Getting Ahead of Your Agile Delivery Teams with a Formalized Discovery Process

Presented By:
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Our Business Context

1000 employee business unit within large, complex organization

Product: Fully online K-12 schools with over 70k full time students enrolled

Scaled Agile (SAFe) development framework

Highly competitive business landscape with aggressive growth goals
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Discuss

How and when do your teams interact with your users and customers?
Self Reflection

How happy / satisfied are your users and customers with your product or service?

How well does your product or service reflect the goals of your users and customers?

How many of the features in your product or service are rarely or never used?
Learning Objectives

Relate to how our discovery framework helps solve some commonly expressed organizational challenges

Apply Design Thinking principles, tools and techniques to discovery efforts in an Agile environment

Decide when and how to engage customers in identifying and validating the right solution to their problems

Flex and fit the discovery framework for your individual environments
Why Discovery?

“Discovery” creates a thoughtful, disciplined and sustainable approach for the right people to focus on composing and validating a great experience for users.

**Discovery**
- Building the RIGHT product & creating better OUTCOMES

**Delivery**
- Building the product RIGHT product & creating high quality OUTPUT
Advantages:

- Dedicated people, adequate time, and lightweight processes
- Focus on the problem / opportunity
- Predictably deliver light-weight requirements & documentation to build the thing right
- Drive down lead time by improving flow of entire system
- Identify risks early (fail fast, learn fast)

A thoughtful and disciplined discovery process ensures the investment made to build a great product is focused on the right things.
When to Consider Discovery

When addressing problems that impact human behavior

&

When the problems are not well defined

When the problems are not known

When data to make decisions is unreliable

When data to make decisions is insufficient
<table>
<thead>
<tr>
<th>Discovery Process Canvas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What meaty or thorny problem in your context would benefit from Discovery?</strong></td>
</tr>
<tr>
<td><strong>Who would you include on your core team? Who would you included on your extended team?</strong></td>
</tr>
</tbody>
</table>
| **Core Team:**  
*Roles on the core team* |
| **Extended Team:**  
*Roles on the extended team* |
| **What questions would a Discovery Process help you answer?** |
| **What constraints should you consider when designing a discovery process for your context?** |
| **What challenges do you anticipate running into?** |
Think about

What meaty or thorny problem in your context would benefit from discovery?
Our Process

- Leverage best-in-class strategies for application of design thinking in product development
- Ensure cross-functional participation - identify core team members who can carry work from design through development
- Establish guidelines and expectations for team delivery, timeboxing discovery to ensure delivery against expectations
The Discovery Process: Paired with Scrum

Adapted From: Takeshi Yoshida
Team Structure

Extended Discovery Team

Core Discovery Team

Enterprise Architect
Product Manager
UX Designer
Product Owner
QA Lead
Analytics Consultant
Development Lead
Finance SME
Legal SME
Engineering SME
Business SME
Business Owner
Business SME
Vendor
Other Product Managers
Finance SME
Legal SME
Engineering SME
Critical for continuity of understanding real need and intent
Who would you include on your core team?
Who would you include on your extended team?
# The Discovery Process

<table>
<thead>
<tr>
<th><strong>Ideate</strong></th>
<th><strong>Validate</strong></th>
<th><strong>Define</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish a goal</td>
<td>Create &amp; test hypothesis</td>
<td>Define requirements:</td>
</tr>
<tr>
<td>Talk to customers</td>
<td>Build prototypes</td>
<td></td>
</tr>
<tr>
<td>Identify potential</td>
<td>Get feedback from users</td>
<td></td>
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<tr>
<td>opportunities</td>
<td>Synthesize Feedback</td>
<td></td>
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<tr>
<td>Ideate potential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>solutions</td>
<td></td>
<td>Prioritize in development backlog</td>
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<tr>
<td>Create high-level</td>
<td></td>
<td></td>
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<tr>
<td>concept</td>
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</tbody>
</table>
# The Discovery Process: Aligned with the SAFe Framework

<table>
<thead>
<tr>
<th>Activity</th>
<th>Participants</th>
<th>Days*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand existing functionality</td>
<td>PdM, PO, UX, Arch</td>
<td></td>
</tr>
<tr>
<td>Understand the customer: Interview users, Validate problem, Identify pain points</td>
<td>PdM, UX, PO [Customers, Stakeholders]</td>
<td>Week 1</td>
</tr>
<tr>
<td>Define high-level vision &amp; goal:: Refine epic definition</td>
<td>PdM</td>
<td></td>
</tr>
<tr>
<td><strong>Validate</strong></td>
<td></td>
<td></td>
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<tr>
<td>Brainstorm potential solutions, <strong>Identify viable solution</strong></td>
<td>UX, Arch, Eng, PdM</td>
<td>Week 2</td>
</tr>
<tr>
<td>Run experiments to validate risky assumptions (UX and technical)</td>
<td>UX, Arch, Eng, PdM</td>
<td></td>
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<tr>
<td>Collect UX feedback</td>
<td>UX, PdM [Customers, Stakeholders]</td>
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<td>Synthesize feedback</td>
<td>UX, Arch, Eng, PdM</td>
<td></td>
</tr>
<tr>
<td>Define Features and Enablers</td>
<td>PdM, PO, Arch, Eng</td>
<td>Week 3 &amp; Week 4</td>
</tr>
<tr>
<td><strong>Define</strong></td>
<td></td>
<td></td>
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<tr>
<td>Analyzing (Epic)</td>
<td></td>
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</tr>
<tr>
<td>Define Features and Enablers: Feature hypothesis, acceptance criteria and WSJF prioritization Wireframes, Architectural plan</td>
<td>UX, PdM, PO, Arch Eng</td>
<td></td>
</tr>
<tr>
<td>Analyzing (Feature)</td>
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## IDEATE: Understand the Customers/Users

### Activities:  (What do we do?)
- Interview Users / Customers
- Observe Users
- Validate the customer journey map
- Identify pain points and opportunities

### Tools and Techniques:  (How do we do this?)
- Users / Customer Interviews
- Personas / Empathy Mapping
- Jobs to be Done
- Design Thinking (Empathize)

### Outputs:  (How do we capture our learning?)
- User Personas / Empathy Maps
- User Journey
- User / Customer Interviews
- HMW Opportunities

### Outcome:  (How will we know we are done?)
- Articulate how our product / service can address the goal of the user / customer
- Identify new opportunities / problems to solve

### Portfolio Kanban
Status: Reviewing

PdM, UX, PO, Customers, Stakeholders
Work Individually

What questions would a Discovery Process help you answer?

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Core Team: Roles on the core team
Extended Team: Roles on the extended team
Constraint #1: Get everyone vested in the process
Connection Before Discovery

- **Introductory Kickoff Meeting**
  - Understand the process
  - Establish a clear goal for the discovery

- **Team charter**
  - Get to know each other
  - Co-create clear expectations of each other
Constraint #2: The established SAFe Framework
Manage flow with WIP (Work in Progress) limits
Leverage Portfolio & Program Kanban
Constraint #3: A Distributed Organization
Invest in the right tools

Online collaboration via MURAL - a game changer!
Everyone can engage
Templates, Virtual stickies and Dot Voting

Video conferencing
Break out rooms
Recording

Manage Artifacts
Internal Wiki for Blogging

Aha! Zoom
Constraint #4: Capacity of Key Participants
Be Strategic about Discovery

- Strategically plan discovery sessions based on roadmap
- Establish WIP limits for discovery sessions
- Mindfully engage core team members and extended team members
Work Individually

What constraints should you consider when designing a discovery process for your context?
Work in pairs:
- Review each other’s Discovery Process canvas
- Offer feedback and additional ideas
Feedback from the team

“I don't like how you have roped me into this and how much I am enjoying it! Damn you Damon!!”

KATIE (Business SME)

“What a manual nightmare these folks are going through. I can't believe we make them do that!”

Business Stakeholder

"Those reports are nuts. I would die a little inside if I had to do that every day."

Business Stakeholder

"That was my first time talking to someone who uses our stuff. I hope to do that much more often. It was enlightening. Usually we just do what we think is a good idea and hope they like it."

Robert (Dev Lead)

"This allows customers to drive the process, not deal with the byproduct. I could do this all day, everyday."

Damon (Product Manager)

I had no idea that's how the user did that - it's awful, we need to fix it!

Joe (Dev Lead)
Our Challenges

- Technical enablers were not good candidates
- Unpredictable discovery timelines led to unmet expectations
- Other priorities interrupted the discovery process
- Having the discipline to stay in the problem space
- Finding dedicated time for discovery team members to fully engage
Sage Advice

- Fall in love with the Problem, not the Solution
- Invite and engage the customer to co-create the solution
- Apply judgement to data to inform your decisions
- Use **Scrum** to plan and collaborate on Discovery Activities with the Core Discovery Team

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<tr>
<th>Plan</th>
<th>What is our plan of action for the next week?</th>
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<tbody>
<tr>
<td>Daily Standups</td>
<td>Re-plan and coordinate for the day (touch base more frequently as needed)</td>
</tr>
<tr>
<td>Review</td>
<td>Review completed work and decide status update for Portfolio/Program Kanban</td>
</tr>
<tr>
<td>Retrospect</td>
<td>Inspect and adapt the process; What went well, what will take us to the next level, what can we agree on trying?</td>
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Learning Objectives

- Relate to how our discovery framework helps solve some commonly expressed organizational challenges
- Apply Design Thinking principles, tools and techniques to discovery efforts in an Agile environment
- Decide when and how to engage customers in identifying and validating the right solution to their problems
- Flex and fit the discovery framework for your individual environments
Questions?
Resources

Online Resources:
- [https://philosophie.is/blog/how-to-set-up-an-effective-product-discovery-team](https://philosophie.is/blog/how-to-set-up-an-effective-product-discovery-team)
- Usability.gov — good material about different types of research methods and pros and cons on each

Books:
- The Lean Startup
- The Four Steps to the Epiphany
- Sprint: How to solve big problems and test new ideas in just five days
- Change by Design: How design thinking transforms organizations and inspires innovation
- Jobs to be Done: Theory to Practice
- Radical Focus: Achieving Your Most Important Goals with Objectives and Key Results
- What Customers Want: Using Outcome-Driven Innovation to Create Breakthrough Products and Services