Agile BW in the Real World

Mark Gorrie, Business Intelligence Manager,
Indigo Books & Music

Session ID # ASUG84001

About the Speaker

Mark Gorrie

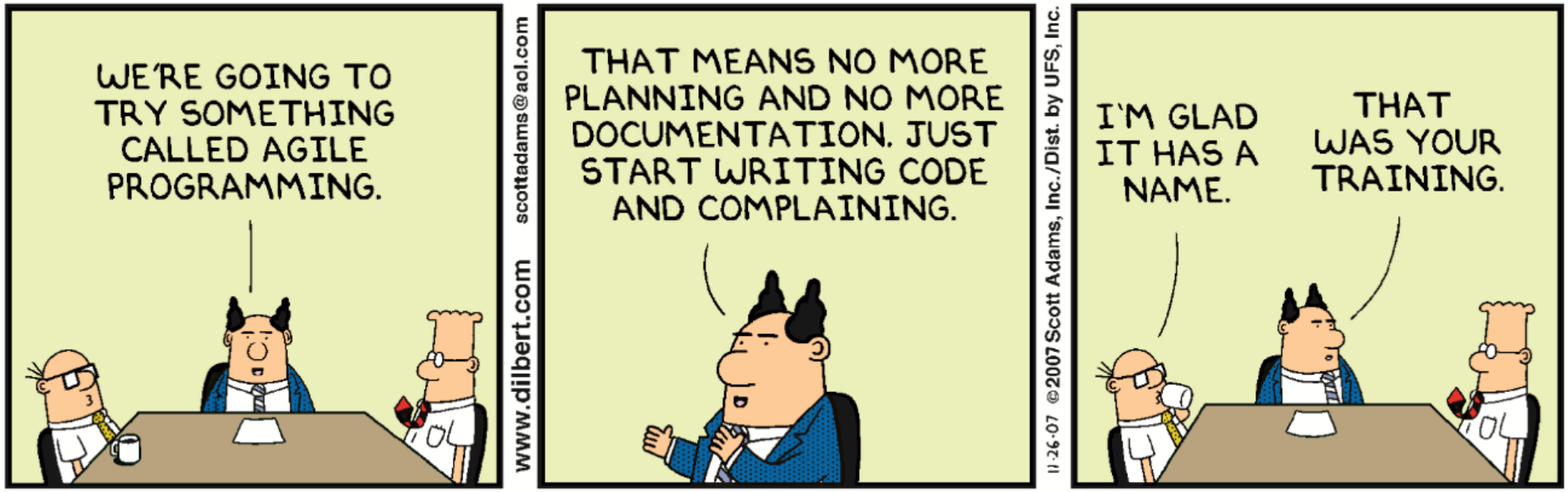
- Business Intelligence Manager
- Indigo Books & Music

Key Outcomes/Objectives

1. Understand why an agile approach to software development is required
2. Understand what the Scrum methodology is
3. Understand how to start using agile and scrum methodologies in your business practices

Agenda

- Agile Project Management – Why?
- Scrum – What is it?
- Deploying Scrum in Your Organization – How?


WE'RE GOING TO TRY SOMETHING CALLED AGILE PROGRAMMING.
THAT MEANS NO MORE PLANNING AND NO MORE DOCUMENTATION. JUST START WRITING CODE AND COMPLAINING.
I'M GLAD IT HAS A NAME.
THAT WAS YOUR TRAINING.
www.dilbert.com scottadams@aol.com
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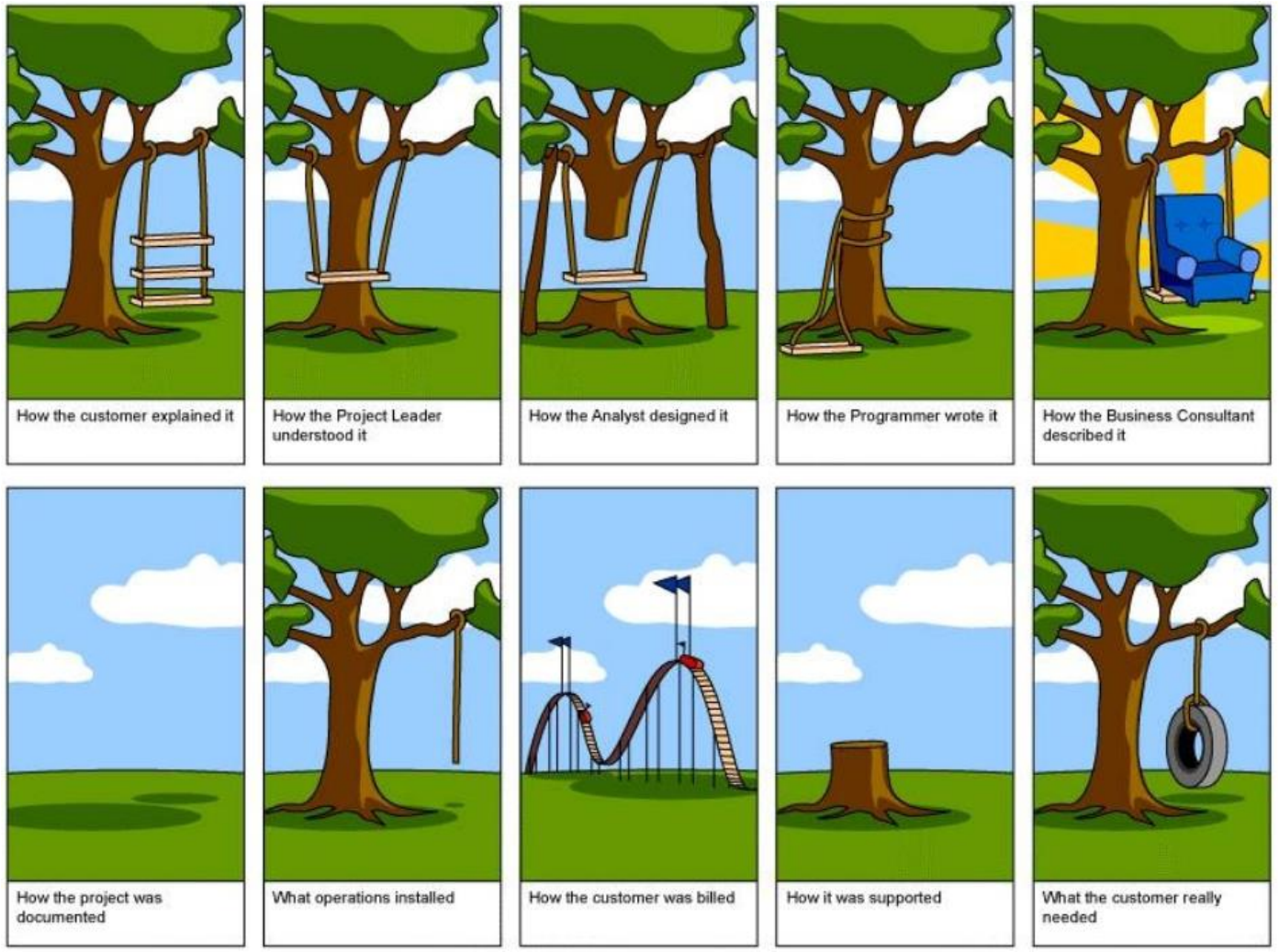
The Alternative:



Agile = Philosophy
Scrum = Methodology

	Scrum	Agile
Philosophy		X
Methodology	X	
Adds process	X	
Transparency	X	X
Deliver software early and often	X	X
Iterative	X	X
Accommodates change	X	X
Continuous improvement	X	X

WHY?

A Monday Morning Conversation at Mark's Traditional Polymorphic Widget Emporium

Hi! The business would like IT to build new **Polymorphic Widget Teleportation** functionality for our customers.

Great! What is the vision and scope? What are your requirements?

Don’t really know yet… but we’ll need to take a customer’s order online, determine if we have stock in a store close to the customer, present them with the option, notify the store, check store stock in real time, teleport the polymorphic widgets to the customer’s location, notify the customer… oh, it would be really cool if we could notify them on their mobile

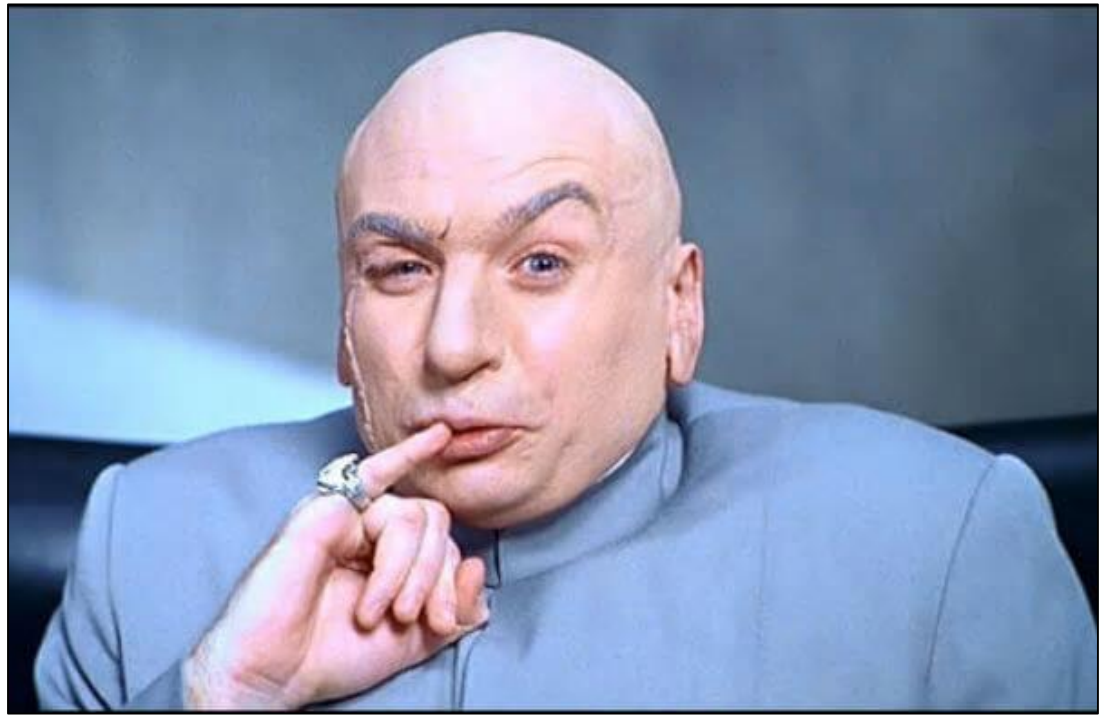
Wait, wait! All great ideas! This sounds like a pretty large and complex cross-functional project… we should probably get clear on the detailed requirements

But I just gave them to you…

No… really. We need very detailed requirements, because once you hand them over to us we're going to go into a bunker and build it for 6 months, so we need to be very clear. Any changes after we start are going to incur a substantial cost increase.

Fine.

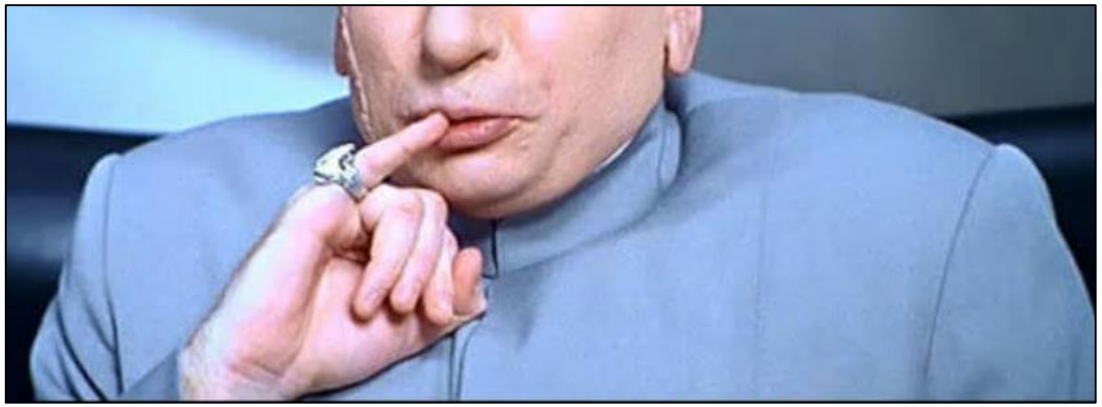
Wow! Uh… OK… here is our cost estimate.



What? That's crazy! Why does IT cost so much? I could outsource it for half that amount…

...

What would it cost to do… half of my requirements?



Fine. That still meets my business case.

6 MONTHS LATER…

Here you go…

What the heck is this?

What you asked for?

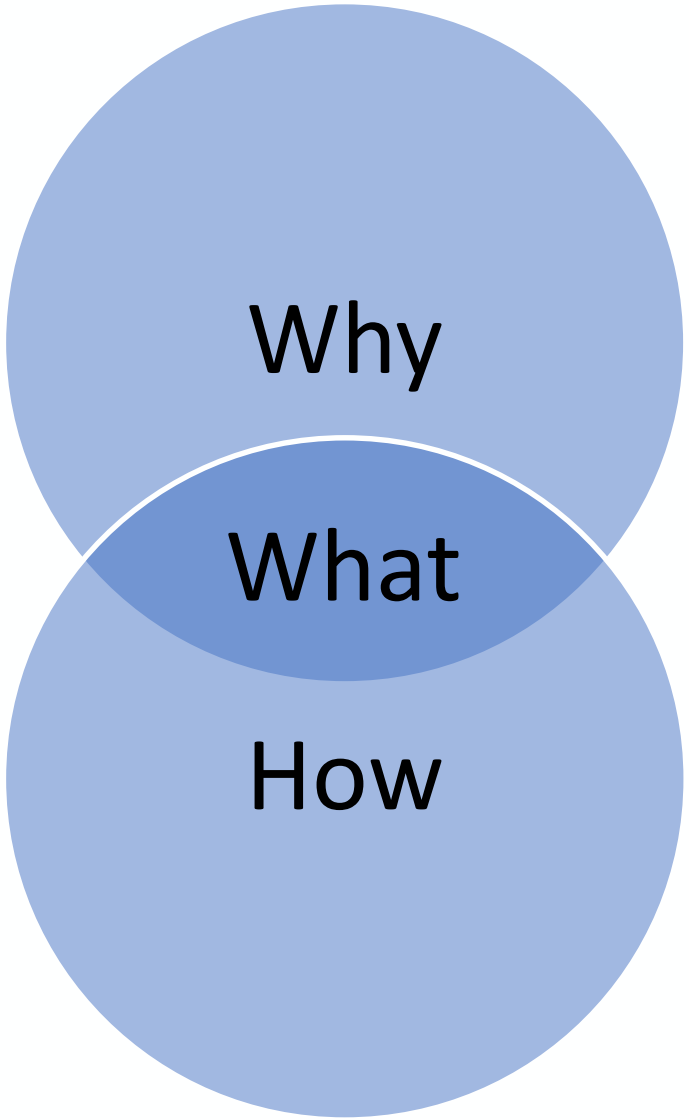
Are you nuts? This doesn’t add any value! This doesn’t meet our needs! We need the rest of the sink, like, yesterday!

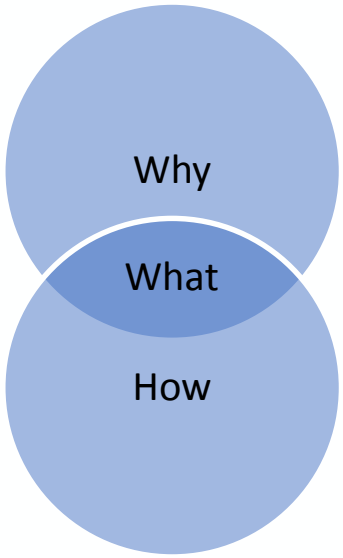
Ok… here's how much it will cost and how long it will…

Fine! Whatever! Just get it done. No wonder we never deliver on time or on budget.

polymorphic widget controller business.

SOUND FAMILIAR?


Why
What
How



Business

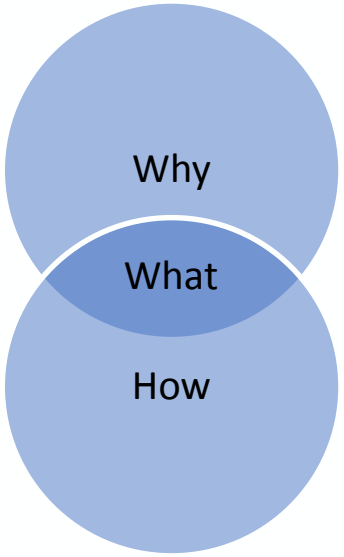
IT

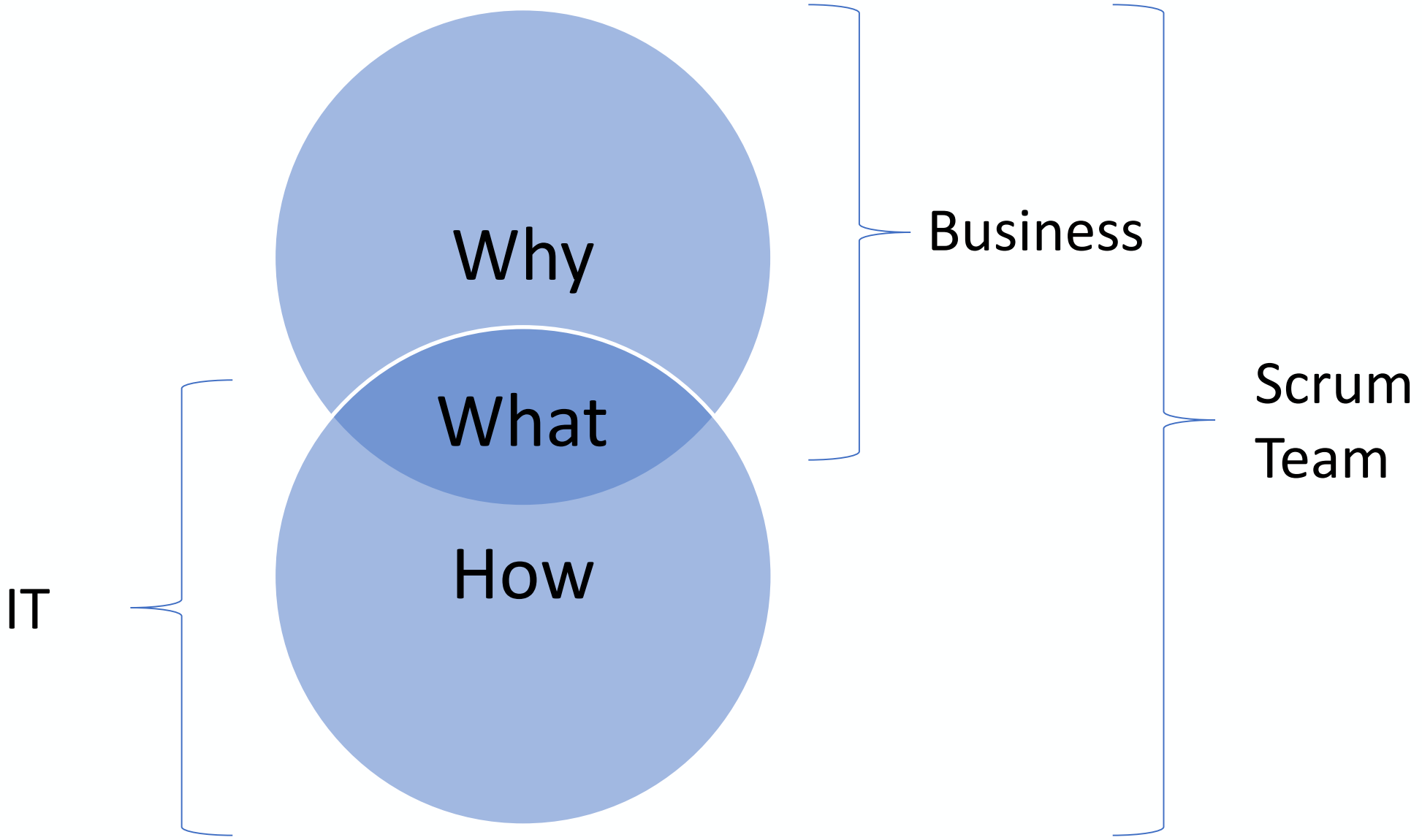
- Disengaged
- No Ownership
- No Governance
- “*We do what we’re told*”

- Planning for the Future is not a Priority
- Understanding Tools & Processes is Not my Job
- *"We don't own technical stuff"*

Business

IT

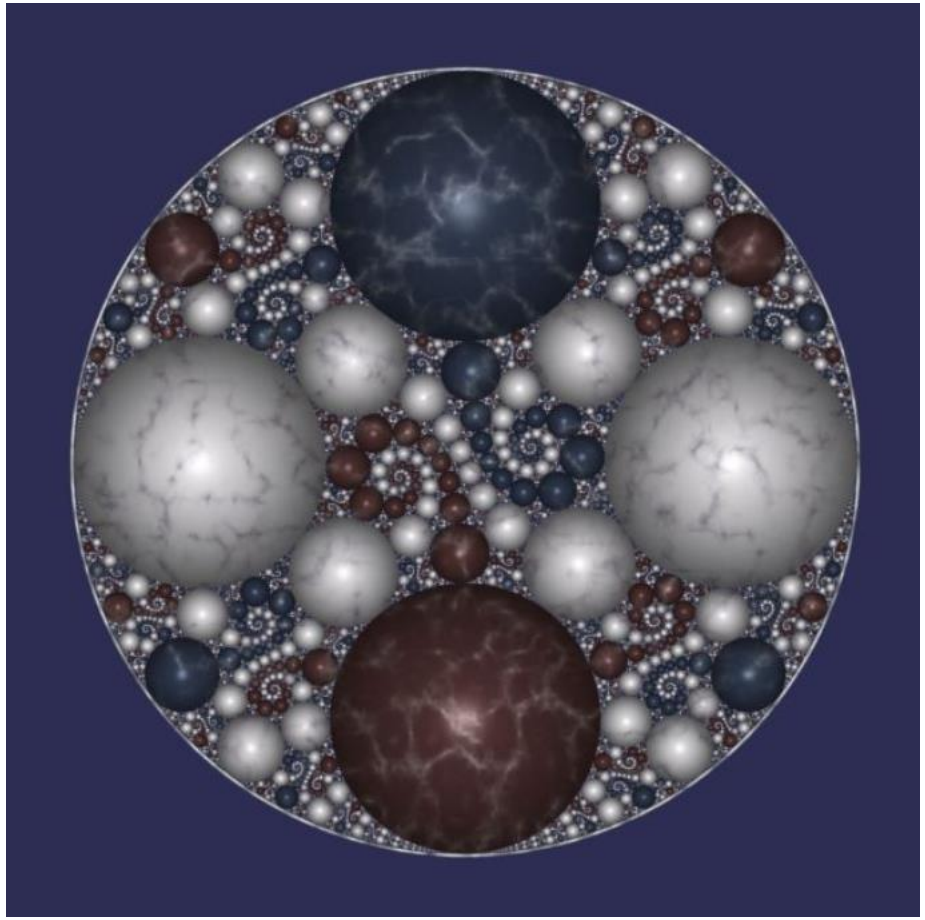



Why
What
How
Business
IT
Scrum
Team

WHAT?

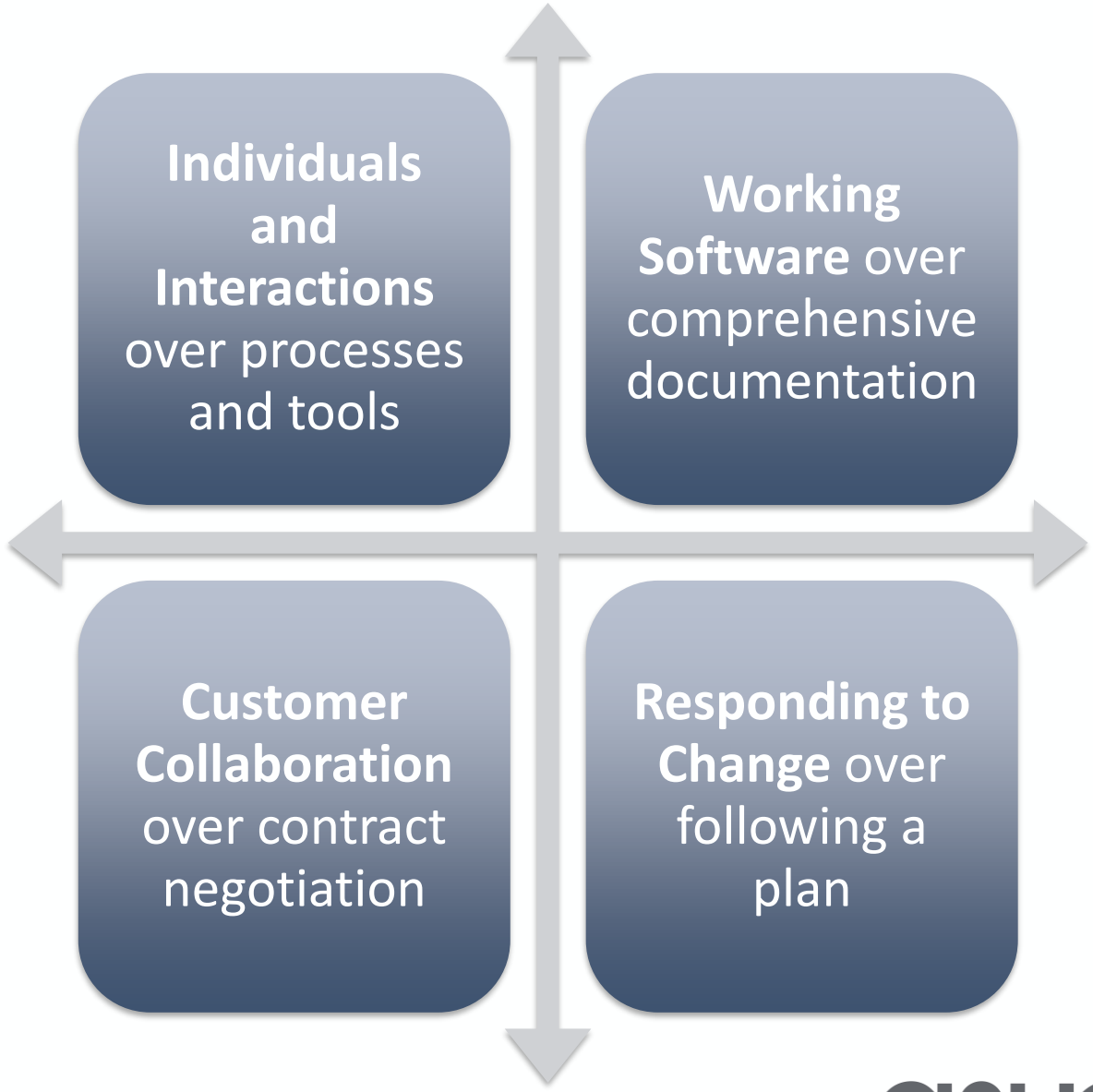
From Simple Things…

$ax^2 + bx + c$

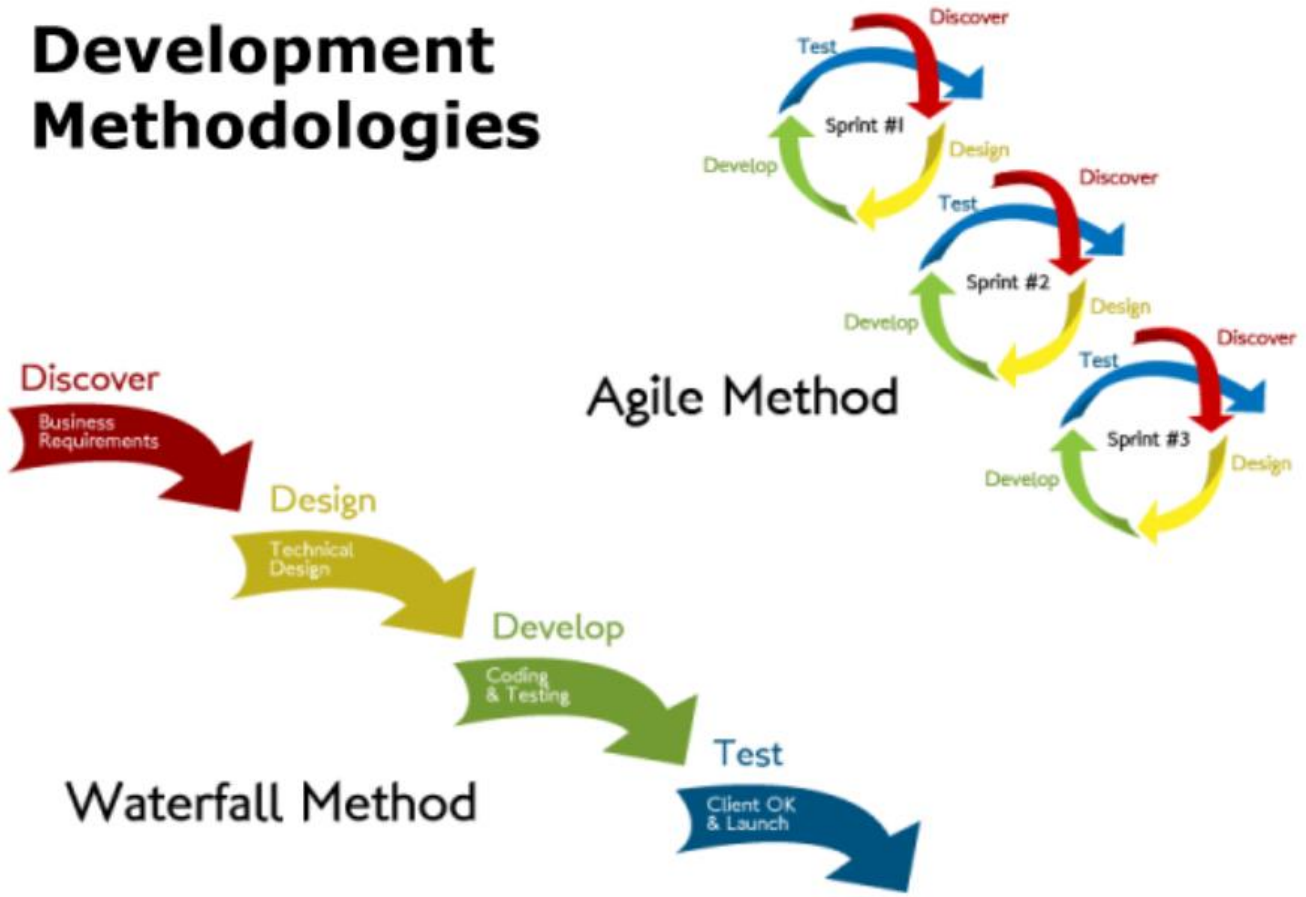


From Simple Things…

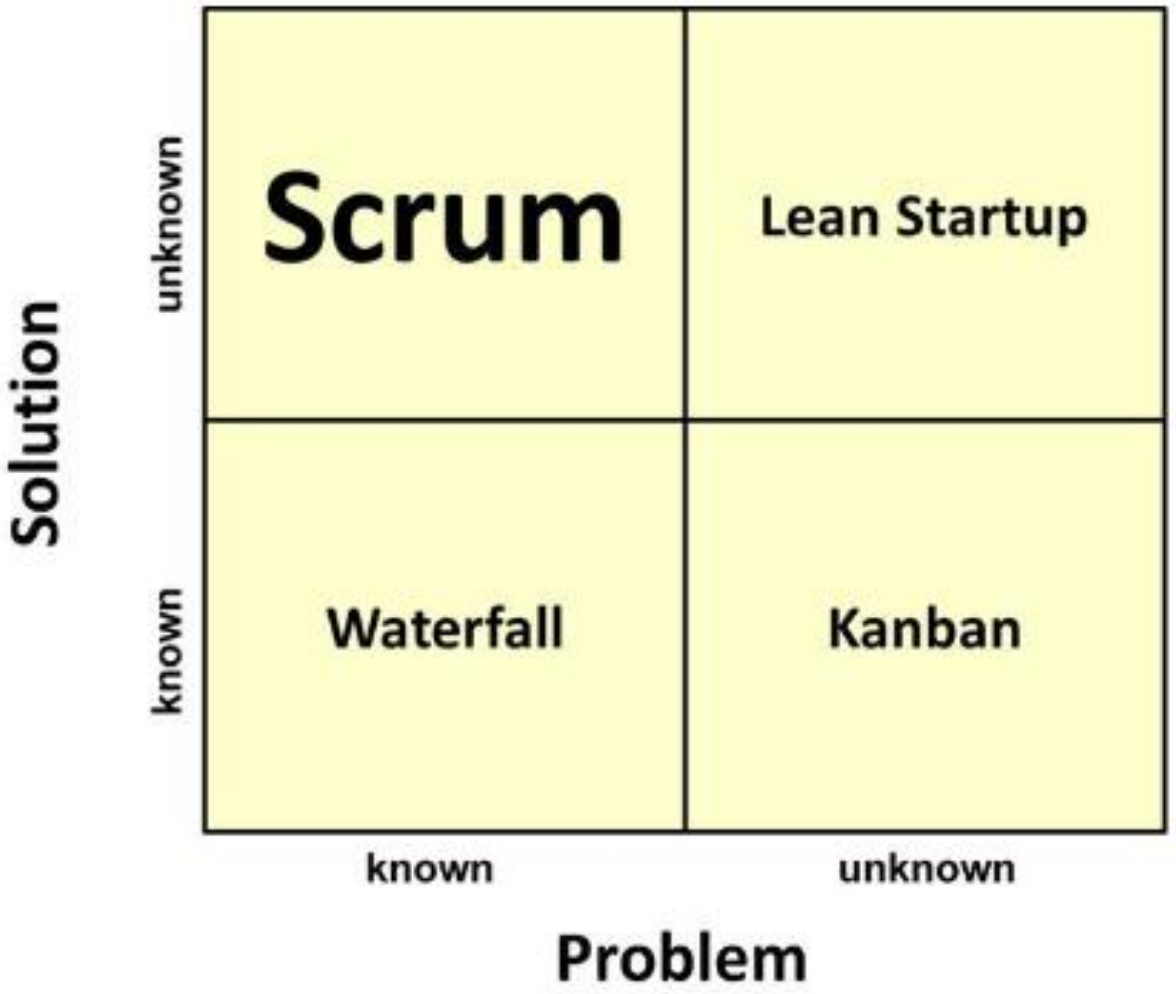
The Manifesto for Agile Software Development



Waterfall vs Agile



Types of Methodologies



Unclear

How To Do It

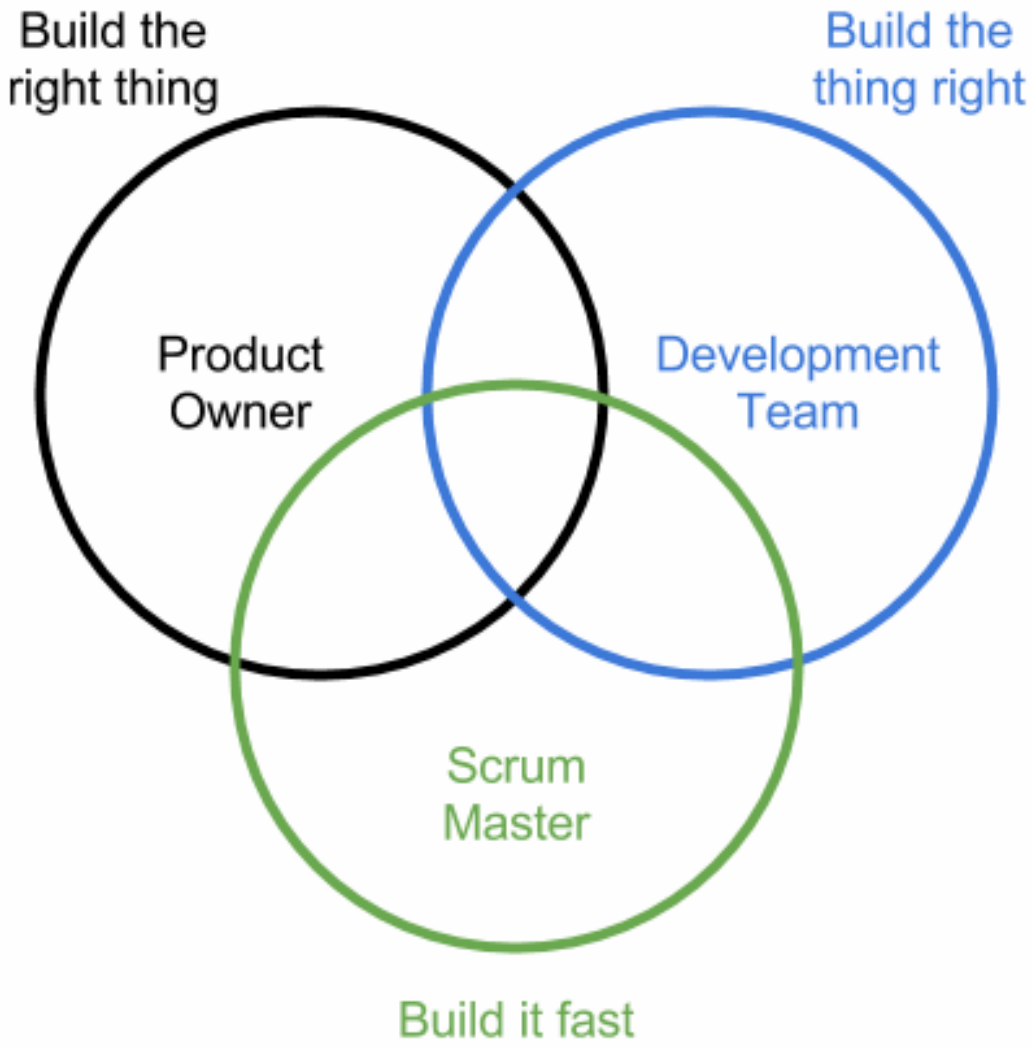
Going on a Quest	Lost in the Fog
• Stakeholders are sure about what needs to be done • Stakeholders are unsure how the project is to be done • The organization needs to spend time on defining "how"	• Stakeholders are unsure about what is to be done • Stakeholders are unsure how the project is to be done • The organization is attempting to something that has not been done before • The organization needs to spend time defining "what" and "how"
Painting by Numbers	**Making a Movie**
• Stakeholders are sure about what is to be done • Stakeholders are very sure about how the project is to be done • The organization is going through a repetitive project and knows the skills needed • Writen procedures, methods and systems are available to replicate what has been done in the past	• Stakeholders are very sure about how the project is to be done • Stakeholders are unsure of what is to be done • The organization is clear about the method to be used and has the expertise • The organization needs to spend time defining "what"?

Clear

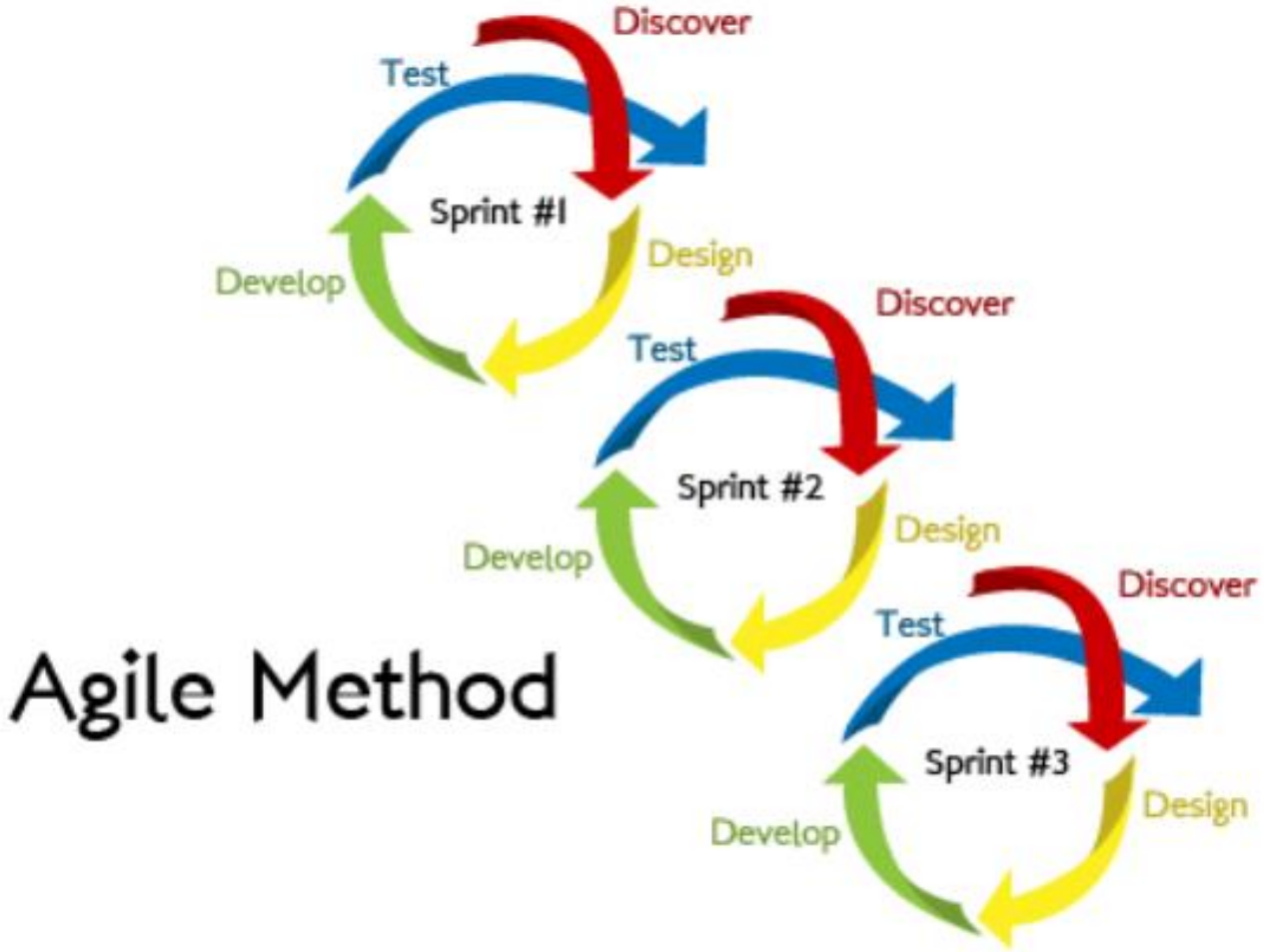
What To Do

Unclear

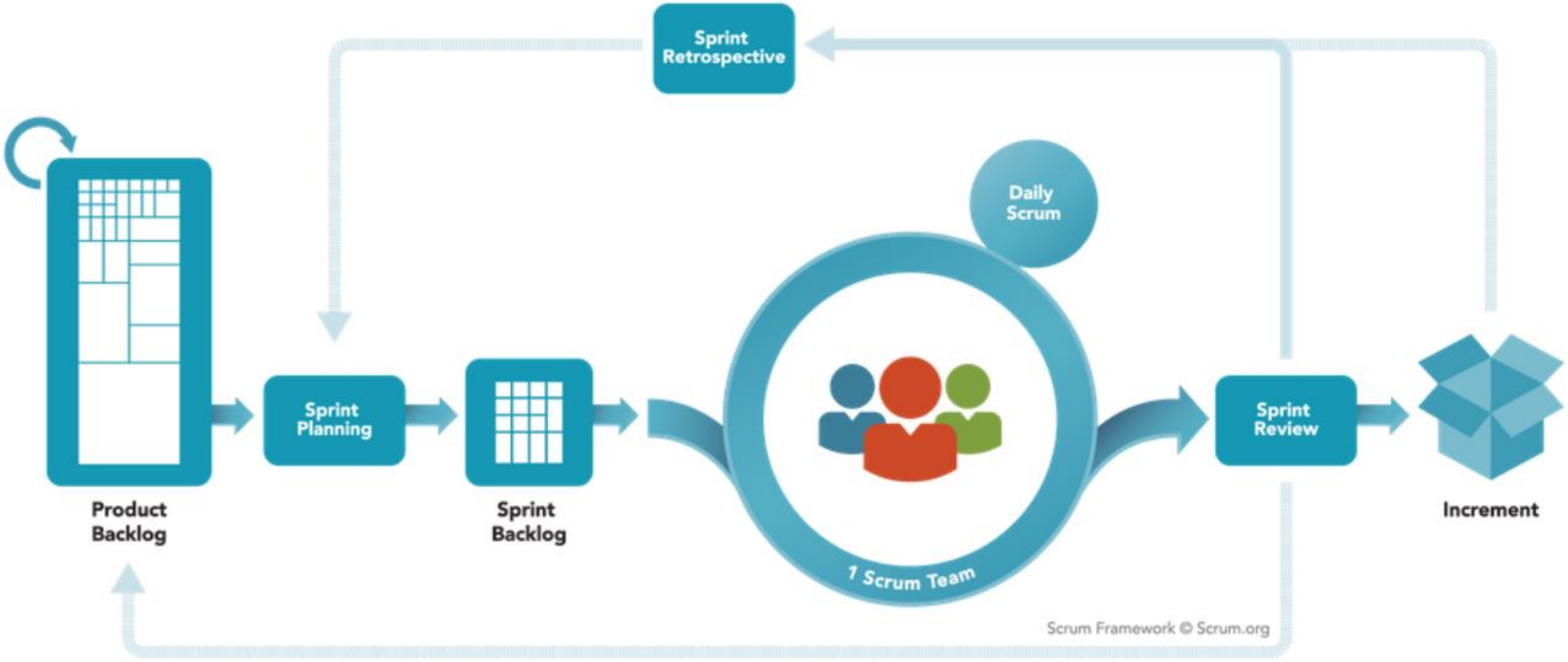
Roles & Responsibilities



Agile


Discover
Test
Sprint #1
Design
Develop
Discover
Test
Sprint #2
Design
Develop
Discover
Test
Sprint #3
Design
Develop
Agile Method

Scrum

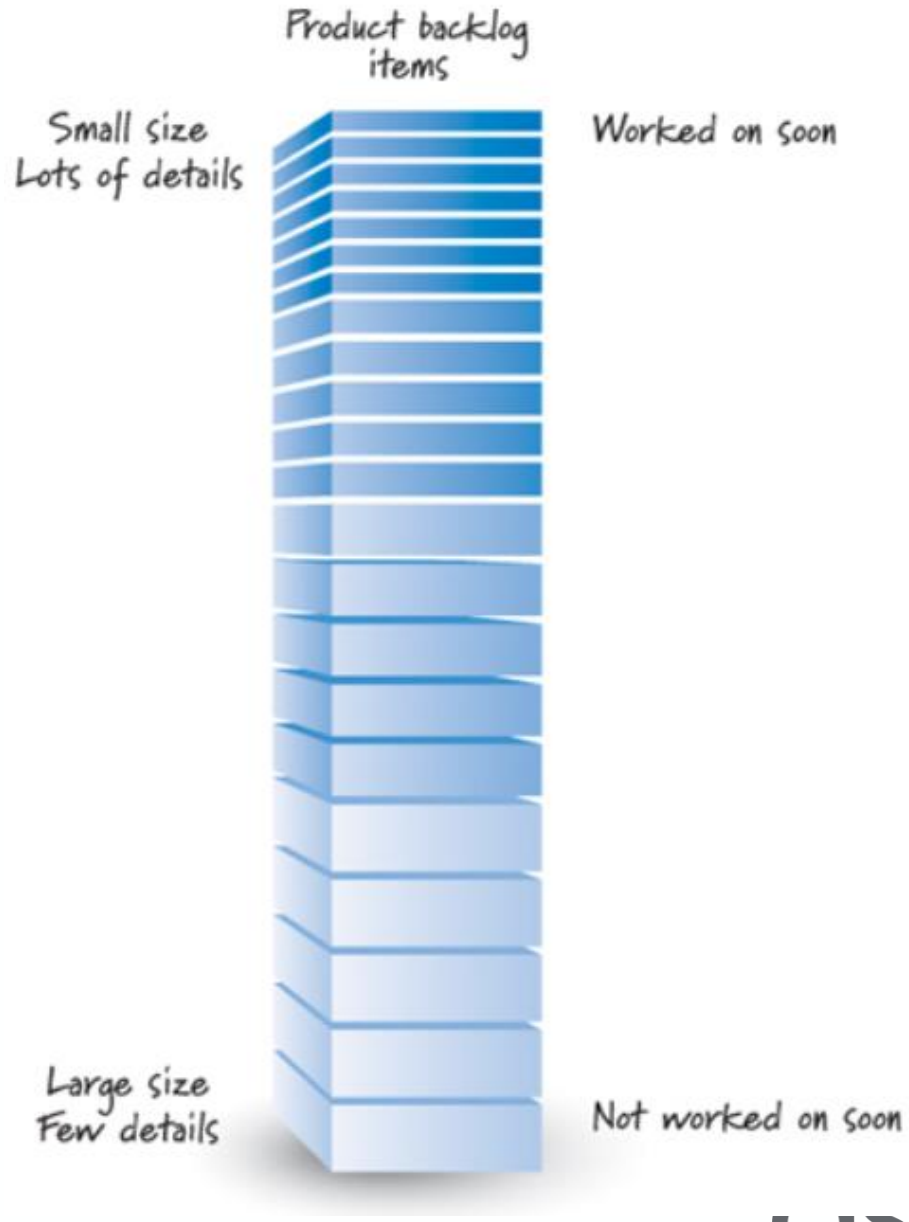

Sprint Retrospective
Daily Scrum
Sprint Planning
Sprint Review
Product Backlog
Sprint Backlog
Increment
1 Scrum Team
Scrum Framework © Scrum.org

Artifacts (Scrum Tools)

- Product Backlog
- Sprint Backlog
- Scrum Board
- Burndown Chart

Product Backlog

- The Scrum Product Backlog is **simply a list of all things that needs to be done within the project, or for the product.**
- It replaces the traditional requirements specification artifacts.
- These items can have a technical nature or can be user-centric e.g. in the form of **user stories**.
- The owner of the Scrum Product Backlog is the **Product Owner.**
- The **Scrum Master**, the **Scrum Team** and other **Stakeholders** contribute to the PBL, in order to ensure is a broad and complete To-Do list.



Estimation

"Agile doesn't fix how bad teams are at estimating. Instead, the team spends much less time on this activity.

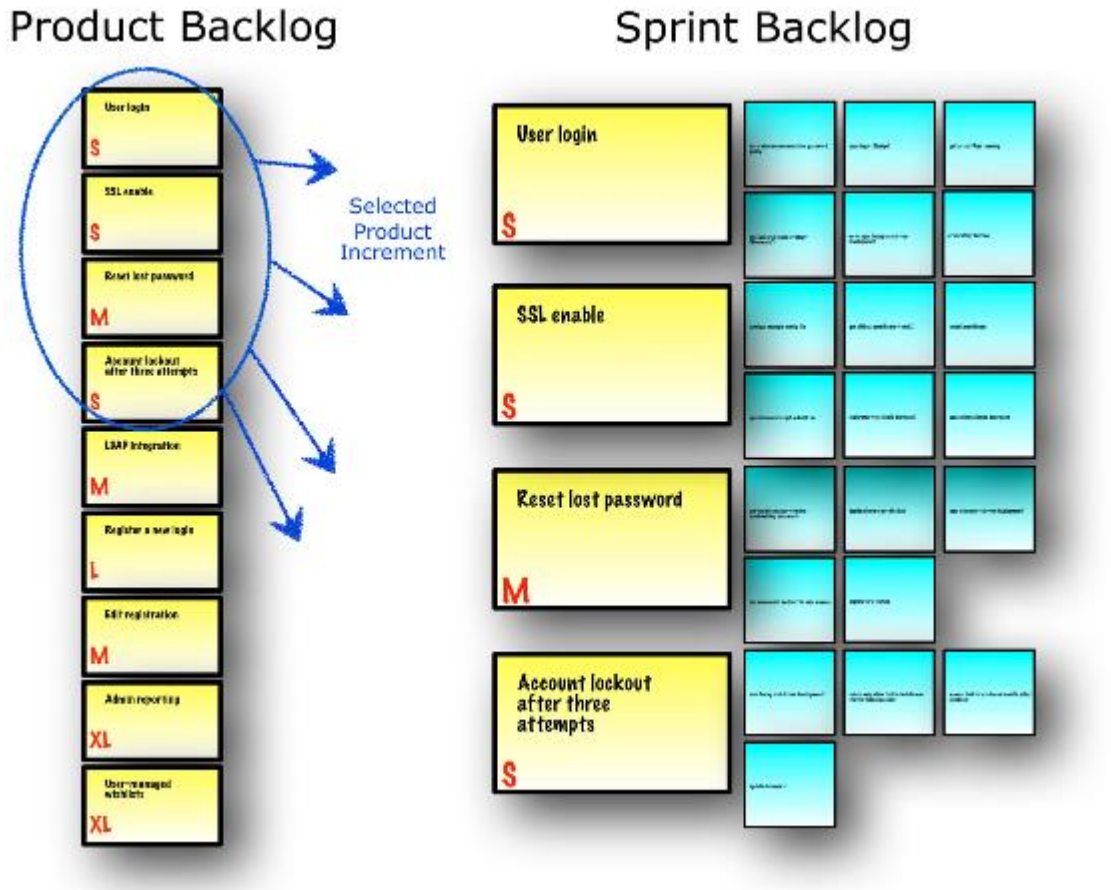
*From an agile perspective, **not** doing something is the fastest way to getting it done."*

Head First Agile

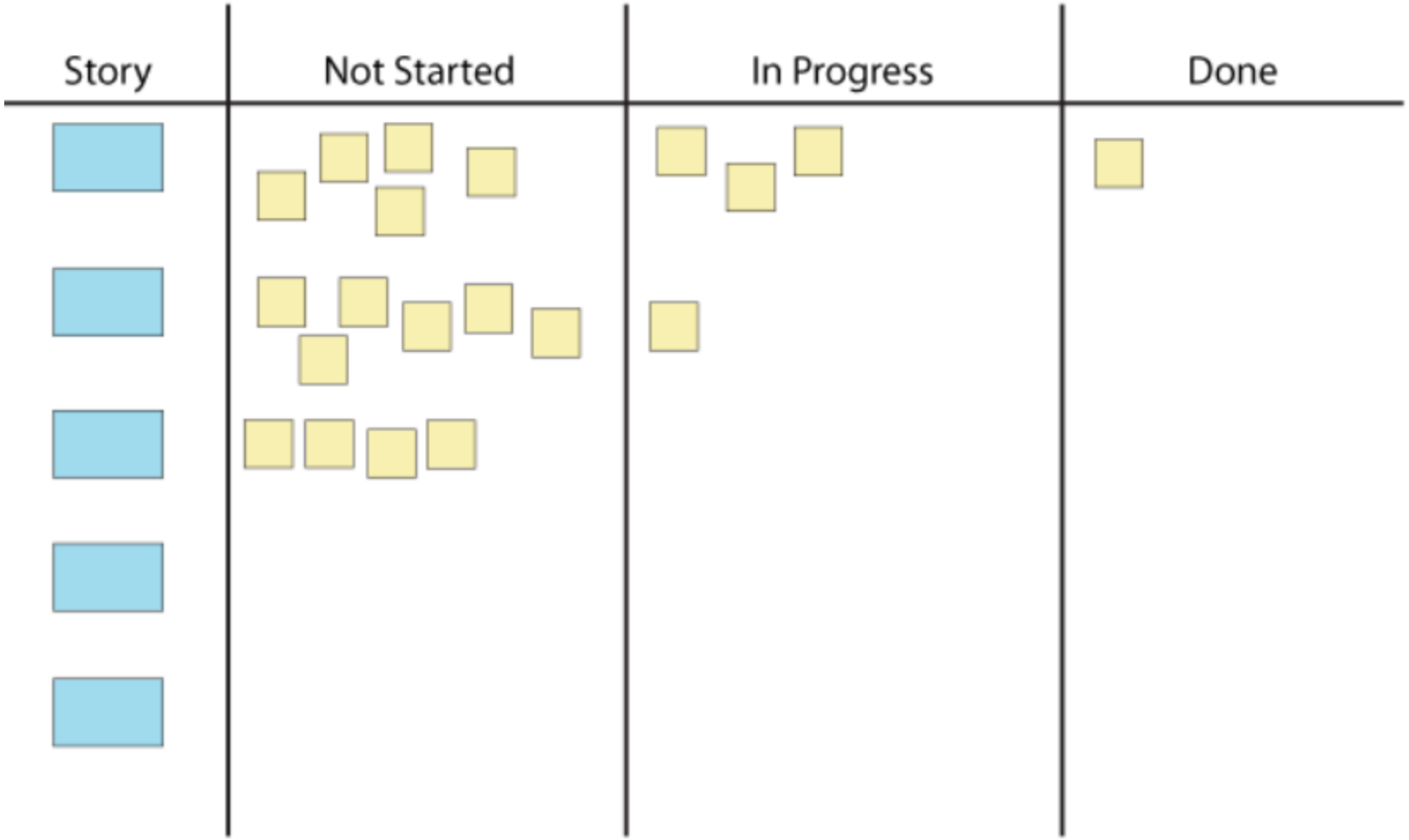
by Andrew Stellman

& Jennifer Greene

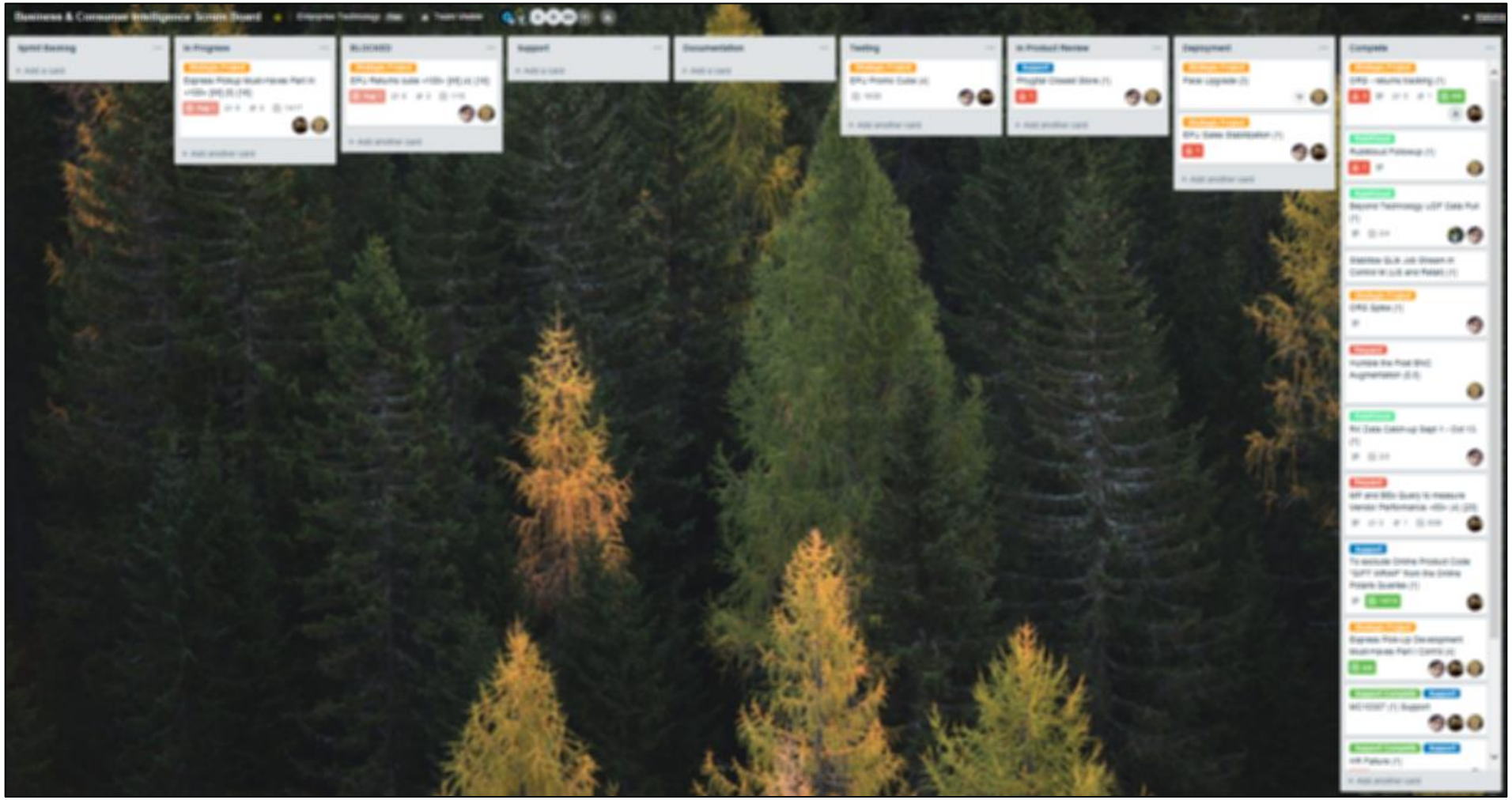
Sprint Backlog



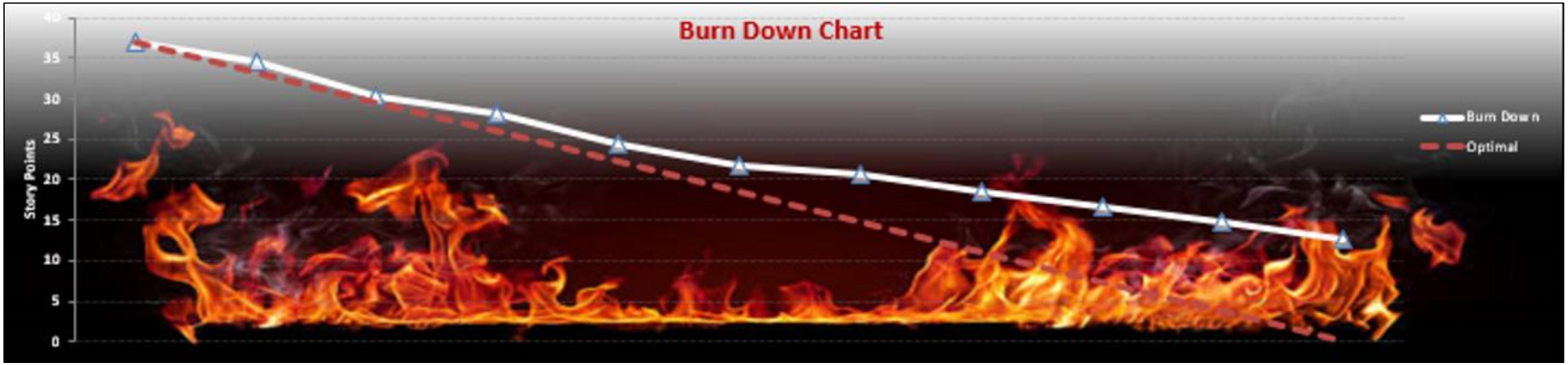
Scrum (Kanban) Board



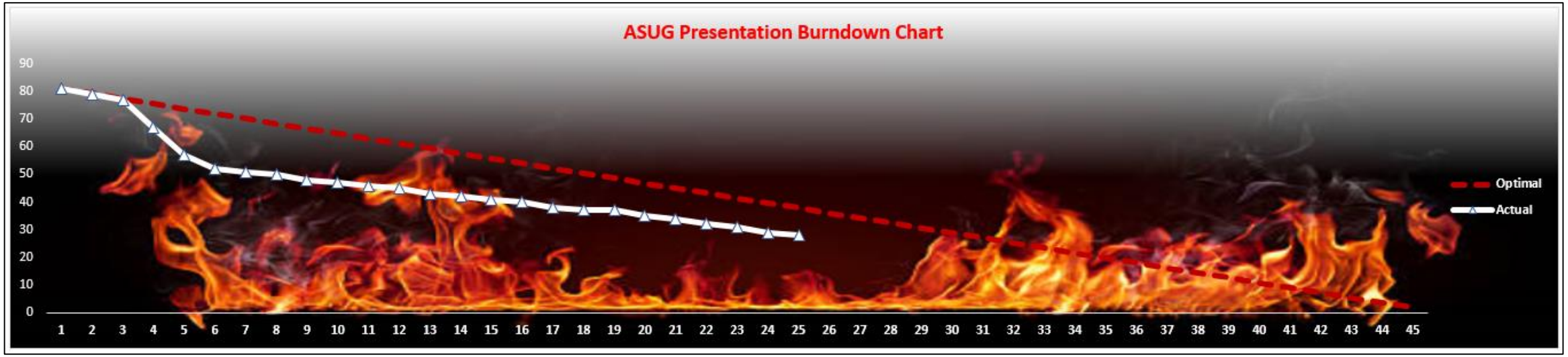
BW Scrum Board (Trello)



BW Burndown Chart



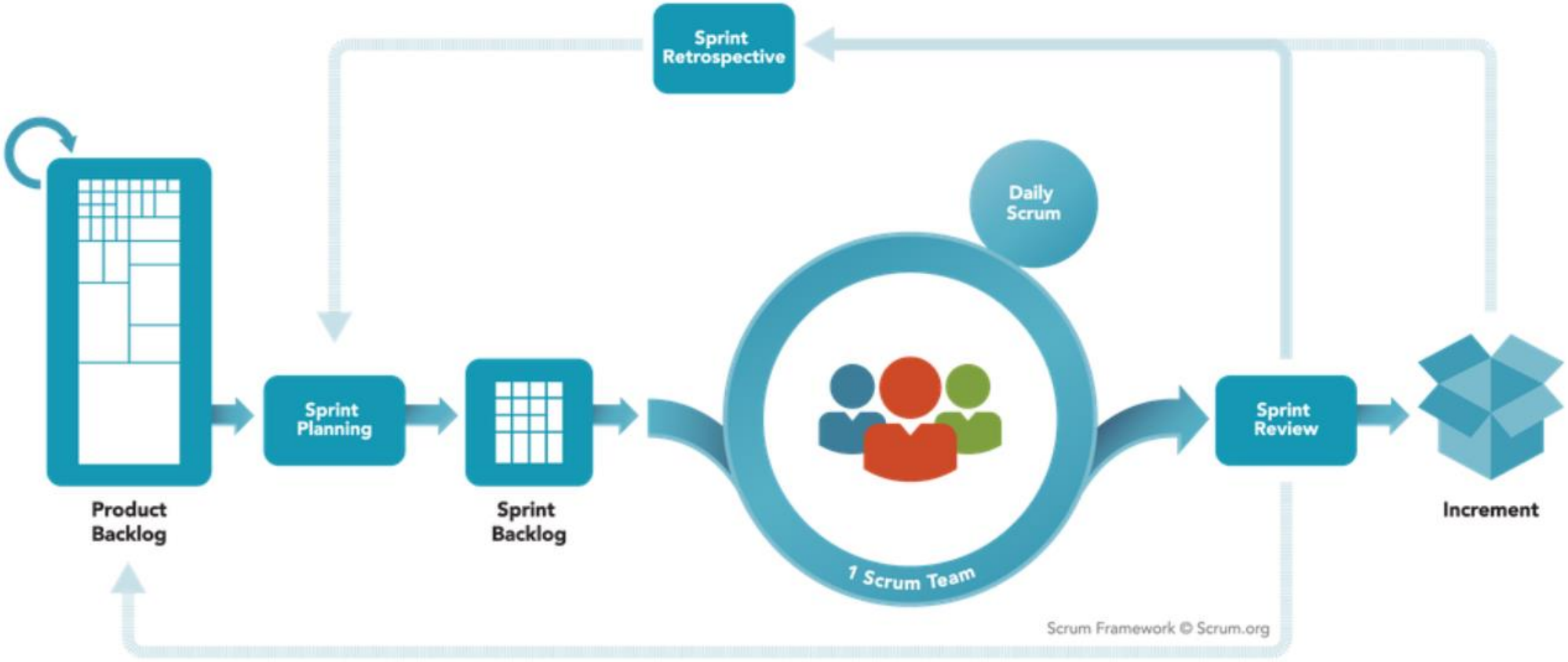
This Presentation's Burndown Chart



Scrum Ceremonies (Team Discussions)

- Sprint Planning
- Daily Scrum
- Sprint Retrospective
- Sprint Review

Scrum


Sprint Retrospective
Daily Scrum
Sprint Planning
Sprint Review
Product Backlog
Sprint Backlog
Increment
1 Scrum Team
Scrum Framework © Scrum.org

Sprint Planning

What is Sprint Planning?

- Sprint planning is a time boxed working session that lasts roughly 1 hour for every week in the sprint.
- In sprint planning, the entire team agrees to complete a set of product backlog items.
- This agreement defines the sprint backlog and is based on the team's velocity or capacity and the length of the sprint.

Who does it?

- Sprint planning is a collaborative effort involving:
- a Scrum Master,
- a Product Owner, and
- the Entire Scrum Team

Daily Scrum

What is the Daily Scrum?

- During the daily scrum, each team member answers the following three questions over the course of **15 minutes**:

1. **What did you do yesterday?**
2. **What will you do today?**
3. **Are there any impediments in your way?**

- Issues that are identified are taken offline and usually dealt with by the relevant subgroup immediately after the meeting.

Who Does It?

- All team members are required to attend daily scrum meetings.
- Other parties are welcome to attend, but only to listen. This makes scrum meetings an excellent way for a Scrum team to disseminate information
- **If you're interested in hearing where things are at, attend that day's meeting**.

Sprint Review

What is a Sprint Review?

- In Scrum, each sprint is required to deliver a potentially shippable product increment. This means that at the end of each sprint, the team has produced a coded, tested and usable piece of software.
- At the end of each sprint, a sprint review meeting is held. During this meeting, **the Scrum team shows what they accomplished during the sprint. Typically this takes the form of a demo of the new features.**

Who Does It?

- Participants in the sprint review typically include the product owner, the Scrum team, the Scrum Master, management, customers and developers from other projects.

Sprint Retrospective

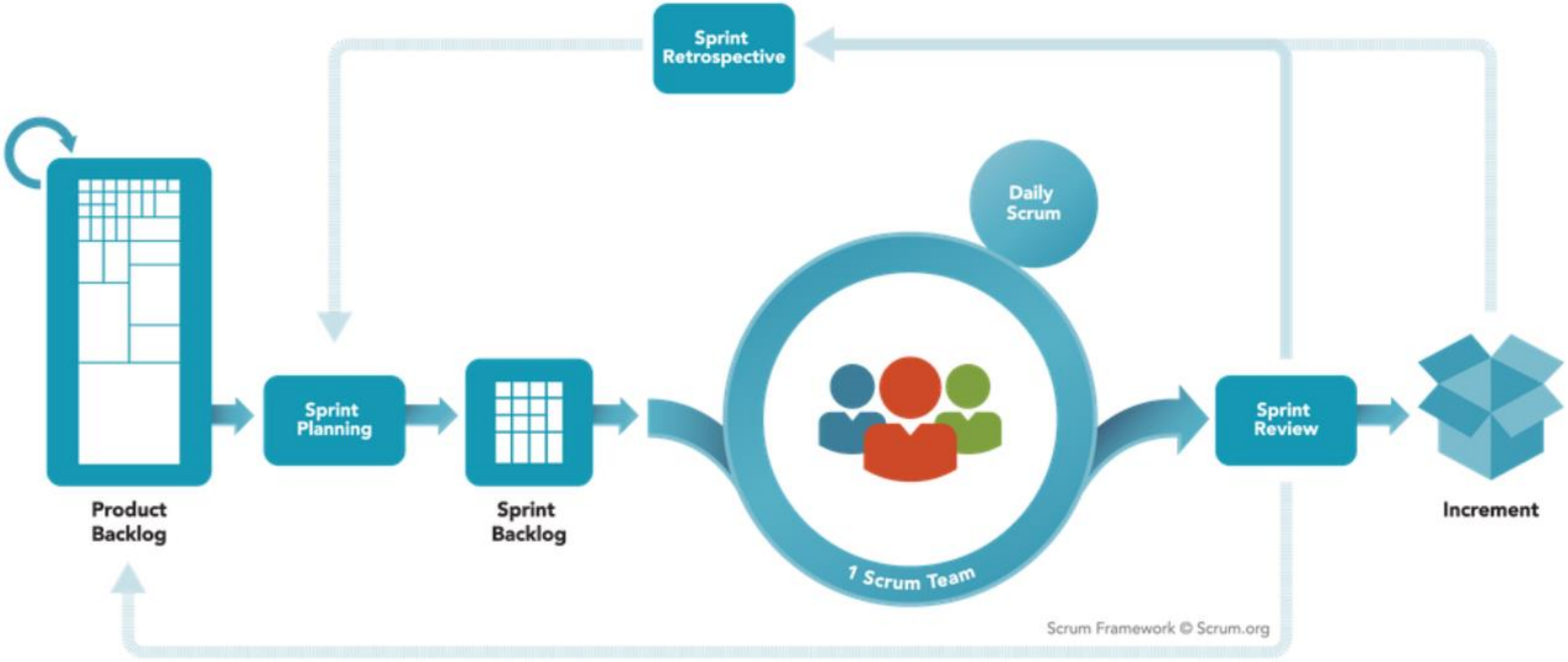
What is a Sprint Retrospective?

- After the Sprint Review and before the next Sprint Planning, the Team has a Sprint Retrospective.
- The Scrum Master encourages the Scrum Team to search for best practices and to identify improvement measures that it will implement in the next Sprint.
- Whereas the Sprint Review is about the product, the Sprint Retrospective is about the process – the way in which the Scrum team works.

Who Does It?

- In the Sprint Retrospective meeting, the Scrum Master encourages the Development Team to inspect, within the Scrum framework and practices, how the last Sprint went in regards to people, relationships, process and tools.
- **By the end of the Sprint Retrospective, the Team should have identified if there are any actionable improvement measures that they will implement in the next Sprint.**

Scrum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Scrum Framework © Scrum.org

Don’t Underestimate the Ceremonies

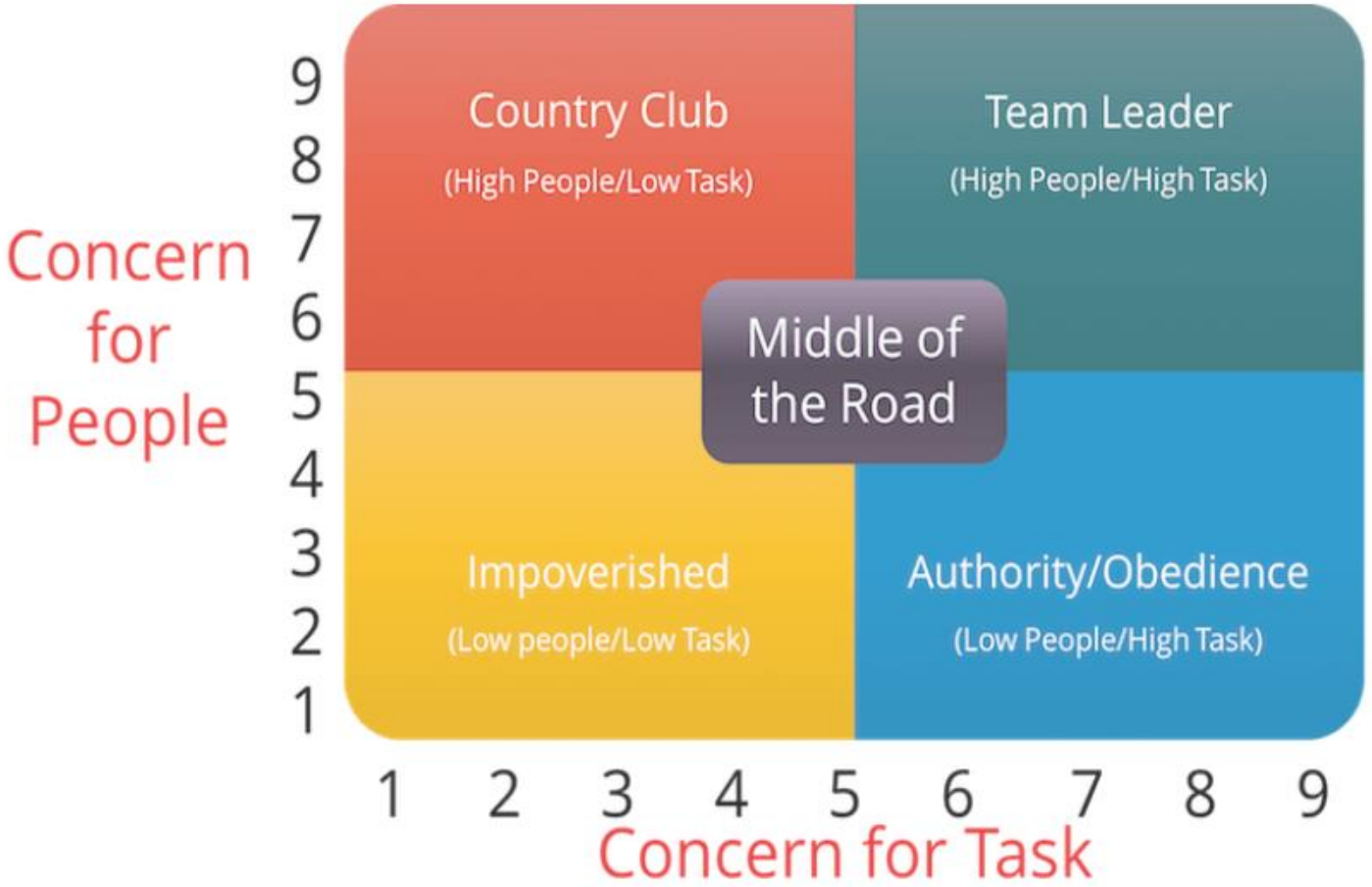
- The **Sprint Planning** session is technically a meeting for the Scrum Team to align on what groomed stories will be committed to for the upcoming sprint. But more than that, it is a dedicated re-occurring time where the Product Owner and Talent **focus** and realign on the strategic goals of the enterprise and **commit** to their part in achieving that goal.
- The **Daily Scrum** meetings are technically 15 minute collaboration sessions. But more importantly, they allow the team to re-learn how to communicate with each other every day, and **self-organize** around completing the shared sprint goal.
- The **Sprint Review** is technically a demo for the shippable increments from the previous sprint. But more importantly it is an alignment session between the scrum team and key stakeholders to ensure the work priority and approach is aligned with the enterprise vision, and that stakeholder feedback is solicited early and often.
- The **Sprint Retrospective** is technically the time for the team to inspect and adapt their own agile processes & tools. But more importantly it is a chance for the team to decompress, be honest and transparent about their pain points in a safe space in front of their peers and business partners. Fostering **openness**, **respect** and **courage**. It allows them to speak up and speak out.

Self Organization

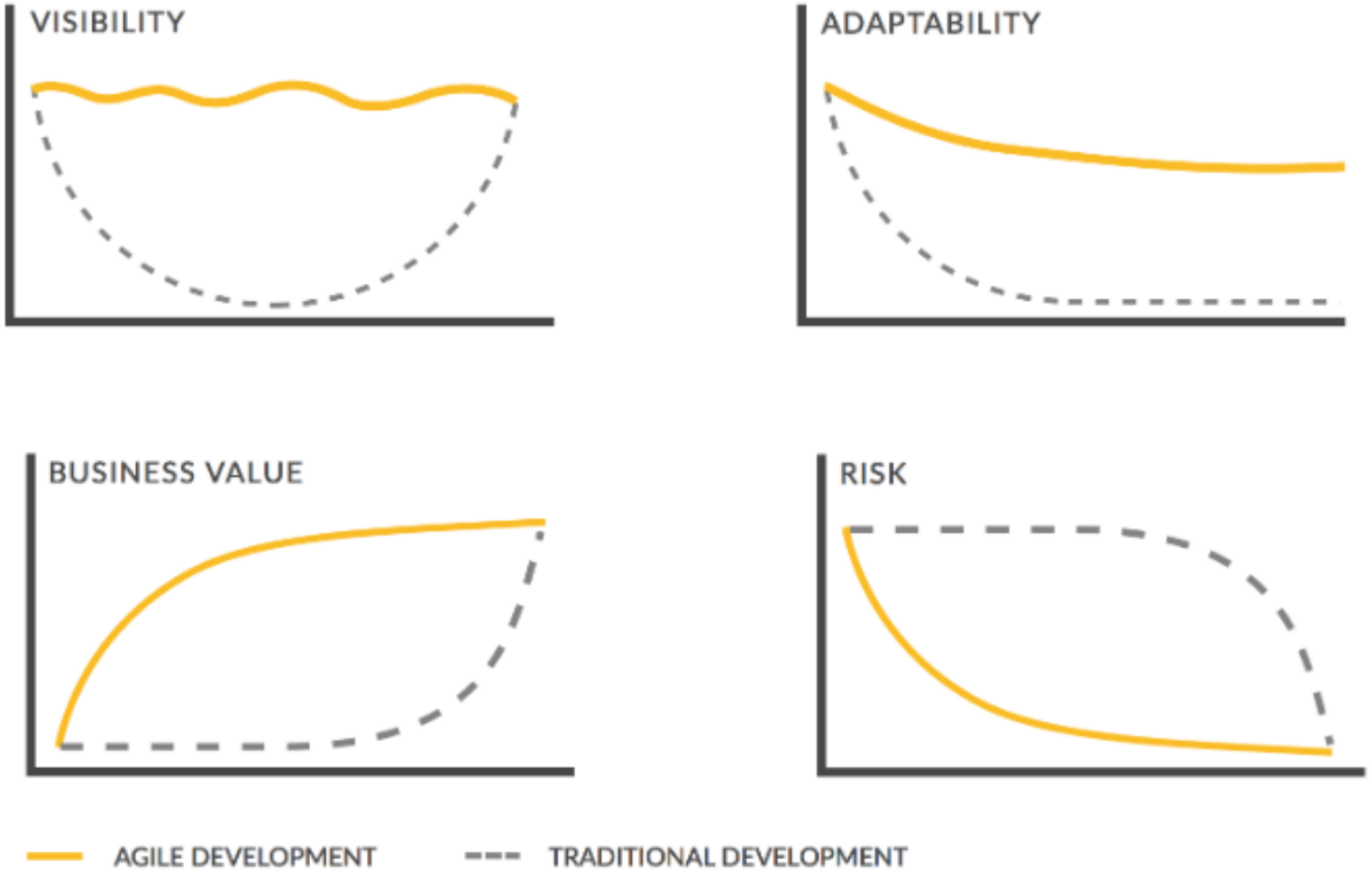
Command & Control

Self-Organized

One More Indirect Benefit:



So… why Agile?


VISIBILITY
ADAPTABILITY
BUSINESS VALUE
RISK
AGILE DEVELOPMENT
TRADITIONAL DEVELOPMENT

HOW?

JUST DO IT.

SCRUM IS EASY TO IMPLEMENT...

...BUT HARD TO MASTER.

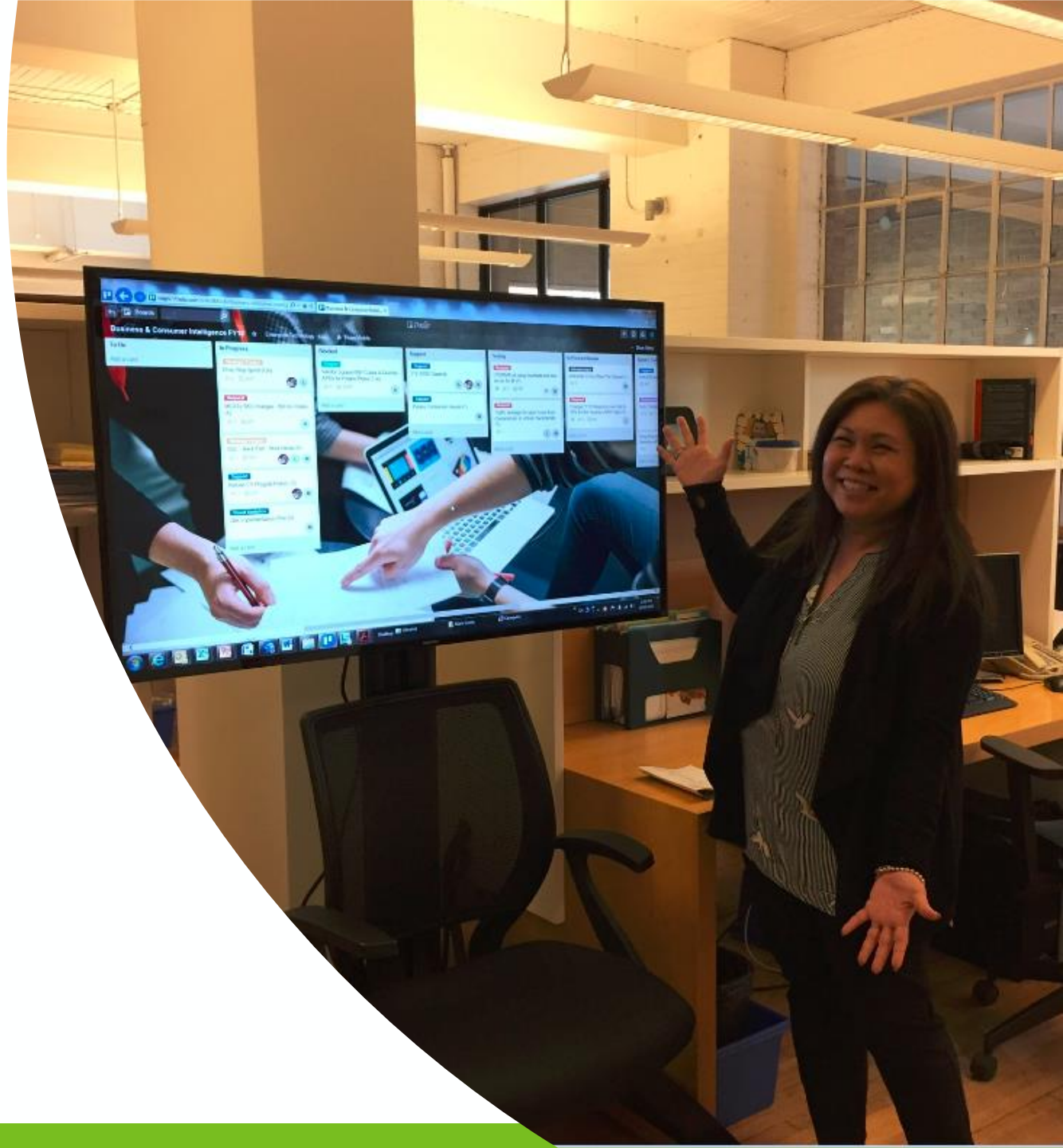
THE INDIGO BW AGILE STORY

Indigo's BW Agile Implementation started January 2018

The following is a brief history of our journey…

July 2017

- Started researching Agile / Scrum
- Met with BW team to gain buy-in and set expectations
- Started calling out “traditional” project management pain points and using Agile language in front of the team
- Started sharing my findings with team, when challenges arose, on “how Agile would handle this”
- Identified Product Owner
- Identified Scrum Master



January 2018

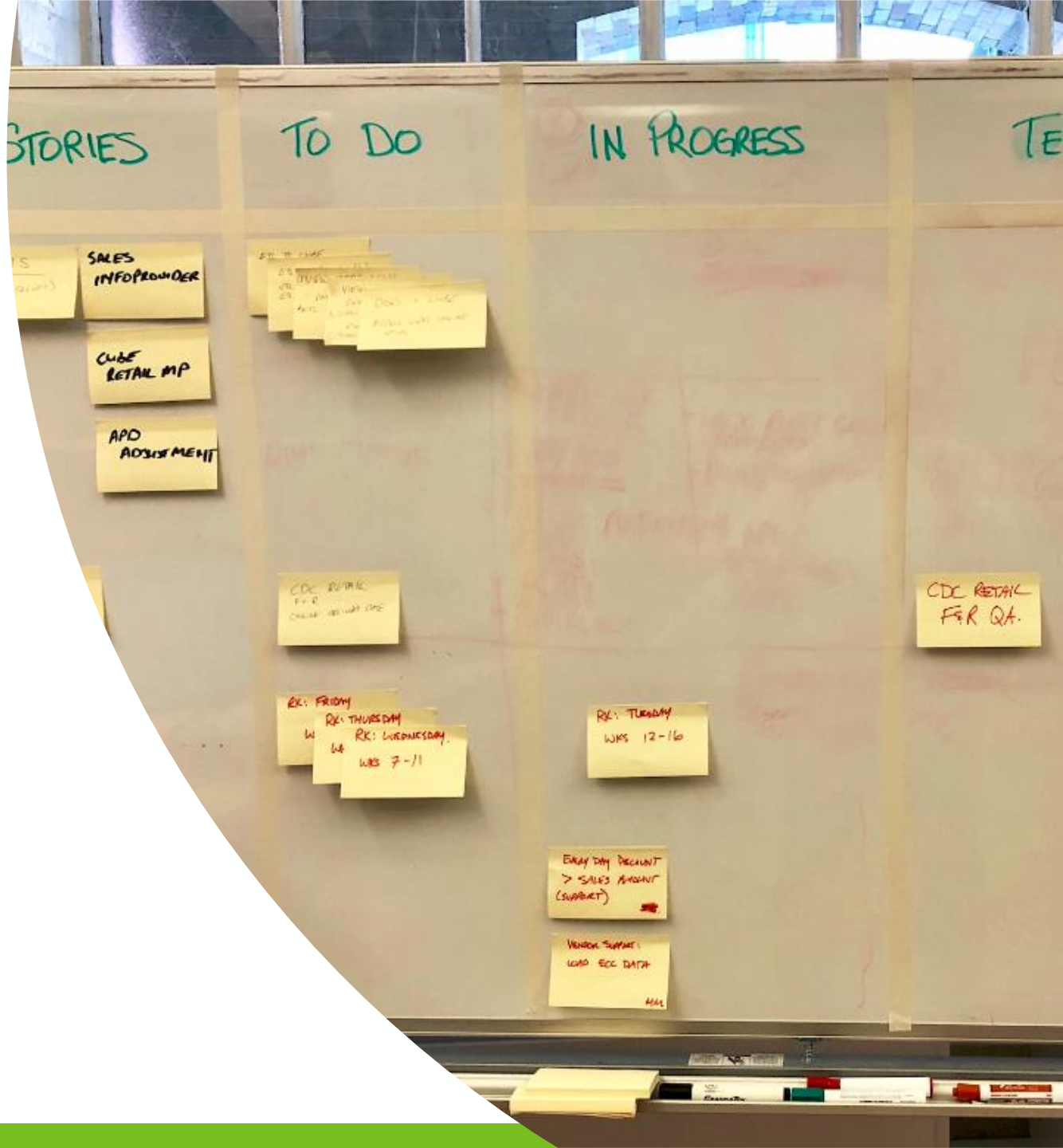
- Team & Scrum Master co-locate to “Scrum Alley”
- Captured all known work, in progress or on deck, in a proto-product backlog.
- Started holding Scrum Ceremonies (Grooming, Sprint Planning, Daily Scrum, Sprint Retrospectives)
- Started tracking KPIs
- Sprint Burndown broadcasted weekly

April 2018

- Met with Product Owners to identify relative business value for all stories in the PBL
- Met with Scrum Team to roughly estimate all PBL stories based on hours, days, weeks or months
- Worked with Team to build our first 12 month sprint release plan
- Installed a dedicated information radiator to broadcast stats 24/7 in real time
- Ensured all team members had laptops
- Moved to tracking completed stories instead of effort
- Started inviting external individuals to daily stand-ups, where required, to ensure alignment on uncontrolled dependencies
- Started using different approaches to our Sprint Retrospectives

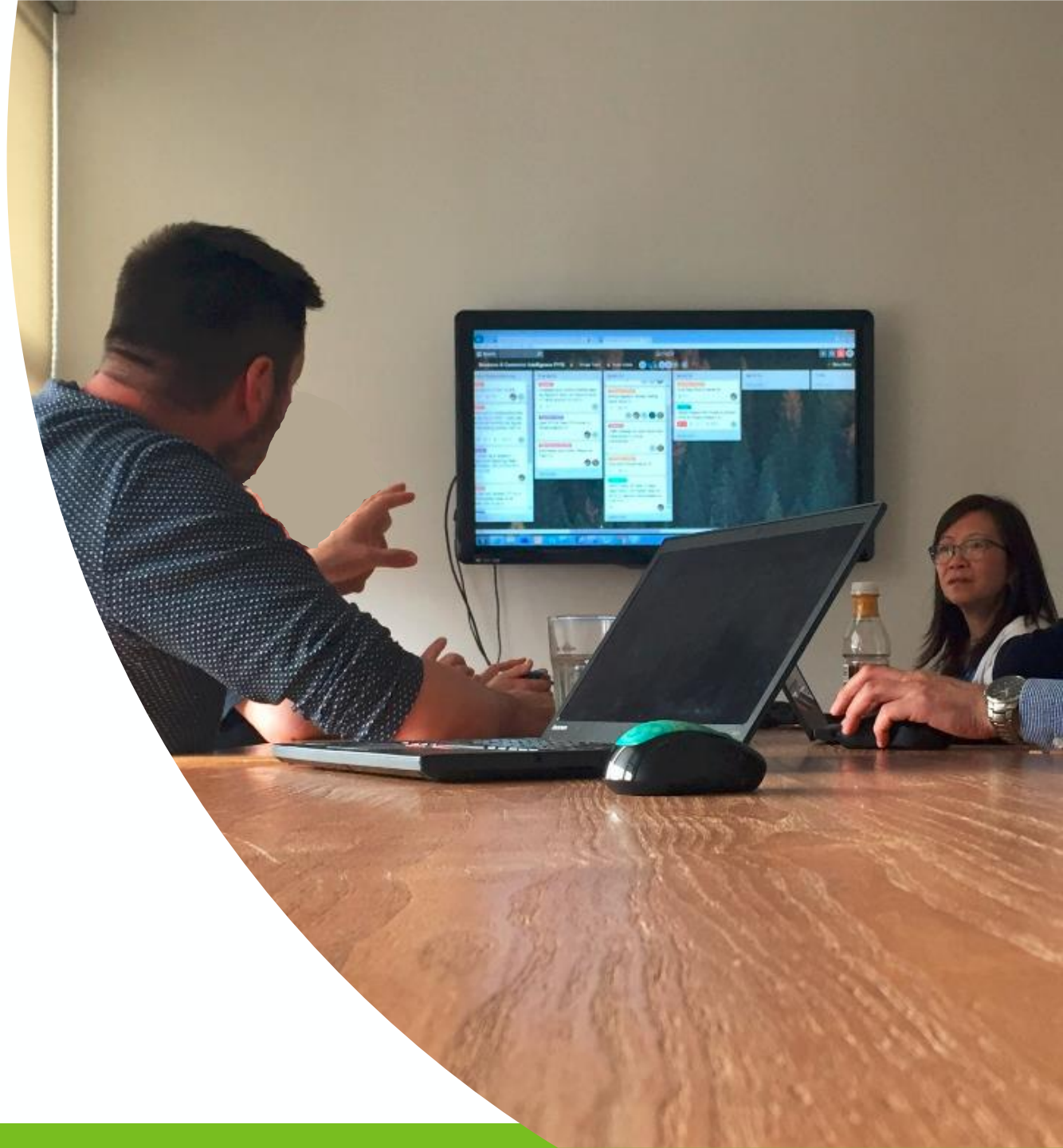
July 2018

- Certified Scrum Master
- Transitioned to a physical Kanban board
- Started using Corrello to track Sprint KPIs



October 2018

- Started monthly sprint reviews
- Implemented a Definition of Ready
- Implemented a Definition of Done
- Tried changing our Sprint Planning sessions to 2 hours per sprint, in order to break out story tasks in the second half of the session



LESSONS LEARNED

The Good

- You don’t necessarily need extensive training to get started with Agile/Scrum. Just do it.
- Your team engagement will skyrocket.
- Your team productivity will skyrocket
- Technology will empathize with their business partners, understand their business processes better, and learn their language, goals, hopes and fears.
- The Business will empathize with Technology, understand their tools better, and learn their language, domain, and frustrations.
- There will be more transparency and project visibility: Obstacles and risks called out almost immediately daily in project work.
- A truly Biz-Tech team will emerge.

The Not So Good

- Agile / Scrum will not work without the right roles in place. Get a **Product Owner**. Get a **Scrum Master**. Be clear on roles and responsibilities. If you don't have the right roles in place, you won't be agile. You'll just become a Cargo Cult, and everyone will point to you as an example of why Agile doesn't work.
- The wrong Scrum Master can ruin everything.
- Your product is only as valuable as your Product Owner
- Scaling Agile/Scrum for Enterprise across many x-functional domain groups is a challenge. Explore SAFe, LESS and other Scaled Agile methodologies. Don't commit to scaling blindly.
- It's difficult to maintain an island of Scrum in a traditional world. And if it goes on for too long, you need to watch out for an "*Us vs. Them*" mentality developing.
- It's hard to wear a Scrum Master and a Team Manager hat at the same time. A Scrum Master is focused on empowering the team to make the right decisions. A Team Manager is focused on teaching individuals how to make the right decisions. It's seems like a delicate difference… until you straddle it.
- A Scrum Master cannot be the Product Owner. The Product Owner must sit with the business. Non-negotiable.

Cargo Cults

How to Begin?

Give the team time to adjust, learn, inspect & adapt.
Here are a few suggested milestones:

Pre-Implementation:

As a Scrum Master, learn about Scrum methodology and principles. Become an SME on Scrum Master and Product Owner roles & responsibilities. Identify and gain buy-in from the product owner. Set-up and display your Kanban board prominently. It will get people talking.

Sprint 1:

Just pull in all work currently in progress into the product backlog. Have the team roughly size the story work in days. Have them commit to what they think they can get done in the next sprint. Schedule all Daily Scrum, Sprint Planning, and Retrospective meetings. During the sprint have the product owner work separately to prioritize the rest of the product backlog items.

Sprint 2-5:

Use the prioritized product backlog to select the next sprint's planned tasks. Team estimates using days/points. Track completed work in your burndown chart.

Sprint 5-10:

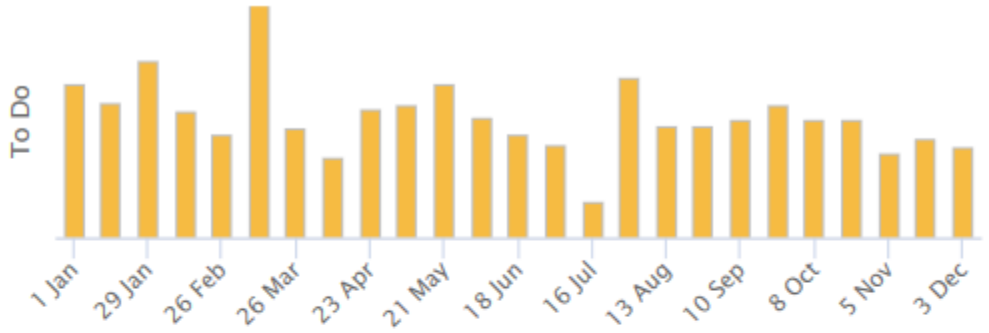
Refine the product backlog. Improve story point estimation. Introduce Planning Poker. Continue to track completed work in the burndown chart. Celebrate completing Sprint 10!

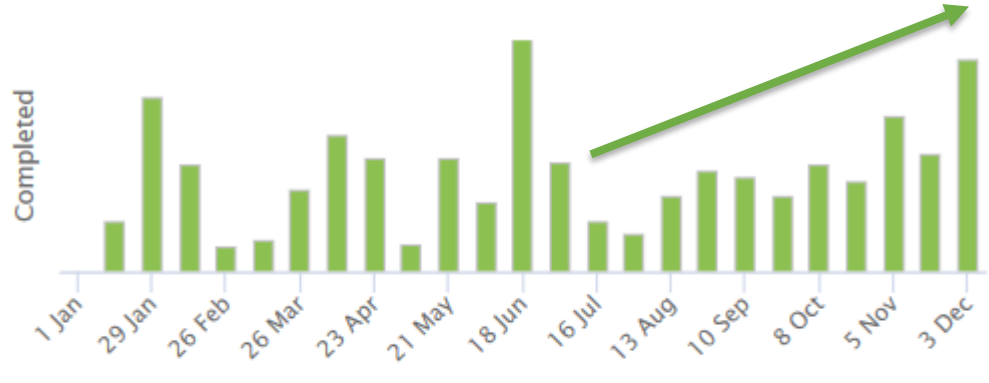
Sprint 10-12:

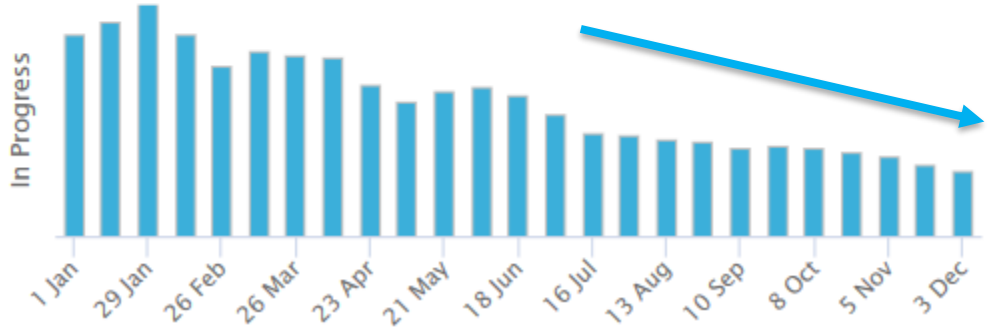
Add value, effort and ROI to the Product Backlog. Draft a Sprint Release Plan. Consider how to balance technical backlog items with Product stories. Start tracking value delivered in the burndown chart. Hold teams accountable to the Sprint Definition of Ready (DoR) and Definition of Done (DoD).

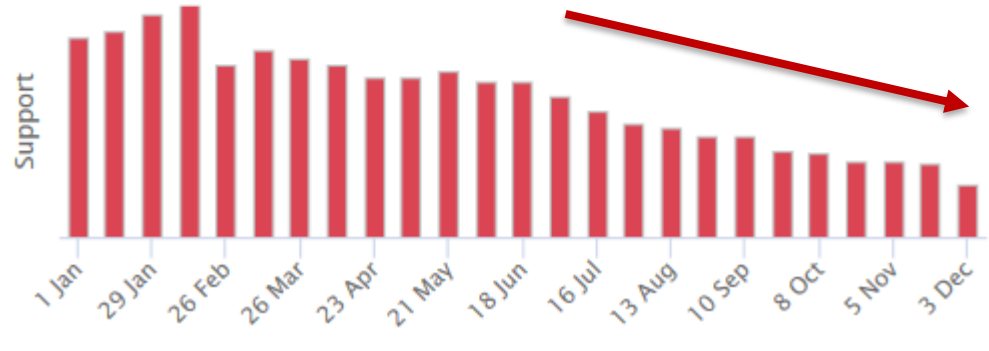
So… How are We Doing?

Indigo BW Sprint KPIs



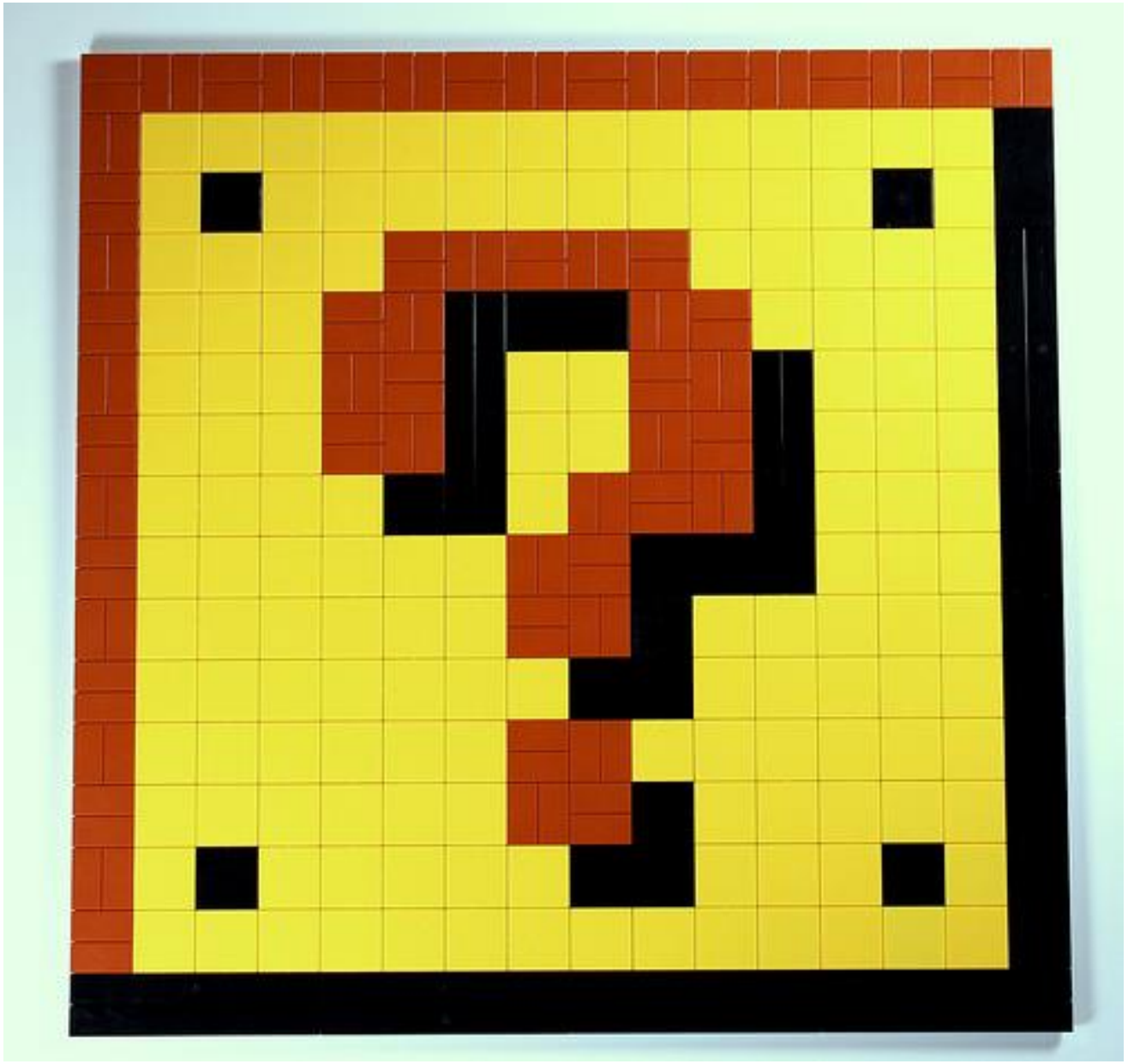






Looking forward:

- Based on BW success, we plan to roll out Scrum to the entire IT Enterprise Solutions team within the next 18 months:
  - Business & Consumer Intelligence ☑
  - Planning to Procurement ☑
  - Forecast to Replenish ☑
  - Order to Cash ☐
  - Finance to Payroll ☐
  - Warehousing & Logistics ☐
  - Hire to Retire ☐
  - Retail ☐



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Resources

- Agile Manifesto
- Scrum Values
- Trello
- Corrello
- Mike Cohn's Blog
- Lynda.com
- Libby
- Product Ownership in a Nutshell

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Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

http://info.asug.com/2019-ac-slides

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Q&A

For questions after this session, contact me at mgorrie@indigo.ca

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