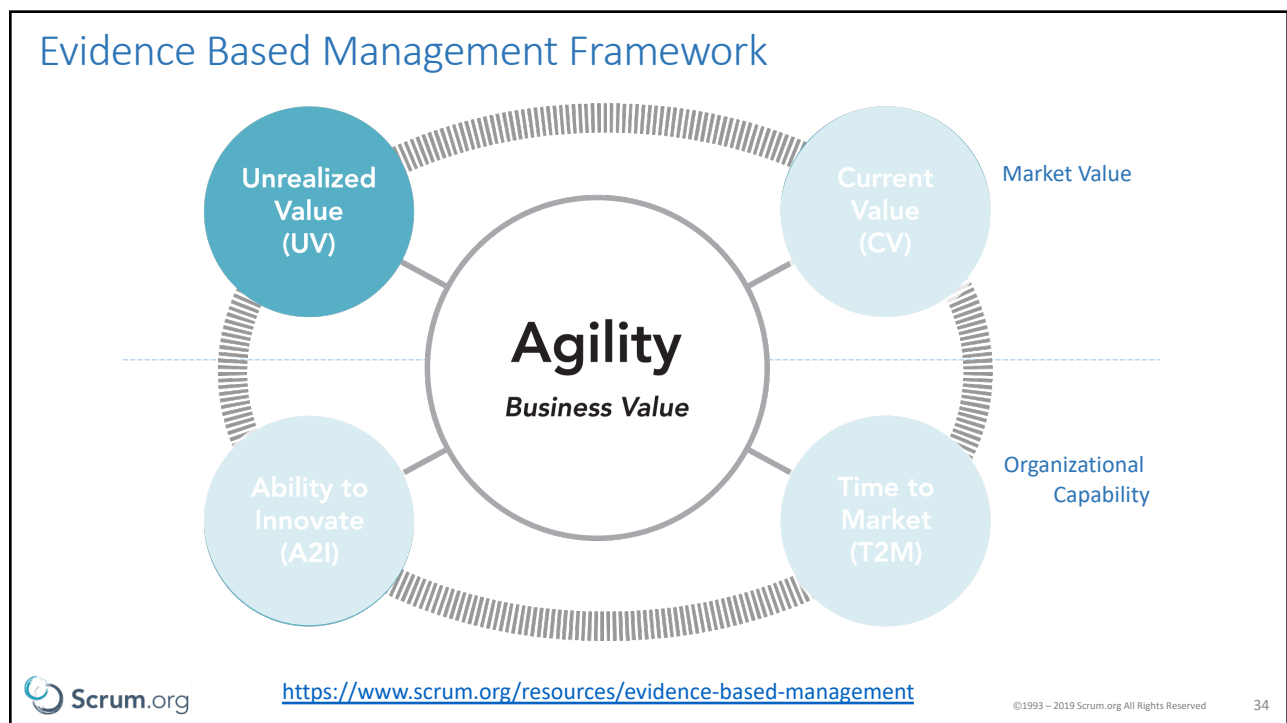
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## Unrealized Value (UV)


reveals the value that the organization *could* deliver to customers, if it was able to successfully reach them all.

**Goal:** to help guide the organization toward opportunities for future growth, and to understand when to shift focus.

**Questions:**

- What needs of customers, actual and potential, remain unmet?
- What are actual and potential customers willing to pay to meet those needs?
- Is it possible to meet those needs?

## What about those *Greater* goals?



Discussion

## Tactical versus Strategic Goals

Tactical – aim higher	Strategic
<ul style="list-style-type: none"><li>• <i>Reduce overhead cost</i></li><li>• <i>Improve profitability</i></li><li>• <i>Consolidate cloud platforms</i></li><li>• <i>Improve current value</i></li><li>• <i>Improve NPS</i></li><li>• <i>Improve Release Frequency</i></li><li>• ...</li></ul>	<ul style="list-style-type: none"><li>• Market leadership</li><li>• Company brand value and reputation</li><li>• Societal contribution</li><li>• ...</li></ul>

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## To find your *Strategic Goals*, keep asking “*Why*”?



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## **Align your Sprint Goals with your greater Goals**

## **Align your Products and Product Backlog priorities with your greater Goals**

## Summary

- Scrum helps you to continuously improve your:
  - Product Value
  - Team Capability
  - Organizational Performance
- Setting ambitious, audacious goals helps you to focus your improvements
  - to rise above merely tactical goals, ask “Why is this goal important?”, until you’ve arrive at the greater Goal
- As you achieve your Goals, keep raising the bar
  - Pretend you are your biggest competitor – what would you do to compete against yourself?
  - Challenge yourself to be even better...



# Questions?

## Where to learn more

- General Evidence-Based Management information (Guide, case studies):
  - <https://www.scrum.org/resources/evidence-based-management>
- Portfolio Management principles:
  - <https://www.scrum.org/resources/introduction-evidence-based-portfolio-management>
- Scrum Studio (patterns of incremental enterprise adoption):
  - <https://www.scrum.org/resources/scrum-studio-model-innovation>

## Where to learn more



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