The Role of a Business Analyst in an Agile Environment

- It is the BA who must become the “value manager” and ensure the value of each delivered sprint is realized.

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The Role of a Business Analyst in an Agile Environment

• Where is the BA role in Agile development?
What is Agile?
Agile is an iterative approach to software delivery that builds and delivers software incrementally from the start of the project, instead of delivery all at once at the end of the project.
Lean: Eliminating Waste

- Lean practices in manufacturing aim to eliminate waste, improve quality, establish smooth workflow, and reduce production time.
- Lean practices became popular in Japan in the 1980s. The Toyota Production System (TPS), is a famous example of lean manufacturing.
- In early 2000s, lean principles evolving in software development.
- The Manifesto for Agile Software Development was declared in 2001.
- The Scrum framework is used in both manufacturing and software development.
The Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value:
- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

http://www.agilemanifesto.org/
The Scrum Framework
Prerequisite of Scrum

• Adopting Agile methodology assumes that the high-level vision and budget for a project have been decided.
• These fundamental decisions about scope and goals should be communicated to the team formed to build the product.
Popular Agile process in use is Scrum
What is a Product Backlog?

The product backlog is a prioritized feature list of user stories. It is a list containing short descriptions of all functionality desired in the product.
What is a Sprint Backlog?

The sprint backlog is a list of user stories to be completed during the current iteration (Sprint).
The Scrum Cycle

Product Backlog (all features and work on the product)
Sprint Backlog (agreed work for the time boxed sprint)
Sprint (2-4 week time box)
15 minute Daily Scrum
Working Increment of Software
Scrum Roles
Scrum Roles: Who does what & why

Product Owner: the person responsible for deciding which features the product should include. The Product Owner represents the “voice of the customer.”

Part of the product owner responsibilities is to have a vision of what to build, and convey that vision to the scrum team. The agile product owner does this through the product backlog, which is a prioritized features list for the product.

- motivates the team with clear goals
- commitment to not throw new requirements at the team during the sprint
- understands the market, the customer and the business in order to make sound decisions
- ensures requirement changes are done outside the sprint
- works closely with key stakeholders
Scrum Roles: Who does what & why

Scrum Master: a “servant-leader,” coaches the team in Agile, protects them from disruptions, removes obstacles, and radiates information about their work out to the larger organization.

The Scrum Master is responsible for making sure a Scrum team follows the values and practices of Scrum. The Scrum Master is often considered a coach for the team, helping the team do the best work it possibly can.

- does anything possible to help the team perform
- removes impediments
- facilitates meetings
- works with the product owner
- protects the team from outside influence
- has no authority
Scrum Roles: Who does what & why

Scrum Team: A typical Scrum team is five to nine people. A Scrum team does not include traditional roles such as programmer, designer, tester or architect. Everyone on the team works together to complete the user stories that they have committed to complete within a sprint.

- self-organizing
- collaborative
- shares the same standards and rules
- accountable for the delivery
- skills within team are balanced
- works full time in the team
Servant Leaders

- The Product Owner serves the client
- The Team serves the Product Owner
- The Scrum Master serves the Team
Role of a Business Analyst in Scrum

1. Scrum Team - Test and document features of the current sprint
2. Scrum Master - Facilitate scrum meeting and remove impediments
3. Product Owner – need to be empowered to make decisions
Role of a Business Analyst in Scrum

- Avoid Proxy Role
- Work within the sprint
Scrum Terminology

**Sprint** - short (1-4 week) period of development that results in working software

**Definition of Done** - Previously agreed-to criteria that indicate when work is complete.

**Sprint Planning Meeting** – Product owner presents prioritized user stories to the team, team discusses and commits to what stories they can complete during the sprint

**Daily Scrum/Standup Meeting** - 15 minute daily team meeting.

**Sprint Review** – at the end of the sprint the Agile team demos working software to stakeholders
Tools for BAs
Daily Stand Up Meeting

(Daily Scrum)
Daily Stand Up Meeting

• Meetings are held in the same location and at the same time each day, ideally in the morning.

• Meetings are strictly time-boxed to 15 minutes.

• All team members are required to attend the meeting and answer the following:
  • What did you do yesterday?
  • What will you do today?
  • Are there any impediments in your way?

• The meeting is not used as a problem-solving or issue resolution meeting; these items are taken offline.

• The ScrumMaster is responsible for removing impediments as quickly as possible.
Daily Stand Up Meeting

• Daily Stand-up Meeting should be face to face

• If face to face is not possible then video should be used
  • Body Language
  • Facial Expressions
User Stories

Users Come First
What is a user story?

A user story is written from the user’s perspective. User stories are short, simple descriptions of a feature told from the perspective of the person who desires the new capability.
Structure of a User Story

As <persona>,
I want <what?>
so that <why?>.

As a <type of user>,
I want <some goal>
so that <some reason>.
Tips for User Stories

• If you don’t know who the users are and why they want to use the product or feature, then you should not write any user stories. User research is needed.

• Use epics to start the discussion without committing to details

• Use Index Cards or Sticky Notes

• Use a modeling language (UML) for technical stories
The Agile Board
The Agile Board

The agile board is a physical representation of the user stories that the team has committed to complete within the sprint

- Typically 3 columns: To Do, In Progress, Done
- The board should be physical, located within the team room
- No one should sit with their back to the board
- Update during the daily standup meeting
The Agile Board

<table>
<thead>
<tr>
<th>TO DO</th>
<th>IN PROGRESS</th>
<th>DONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Post-it notes]</td>
<td>[Post-it notes]</td>
<td>[Post-it notes]</td>
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<td>[Post-it notes]</td>
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<td>[Post-it notes]</td>
<td>[Post-it notes]</td>
<td>[Post-it notes]</td>
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</tbody>
</table>
The Agile Team Room
Wireframes
Wireframes

A visual guide that represents the skeletal framework of a user interface.

- Wireframes conceptualize an idea and communicate the ideas to a group.
- Team member can review wireframes for design ideas.
- Wireframes reduce the amount of time needed by extensive requirements or prototype development.
Wireframes
Planning Poker
Planning Poker

A deck of Planning Poker cards will show the Fibonacci sequence:

0, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89

Other decks use:

0, 1, 2, 3, 5, 8, 13, 20, 40, 100
Planning Poker

Stakeholders are presented with the user stories. Each stakeholder selects 1 card to represent his or her importance value. All cards are then revealed at the same time.
Planning Poker

The high and low values share their reasons for their level of importance. After further discussion, each stakeholder reselects a card, and all cards are again revealed at the same time. This continues until consensus is achieved.
The Agile BA – Adding Value
The Agile BA – Adding Value

- Eliminate waste by NOT building features that won’t be used.

- Customers don’t have to think of everything they could possibly ever want before the system is built.

- Customers are involved throughout the software development lifecycle.

- Customers are allowed to change their minds, but they must always prioritize the things they want.
PMO

Agile PMO

BA

Product Owner

Stakeholders

Customers

Project Team

Business Analysts

Scrum Master
Agile Benefits
Where the Agile BA can add value

• **Higher Productivity**
  The Agile methodology emphasizes delivery of usable features at the end of every short development cycle.

• **Higher Quality**
  A key principle of Agile is to test early and often, which results in a higher quality product being delivered to the customer.

• **Higher Customer Satisfaction**
  Customers are involved throughout the process, and can give feedback early and often. This will result in a better product.
Recap

Product Backlog → Sprint Backlog → Sprint

- 24 h
- 30 days

Working increment of the software
References

Scrum Alliance: scrumalliance.org

Scrum, Inc.: scruminc.com

Mountain Goat Software: mountaingoahtsoftware.com
Questions