SCRUM Product Ownership

From the Inside Out

Bob Galen
Director Agile Practices, iContact
President & Principal Consultant
RGCG, LLC
bob@rgalen.com
Practices of a Great SCRUM Product Owner

Bob Galen
Director Agile Practices, iContact
President & Principal Consultant
RGCG, LLC
bob@rgalen.com
Outline

Introduction
- Basics of the Role
- Exploring Backlogs
- Sprint Dynamics
- Goals & Criteria
- Role of the Product Owner at-Scale
- Q&A
Many Product Owners are conflicted…
- Product Manager assigned…w/o sufficient time, too heavily customer & stakeholder facing
- BA or others assigned…w/o PM skills
- Team / Scrum Master tries to do it…just messy
- Little/no PO training

Serious role within Scrum and should be handled that way

Premise: Product Owners first responsibility is towards their Team!
- Backlog & work orchestration
- Interaction & feedback
- Goal setting & acceptance
- Leadership & partnership
Basics of the Role
Part of the Challenge – Breadth

- **Part Product Manager** – traditional sense from Pragmatic Marketing
  - [www.pragmaticmarketing.com](http://www.pragmaticmarketing.com), 37 ‘activities’ as part of PM role; PO only covers 8-10 of those

- **Part Project Manager** – release planning, cross-functional & external dependencies in larger-scale environments

- **Part Leader** – partnered with the Scrum Master, influence & motivation capabilities, congruent leadership, its *your* team

- **Part Business Analyst** – creating user stories and other requirement artifacts; UI design often a ‘stretch’
Can there be Only 1? Are they a Part of the Team?

- It’s a complex role at best
  - Complex real-world environments, even tougher

- Scrum Yahoo Group there was discussion in the Fall of 2008 regarding whether it could be done by a small group. Schwaber stated that “there can be only 1”.
  - Respectfully I understand, but sort of disagree. What if you don’t have that ‘perfect’ person?

- Oh, and are they a part of the team?
  - For example, do they attend the Sprint Retrospectives?
  - Can they perform work within the Sprint?
Another Challenge…
Shifting Gears

*I think that the challenges of shifting gears between road maps and backlogs and internal stakeholders versus external stakeholders are among the toughest challenges - at least for me. Many Product Managers I have seen come from a pure marketing background and tend to have less affinity with engineering, sometimes resulting in challenged and limited communication. One of the challenges I see is that Product Managers in the role of Product Owners are having to bridge between Product Backlog and Sprint Planning versus Product Marketing and Strategic Planning.*

*One is aimed at optimal performance and the other is aimed at predictability of annual deliveries. Marketing and the executive team want to know what will be released 12 or even 24 months from now and will actively plan market activities and revenue projections around those deliveries. Where as the input from Scrum planning only provides us predictability for the near future, a successful Product Owner needs to manage expectations both ways and be able to shift between these two very different expectations without burdening one team too much with the expectations of the other yet always maintaining transparency.*

—Michael Faisst
Product Backlogs
Product Backlog
Simple list, or something else?

- All work vs. feature work? One list vs. many?
  - Features, Technical, Quality, Release, etc.
  - I think in terms of broad nuance; with multiple ‘threads’ weaving there way through the Backlog

- Excel Product Backlog Items (PBIs) vs. User Stories vs. something else altogether?

- Can you ‘connect’ to other requirement artifacts?
  - How? And how do you prevent too much work-ahead on requirements

- How do you orchestrate or influence – Emergent Practices?
  - Architecture, feature sets, usability, design, etc.
Creating a ‘New’ Backlog

- User Story Writing Workshops
  - Collaborative & fast
  - A sense of where you’re going
  - Drive them using Roles
  - I prefer User Stories, but the premise is the same…

- Partitioning the Backlog - workflow
  - Opening Moves – emergent understanding, beginning well
  - Middle Game – stabilization, value, mass
  - End Game – integration, quality, customer delivery
Backlog ‘Tension’ Points

- How many items? Size – does it matter? Are they all the same?
- Prioritization & Valuation methods
- FutureCast – painting a compelling picture of the “Tactical Now” vs. the “Strategic Later” w/o scaring everyone to death…

**Granularity heuristic**

*Use the 20/30/50 rule. 20% proper stories ready to roll. 30% are epics - bigger stories that will eventually be split out into smaller fine grained ones (only as needed). The last 50% are themes - vague ideas about long term product direction and I never put much effort here because it’s almost always wrong.*
‘Grooming’ your Backlogs Approaches?

- The Product Backlog is **Organic** and needs care & feeding
  - Reserve time for collaborative, team-based grooming meetings
  - ‘Assign’ individual stories to team members for vetting
  - Some combination of these two

- Keeping it interesting, grooming at 3 levels:
  - 20%: what’s right around the corner – are we ready?
  - 30%: what’s 3-4 sprints away – are we getting clearer?
  - 50%: what’s the future looking like? Break those things down…
‘Grooming’ your Backlogs

Approaches?

- Judicious use of *Research Spikes* to gain understanding

- In some cases, run Sprint #0 types of iterations to get your feet under you

- Always looking for new ‘contributions’
  - Technical, quality, release workflow, etc.
  - Rarely do they seem to be forthcoming; encourage them from the team
  - It’s the Teams Backlog!
Sprinting
Sprint Dynamics Planning

- Always be ready; strategize with your Scrum Master
  - No surprises for the team!
- You’re part of the team, stay engaged in the entire process
- Drive everything with ‘goals’

**Point of Sprint Planning**

1. To share and gain the teams’ commitment toward the **Sprint Goal**
2. To identify the set of **User Stories** that align with and are feasible to deliver within the Sprint
3. To identify the **Tasks** associated with delivering those User Stories

*In that priority order and leading to goal-driven work*
Sprint Dynamics
Execution

- **Stay engaged**
  - Attend daily Scrum
  - Observe the trending; consider adjustments as the sprint evolves
  - Actively participate…perhaps in testing; certainly in grooming

- **Looking-ahead**
  - Grooming the Backlog in ALL dimensions
  - Collaborating with Customers
  - Collaborating with Stakeholders

- **Observe & understand your team dynamics**
  - Strengths, capabilities, weaknesses, etc.
The very next day, the Product Owner gave me a call. Again, 5 a.m. on the west coast, but hey… he had a Sprint progress observation and wanted my advice. He said it seemed clear that the team was going to miss delivering some of the features for the Sprint.

However, he was OK with that and wanted to know if he could start removing or reframing Stories in order to increase the teams ability to meet the Sprint Goal?

So, here’s a Product Owner who, in their very first Sprint, gets the difference between planned scope versus actual team capacity and the need for ongoing adjustments. Ah Ha—I thought!
Sprint Review
A Defining Moment

- **Take ownership of attendance**
  - Ensure key stakeholders are going to attend; If not, ask them to send someone
  - Make it compelling to them; sell the opportunity
  - Same ‘ceremony’ every Sprint?

- **Help the team prepare**
  - Have a ‘script’; don’t over-prepare, but DO NOT wing it
  - Product Owners should “Set the Stage” for the Sprint
  - It’s not simply about features
    - Other artifacts, test automation, prototypes, etc.
  - Whole team approach

- **Call it! At a Story level and at a Sprint level…**
  - Pass or Fail?
Goals
Establishing Goals & Criteria
Why it’s Crucial?

- Agile teams are essentially self-directed, so plans don’t drive behavior or success…

- People do and Goals drive the Team!

- The team then swarm around the goal(s), using their creativity and teamwork to figure out:
  - What’s most important
  - How to achieve it
  - Always looking for simple & creative—20% solutions
Notions of Done-ness

- Need to define “Done” from team members perspectives
- If you’re a developer, what does “I’m done with that story” mean?
  - Code complete
  - Code reviewed (paired)
  - Checked in – build successful
  - Unit tests developed – passed
  - Integration
  - QA collaboration
  - Run by the Product Owner
- Every type of task should have a definition of done-ness! How else could you estimate the work?
Story Acceptance

- Each User Story should have acceptance criteria as part of the card
- They should focus on the verifiable behavior, business logic, for the story
- Typically, they are crafted by the Product Owner
  - Leveraging skills of Business Analysts and Testers
- Story acceptance tests are normally automated and run as part of feature acceptance AND regression
Iteration / Goal Acceptance

- Each Scrum Sprint has a Product Owner determined Sprint Goal

- Usually sprint success is not determined by the exact number of completed stories or tasks

- Instead, what most important is meeting the spirit of the goal

  Deliver a 6 minute demonstration of the software that demonstrates our most compelling value features and achieves venture capital investment interest
Release Criteria

- Goals and objectives for the entire project release
- Usually they are multi-faceted, defining a broad set of conditions
  - Required artifacts
  - Testing activities or coverage levels
  - Quality or allowed defect levels
  - Results or performance metrics achievement levels
  - Collaboration with other groups
  - Compliance levels

- That **IF MET** would mean the release could occur.
## Levels of Criteria

<table>
<thead>
<tr>
<th>Activity</th>
<th>Criteria</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Team Work Products</td>
<td>Done’ness criteria</td>
<td>Pairing or pair inspections of code prior to check-in; or development, execution and passing of unit tests.</td>
</tr>
<tr>
<td>User Story or Theme Level</td>
<td>Acceptance Tests</td>
<td>Development of FitNesse based acceptance tests with the customer AND their successful execution and passing. Developed toward individual stories and/or themes for sets of stories.</td>
</tr>
<tr>
<td>Sprint or Iteration Level</td>
<td>Done’ness criteria</td>
<td>Defining a Sprint Goal that clarifies the feature development and all external dependencies associated with a sprint.</td>
</tr>
<tr>
<td>Release Level</td>
<td>Release criteria</td>
<td>Defining a broad set of conditions (artifacts, testing activities or coverage levels, results/metrics, collaboration with other groups, meeting compliance levels, etc.) that IF MET would mean the release could occur.</td>
</tr>
</tbody>
</table>

Contributed to Chapter 20 of Lisa Crispin & Janet Gregory's new 2009 *Agile Testing* book
Role of the Product Owner
At Scale
Product Owners
Their Evolving Role

- Within each Scrum, the PO is typically narrowly focused on crafting the Backlog, engaging in progress, and reviewing sprint results.

- However, as Scrum scales, the PO team needs to become more focused on:
  - **Product Line Evolution** – Meta Backlog and coordination across Sprint teams, strategy development & execution, resource load-balancing, and budgeting.
  - **Cross-Team Planning** – SoS coordination, linked goals and backlog work, delivery integration, and staged (forward-thinking) planning.
  - **Delivery Dynamics** – timing, marketing, packaging, interrelationships, customer feedback, and achieving production quality.

All of course with the team(s) delivering the product.
Product Owners
Guiding Testing

- The PO also needs to have a Quality & Testing perspective that within each Sprint focuses on –
  - Developing specific multifaceted quality release goals
  - Working with the team (Testers) to develop acceptance tests
  - Guiding daily convergence towards goals

- Across the Scrum of Scrums:
  - Developing Product & Portfolio quality meta goals that cross all Sprints
  - Integrating deliverables and qualifying the overall Product via planned Integration & Stabilization Sprints
  - Balancing automation vs. manual testing capacity and investment
  - Focusing teams towards Product release points
Inherently Narrow Focus of Agile Testing

Typical Agile Team Testing Focus

- Unit Testing
- Automated Builds – Smoke Testing
- Focused – Customer Acceptance Testing
- Test Driven Development (TDD)
- Very limited – Integration & Regression Testing
  - Focused Towards Automation
  - Limited Exploratory Testing

What’s Missing for Larger Scale Organizations?

- Integration Testing
- Functional Testing
- System Testing
- Regression Testing
- Performance Testing
  - Load Testing
- Scenario Based Testing
- User Acceptance Testing (UAT)
- Usability Testing, Other “ility” Testing
- Exploratory Testing
- Large-scale Automation
Product Owners
Coordination Workflow

- Scrum of Scrum of Scrums – The PO organization must coordinate
  - Feature timing & workflow
  - Quality & integration workflow
  - Product maturation and release readiness
  - Production deployment

*In conjunction with technology and project leadership*

*While often interfacing to operations and customer facing organizations*
Product Owner
Planning Levels in Large-Scale Agile Projects

- **Product Vision**
  - Yearly by Product Owner (s)

- **Product Roadmap**
  - Semi-Annually by the Product Owner (s)

- **Release Plans**
  - Quarterly by the Product Owner & Team (s)
  - Small To Large

- **Iteration Plans**
  - Monthly or bi-weekly by the Team (s)

- **Daily Plans**
  - Daily by the team members
Release Train Management

- Iterative model with a release target
  - Product centric
  - Focused on a production push/release

- Synchronized Sprints across teams
  - Some teams are unsynchronized, but leads to less efficient cross-team (product) interactions

- Continuous Integration is the glue
  - Including automated unit and feature tests; partial regression

- Notion of a “Hardening Sprint”
  - Focused more on Integration & Regression testing
  - Assumption that it’s mostly automated
  - Environment promotion

- Define a final Hardening Sprint where the product is readied for release
  - Documentation, Support, Compliance, UAT, Training
Release Train Management
“Internal” Driving Forces

- Customer’s ability to “accept” the release

- Value being delivered in the release – purely scope

- Hardening Sprint “reality”
  - Time, Complexity, Automation, Size, Compliance, and Industry

- Internal team readiness
  - Customer support
  - Sales & Marketing readiness
  - Overall documentation & training
The Agile Release Train
Synchronized

Team 1
- Iterate
- Iterate
- Harden

Team 2
- Iterate
- Iterate
- Harden

Team 3
- Iterate
- Iterate
- Harden

Team 4
- Iterate
- Iterate
- Harden

... Team n
- Iterate
- Iterate
- Harden

Continuous

Internal Release

Iterate
Iterate
Iterate
Iterate

Integration

External Release

X-team
Harden

Docs,
Training,
Support,
UAT,
Comp.

Internal Release

Continuous

Internal Release

Continuous

Internal Release

Continuous

Continuous

Integration

Integration

Integration

Integration

Integration
The Agile Release Train
Example: eCommerce / SaaS Model

10 days  |  10 days  |  5 + 2 days

External Release

Team 1  
Iterate  |  Iterate  |  Harden
Continuous Integration

Team 2  
Iterate  |  Iterate  |  Harden
Continuous Integration

Team 3  
Iterate  |  Iterate  |  Harden
Continuous Integration

Team 4  
Iterate  |  Iterate  |  Harden
Continuous Integration

Team 8  
Iterate  |  Iterate  |  Harden
Continuous Integration

Environment Evolution

Dev + QA  |  Dev + QA  |  QA -> Staging  |  Production
Continuous Integration

Rinse & Repeat

Copyright © 2011  RGCG, LLC
Release Train Management
“Motivational” Driving Forces

- **Vision**
  - Schedule for delivery
  - Feature set(s)
  - Goals for each team

- **Themes**
  - Which teams will be working on what components
  - Packages of User Stories
  - Prioritized by business value & need

- **End-to-End Use Cases**
  - Integration focused execution
In Closing…

- Product Ownership (by the Customer, Stakeholder, BA, Product Manager) is the most crucial role within agile teams, providing—

  - Inspirational vision
  - Clear goal – setting; quality balanced
  - Prioritized requirements – value based, workflow
  - Measured & accepted results
  - Scaled appropriately
  - Focus towards the team first
Questions?

Thank you!
Contact Info

Bob Galen
RGalen Consulting Group, L.L.C.

Agile focused training, coaching & consulting

PO Box 865, Cary, NC 27512
919-272-0719

www.rgalen.com
bob@rgalen.com


Go to www.rgalen.com for purchasing / for order info, misc. related presentations, and papers.
Just curious…

- How many are using User Stories?
- How many use Story Points for estimation and Planning Poker?
- How about complex prioritization – different types of work, release workflow?
- Or driving Value, any secrets?
- Comfortable with them? What are some of the challenges?
- If not, what are you using?
- What flavors – Fibonacci, HML, gummy bears, something else?
- Again, comfortable with them? What are your challenges?
- How do you handle simple prioritization (business features) vs. other team-driven value?
- For example, anyone using Value Poker?
Potential Exercise

- Gather in small groups; better that you are from the same company/organization OR those with similar characteristics
- In this section, we discussed the various levels of criteria that are important within agile teams.

1) Amongst your team, discuss how you’ve established goals & criteria in your Agile (or non-Agile) teams
   1) What levels are the most important?
   2) What levels don’t matter as much?
2) What part does the team play in definition? Should play?
3) Does defining what “done” means really matter? How?
4) If you had only one to pick, which would it be? And why?