Project Management is About Risk

- We have risks everywhere:
  - Schedule
  - Technology
  - People
  - Murphy’s Law
  - More

- How do we manage the risks?
* But when could you tell when anything was ready?

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Analysis</th>
<th>Design</th>
<th>Code</th>
<th>Integration</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-estimate, replan, possibly cancel</td>
<td>Re-estimate, replan, possibly cancel</td>
<td>Re-estimate, replan, possibly cancel</td>
<td>Re-estimate, replan, possibly cancel</td>
<td>Re-estimate, replan, possibly cancel</td>
<td>Re-estimate, replan, possibly cancel</td>
</tr>
</tbody>
</table>
Johanna’s General Agile Picture

Idea

Ranked Backlog

Cross-functional team

The team produces shippable product on a regular basis

Responsible Person

© 2013 Johanna Rothman
The Principles Behind the Agile Manifesto

- Satisfy the customer through early and continuous delivery of valuable software.
- Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
- Business people and developers must work together daily throughout the project.
- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- Working software is the primary measure of progress.
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- Continuous attention to technical excellence and good design enhances agility.
- Simplicity--the art of maximizing the amount of work not done--is essential.
- The best architectures, requirements, and designs emerge from self-organizing teams.
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.
Why Do Agile?
What’s the Point?
Johanna’s General Agile Picture

The team produces shippable product on a regular basis

Cross-functional team

Ranked Backlog

Idea

Responsible Person
Agile Teams

* Contain all the roles required
* 5-7 people is the sweet spot
* Deliver value every iteration or every feature
Ever Wondered About Agile “Projects?”

- Agile projects are real projects
- They have beginnings, middles and ends
- Iterations help you manage technical risk
- Increments help you manage schedule risk

<table>
<thead>
<tr>
<th>Start a Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iterate/Increment/Manage Risk/Retrospect/ Produce Releaseable Product</td>
</tr>
<tr>
<td>Iterate/Increment/Manage Risk/Retrospect/ Produce Releaseable Product</td>
</tr>
<tr>
<td>(As Many of These As You Need)</td>
</tr>
<tr>
<td>Iterate/Increment/Manage Risk/Retrospect/ Produce Releaseable Product</td>
</tr>
<tr>
<td>End Project (If Necessary)</td>
</tr>
</tbody>
</table>
**Prototypes Are an Old Design “Trick”**

- Think back to a time when you could not know if a technical approach was right. What did you do?

- You can iterate on more than the architecture…

<table>
<thead>
<tr>
<th>Initial pass at requirements.</th>
<th>Prototype what we do know about. Get feedback. Select an architecture.</th>
<th>Continue the project however you did it…</th>
</tr>
</thead>
</table>

© 2014 Johanna Rothman
Timeboxes Are an Old PM “Trick”

* Think back to a time when you had the risk of not finishing the work. Or, when you didn’t want to start the work.

* What did you do?
Agile Provides You Iterative and Incremental

* You get both kinds of risk management with agile:
  iteration and incremental risk management
Benefit of Short Cycles

- “You gave me what I asked for, but not what I wanted!”
- Feedback is key
- The shorter the cycle, the smaller the story/task/item, the more frequent the feedback
How Long Should an Iteration Be?

* How much can you afford to throw away?
Let’s Discuss “Flow” or Lean

- Kanban means “signboard”
- It can help you see your bottlenecks
Different Planning Horizons

* Project portfolio is which projects the organization commits to.
* The roadmap explains the rough order of the features. This changes.
* The release plan takes your Minimum Viable Product and says this is when you can release something.
* If you use iterations (1-4 weeks), this is your iteration goal.
* Teams commit daily to one another at the standup.
Who Does What?

- **Product Owner/Value Team**: Decides what's in/out for this project.
- **Product Development Team**: Develops the features for a product.
- **Project Portfolio Team**: Decides which project is #1.
What’s on the Board?

* Not honking big requirements documents
* But, user stories
* A promise for a conversation

As a checking account owner,
I want to take out fast-cash of $20
so I can use the drive-through and not talk to a human being

Acceptance Criteria:
1. Owner has enough money in account.
2. Owner has correct PIN
3. Owner has not taken out more money in past three days...
How Big Is a Story?

* Estimation is a tricky thing
* Relative sizing helps
* Separating sizing from duration helps
* Planning poker helps you do both
At Least Two Approaches for Relative Sizing

* When you separate sizing from duration, you avoid estimation commitments to a date
* If you use stories, you tend to make stories smaller
* We are better at estimating smaller things
* If we estimate as a team, we tend to not forget things
What About #Noestimation?

* Some teams have stopped estimating entirely
* They swarm/mob over their stories
* They find this quite effective
* I do this too
What’s So Good About Agile?

* How many times have people asked you, “Where are you?”
* Empirical feedback
* Transparency
* Let’s look at some boards
Typical Scrum Board

- Ready column contents do not change during the iteration.
- The team commits to the Ready column at the beginning of the iteration, for each iteration.
There is No Typical Kanban Board

- Every team’s board is unique because it describes the team’s flow
- There is a limit on each column (Work in Progress)
- The team always takes the first card on the Ready column
- Kanban shows the flow of work and the bottlenecks
Standup!

* How you move items across a board
* How you make micro-commitments inside the team
* Track where you are: create your velocity chart at the board
The Three Questions

- My questions:
- What did you complete since the last standup?
- What are you working on now?
- What are your impediments?
Burnup Velocity Charts Provide a Team Feedback

* Velocity is personal to a team
Velocity Charts

- Velocity is personal to a team and can change depending on many factors:
  - vacation, story breakdown, how consistently the team estimates, if anyone pressures the team to estimate differently, etc.
- I have yet to see a project that did not add features
- You might want to add that to your burnup charts
Information Radiators

- Project dashboards are information radiators
- You can see everything at one glance
- Public
- Big
- Transparent
One Team Sounds Possible—A Program?

* Can we scale agile to a program?
* Is it possible?
Agile Can Scale to Programs

- Several competing ideas:
  - Scrum of Scrums
  - Disciplined Agile Delivery
  - SAFe
  - Small world networks
Agile Programs: Scale Out, Not Up

- Allows for geographically distributed teams
- Assumes people are responsible and will help each other
- This image is the software program team in a small world network
You May Need Two Program Teams

* Core Team manages the cross-functional business risks
* That Core Team may/may not manage the project portfolio
* The Core Team delivers the product
Manage Project Portfolio

* The product development team works on tactical work: the project
* Managing the project portfolio is strategic management work
* Agile allows you to iterate on these decisions
Reading Recommendations

* http://www.jrothman.com/services/minimum-reading-list-for-an-agile-transition/

* My other writing:

  * http://www.jrothman.com/tag/transition-to-agile/

  * http://www.jrothman.com/blog/mpd/tag/transition-to-agile
Stay in Touch?

• Pragmatic Manager:
  www.jrothman.com/pragmaticmanager

• Please link with me on LinkedIn:
  www.linkedin.com/in/johannarothman/