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# A Scrum Book

The Spirit of the Game

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Raleigh, North Carolina

# A SCRUM BOOK

THE SPIRIT  
OF THE GAME

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*edited by Adaobi Obi Tulton*

# A Scrum Book

The Spirit of the Game

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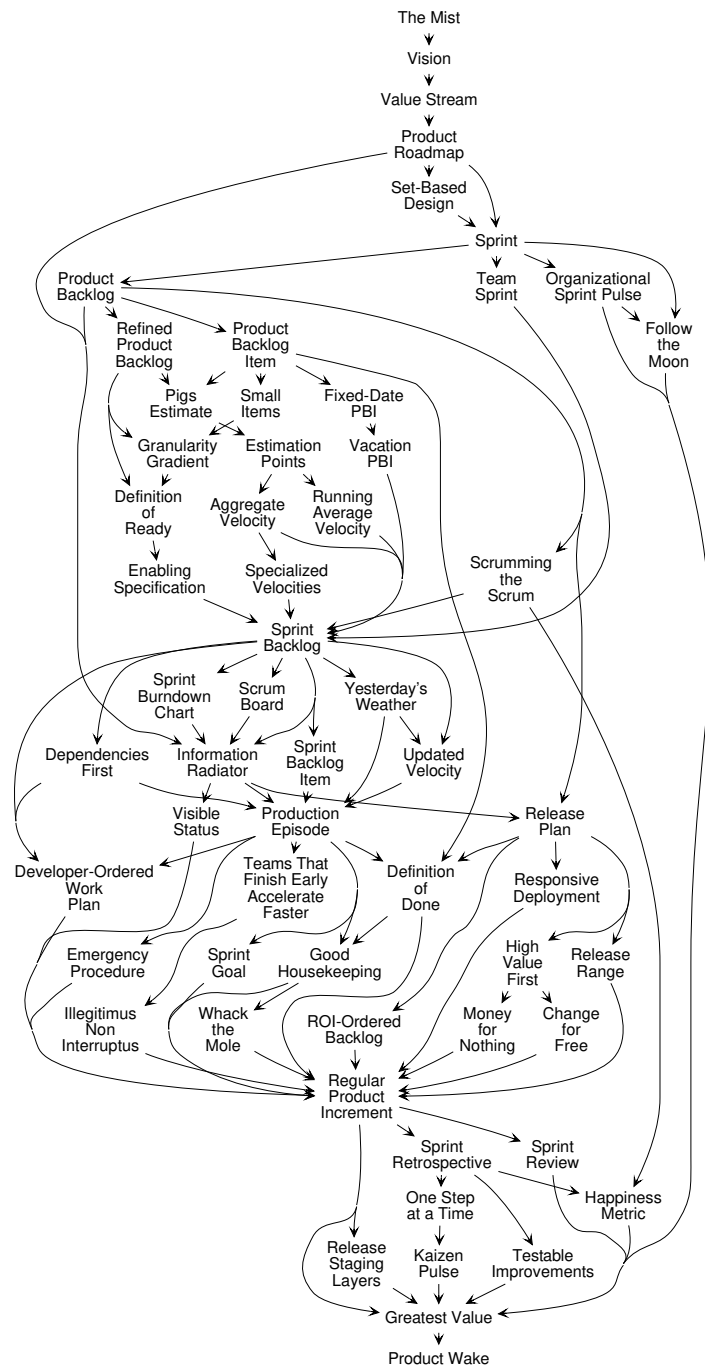
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# Value Stream Pattern Language

Whereas the [Product Organization Pattern Language on page ?](#) builds the relationships between the people and teams in a Scrum organization, the Value Stream Pattern Language builds relationships between steps of product construction, and the artifacts that represent parts of the process. The *Scrum Team* builds the Value Stream to frame out the overall rhythms and activities of development. Value generally flows from the [¶139 Vision](#) into the [¶154 Product Backlog](#), and from there into the [¶172 Sprint Backlog](#) and eventually into the [¶185 Regular Product Increment](#). Many other patterns refine these larger *Value Stream* components along the way.

The following picture is the pattern-language graph for the Value Stream Pattern Language, and shows the dependencies between the language's patterns. We described how to use a pattern language graph in the first section of the [Product Organization Pattern Language](#).



## Value Stream Sequence

Scrum is as much about crafting the process as it is about building the product. There is a saw in Lean that advises: “Build the right process, and you’ll build the right product.” The most fundamental process is that of “inspect and adapt,” which organizations can use to steer both the product *and* the process. We use the metaphor of a streambed that is the path through which the product travels on its journey from the [139 Vision](#) to its end users. We think of the *Vision*, [154 Product Backlog](#), and [172 Sprint Backlog](#) as the lining of this stream—these are Scrum artifacts. But they are also demarcations of time that reflect how development flows from conception to delivery.

A *value stream* is just a sequence of activities that produce value. An enterprise can design a *Value Stream* to build a product, offer a service, or to otherwise create value. The core Scrum *Value Stream* focuses on delivering a [185 Regular Product Increment](#) for end users. These activities that produce value for the end users also create value for shareholders, for the [114 Development Team](#) (e.g., pride in building something great, an enhanced opportunity for professional development), and others. We think of each of these as a *Value Stream* in its own right, even though they may all emanate from the same broader product development effort.

This is one sequence (intended to be an archetypical one) that highlights the main patterns along the main waypoints of building and refining a *Value Stream*. We omitted some smaller patterns to help maintain the big picture perspective. Again, the sequence is only archetypical, and you may find it useful to apply the patterns in an order that differs from that which we describe here.

[12 The Mist](#) Great works start with a vague longing across some community, and with its attempts to solve great problems locally or individually, and while aspiring to do great things, stops at small, local benefits for want of effective cooperation.

[139 Vision](#) These longings come together in an articulated vision of the desired future state—the great thing that the *Scrum Team* will build. Everyone involved in realizing the problem shares this *Vision*. One person, the *Product Owner*, comes to embody the *Vision* by taking responsibility for it, and for the value that emanates from building the product.

[141 Value Stream](#) An organization congeals around these longings with a passion to build something great and generate value, with a vision not only of the end results but of the means for achieving those ideas and to

drive an evolving stream of deliverables to a growing notion of collective self. The sweat and bricks and mortar of design and product realization flow into the *Value Stream* at points that complement each other and support a harmonious flow of work.

**¶145 Product Roadmap** With ever a playful eye to the possibility of change and new ideas, a direction that may attain the greater good starts to congeal out of *The Mist*. There are several potential paths to building something great and generating value as led by the *Vision*. The *Vision* becomes a collection of dreams, of product increments, organized to facilitate early decisions that will guide the best-known path to Wholeness at any given time.

**¶146 Sprint** The *Value Stream* develops deliverable product increments in uniformly time-boxed episodes of product development called *Sprints*. Each increment is a *Done* contribution to furthering the vision. Uniform episodes also give the opportunity for meaningful improvement of *Value Stream* development processes. A natural cycle of *Sprints* might **¶177 Follow the Moon**.

**¶154 Product Backlog** Foresight, experience, and circumstances lend insight on what the best decisions might be at imminent forks in the roadmap. A vision of a specific path through the roadmap emerges to add value at every step, based on today's best guess of business conditions. The *Product Backlog* makes the immediate likely trajectory of long-term delivery visible to all stakeholders. See the **Product Backlog Sequence on page ?**.

**¶155 Product Backlog Item** The *Scrum Team* breaks down the product into individual deliverables called *Product Backlog Items* (*PBIs*), which are the focus of the effort to build deliverables. Developers accept those *PBIs* into development that meet the **¶165 Definition of Ready**, and which the developers have estimated, as in **¶157 Pigs Estimate**.

**¶171 Sprint Goal** The Team commits to a *Sprint Goal*, the “must do” of the *Sprint*, which will result when the work of the *Sprint* is complete. The *Sprint Goal* creates a focus for teamwork, helping the team work together instead of focusing on multiple independent efforts.

**¶172 Sprint Backlog** The *Development Team* plans how it will achieve the *Sprint Goal* and develop the *Product Backlog Items* that will allow them to deliver the Product Increment, and creates a work plan called a *Sprint Backlog*.



**¶175 Production Episode** The *Development Team* works toward the *Sprint Goal* and the delivery of the *Product Increment*. The developers update the *Sprint Backlog* every day in the **¶129 Daily Scrum**. The team works largely uninterrupted, **¶125 Swarming: One-Piece Continuous Flow** as a team to develop one *PBI* at a time.

**¶184 Responsive Deployment** As development progresses, there are small deliveries inside the larger *Sprint* cycles to address emergencies and fix bugs, or to generate value as opportunistically as possible, without waiting for the end of the *Sprint*.

**¶135 Sprint Review** After development for the *Sprint* is over, the *Product Owner* and invited stakeholders assess the current state of the product and what parts of it are ready for inclusion in a *Product Increment*. Work from the most recent *Sprint* must meet the **¶182 Definition of Done** before the *Scrum Team* deploys the *Product Increment*.

**¶136 Sprint Retrospective** The team also assesses the current state of its process and seeks opportunities for improvement, choosing one key improvement that the team together will realize in the next *Sprint*, and making it a *PBI* so that *Scrum* becomes the vehicle for improving the process: **¶192 Scrumping the Scrum**.

**¶185 Regular Product Increment** Approved *Product Backlog Items* compose into a cohesive *Product Increment* which the *Product Owner* may choose to make available for use.

**¶186 Release Staging Layers** The scope of delivery and application of *Product Increments* expands and contracts as experience testifies to the soundness of a given increment, while weaker increments die off.

**¶189 Value Areas** *Value Streams* may have independent tributaries that distinct teams can develop separately, but which the market chooses to use together as an integrated Whole. The enterprise can internally partition such work into *Value Areas*, each of which works like a small, self-contained entity to develop a product part for which there is no market alternative. All such *Value Areas* lie behind a market perception of a single product with potentially multiple *Value Streams*.

**¶190 Value Stream Fork** Successful *Value Streams* may grow in scope, and one problem with success is that the result can outstrip the original vision. If so, the original single *Value Stream* may become multiple streams, each with its own *Product Backlog* and *Product Owner*, bringing focus and a refined *Vision* to each one.

¶193 *Greatest Value* While it remains in use, the product produces the greatest value possible; and while development is still active, the product direction changes to provide the highest value.

¶194 *Product Wake* The cycles of life and nature ultimately bring products to the end of their useful lives, and they should be brought to an end in a way that returns their resources to nature and that recognizes the dignity of all stakeholders.