Introducing Enterprise Scrum for Business Agility:
Scale Scrum from Single Teams to Whole Organizations

Enterprise Scrum (ES) is a highly configurable, customer-centric management framework for achieving true business agility – the organizational ability to adapt quickly and effectively, to all forms of change, to deliver maximum value and greatest satisfaction, for customers and everyone else involved in your work.

Applied at the level of individual teams, ES makes Scrum practice more transparent and more robust. At the level of larger software projects, programs and portfolios, ES stretches the foundations of single-team Scrum practice across many teams, offering menus of configuring options, rather than imposing specific practice requirements. ES extends and expands the benefits of Scrum, making them accessible and achievable anywhere in the (evolving) organization. Even large transformations, agile or otherwise, can be managed this way.

ES has been developed and tested over 20+ years by Mike Beedle[1], one of the authors of the Agile Manifesto[2], a certified trainer of thousands of Scrum practitioners, and founder/leader of multiple successful businesses that have been managed with versions of Enterprise Scrum.

Understanding Enterprise Scrum

To understand ES, think in terms of what it offers and allows more than what it imposes and requires. Any number of things that effective scrum teams have done, beyond the Scrum Guide, are allowed, visualized, reviewed and improved. In this way, ES invites and supports self-organization at scale, via sets (menus) of structuring options.

This allows teams of teams to pull not only the content of their work, as in standard scrum practice, but also to specify, test, inspect and adapt everything that matters to their success, including all of their configuration choices, at the end of each iteration.

Some of the most important menus of configuration options offered in ES include patterns for structuring teams, owners and coaches (some examples are given below), collaboration style (centralization, delegation, collaboration), delivery modes (continuous deployment, continuous delivery, cycle releases, multi-cycle releases), contract types (time and materials, fixed date, fixed price, cost plus, operations/subscription), a range of (business, customer, employee, and societal) metrics.

To enable enterprise-wide application of the ES framework, it generalizes many of the core elements of Scrum. Product Backlog

What is Scrum Project Management?

Scrum is one of the "lightweight methods" that inspired the agile movement. The definitive Scrum Guide[3], just sixteen pages long, articulates a few roles, artifacts and ceremonies (meetings), but that's enough to enable increases in quality, speed, learning, and engagement, while decreasing risk and waste.

When people talk about "doing Agile," 70-80% percent of the time they're talking about Scrum, a decades-old project management framework. It's been proven around the world in software development and applied to dozens of other domains.

Scrum works by addressing change, complexity and uncertainty directly, in small iterative bites, commonly in two week cycles called Sprints. Team autonomy is high, but bounded by transparency, with everyone focused on delivering the greatest customer value. Cross-functional teams are created with all the skills they need to deliver whole, "vertical slices" of work, meaning they have a little bit of everything required in the end result. Feedback comes directly and frequently and teams learn quickly. Forecasts and budgets improve from wishful thinking or wild guesses to mathematical projections based on real and recent team performance.

Taken together, these characteristics create the potential for doing 2-4 (or more!) times the work, with a fraction of the time and resources required using traditional project management.

becomes Value List, for instance AND it becomes multi-dimensional in the form of a user-customized canvas. Product Owners become Business Owners. Sprints become cycles. Cycles of one to four weeks are still the rule for software work, but in other domains cycles might be as long as quarters or a full year.

The essential shape of ES practice remains true to the standards advanced in the Scrum Guide. At the same time, a growing list of new strategic and management techniques, or in-house models, can be incorporated into ES-based work. Just add their required activities to the "Canvas[4]" (explained below) and pull them into a cycle.

Three Key Dimensions of Enterprise Scrum Practice

Enterprise Scrum has three key dimensions, supported by three new ES-specific artifacts: the ES Configuration Set, the ES Initial Canvas, and the ES ScrumBoard.

1. Configure - Establish key parameters
2. Visualize - Create your initial canvas
3. Iterate - Deliver value and evolve process

Configure each instance of ES to satisfy specific needs and circumstances. Start with a high-level vision (value, purpose) to establish scope and sponsorship. Then set parameters and working agreements, drawing from ES configuration menus offering a full range of options for key structuring decisions.

All of the options on the ES menus are patterns that have been identified in the wild, in practice at real organizations. In this way, ES offers a wider vocabulary to describe what actually happens when real organizations scale scrum practice. In standard Scrum practice, teams pull their development work.

In ES practice, teams, coaches and owners take explicit responsibility for all of the other work that we do "around" the actual development work. ES makes this work visible, so it can be named and tracked. Technical debt and other "debts" (learning, decisions, research, monitoring, cultural, refinement, and other work we should have done earlier but didn't) are simply the rest of the work.

With ES, teams can make more conscious choices about all of that. They can even pull

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What is Scrum, *continued...*
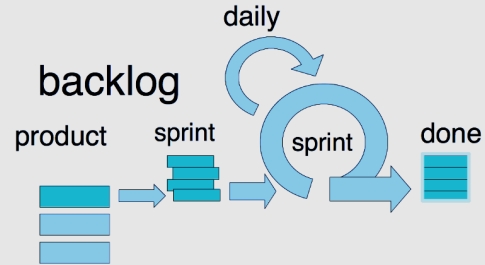
Roles: In Scrum, a Product Owner is responsible for setting priorities: making sure the team is building the right things and building the most valuable things first. The team that does the work is self-organizing, meaning they have direct responsibility for figuring out the best ways to deliver the desired results. The Scrum Master or Coach is responsible for facilitating the ceremonies that help the team plan, collaborate, review and improve.

Artifacts: The first artifact is the Backlog, which starts with a high-level vision that is then sliced into smaller and smaller pieces of work to be delivered. This is how the Product Owner communicates to the team what is needed and the team figures out how to build it. Every Sprint, the team commits to deliver a small slice of the Backlog, this list is the second artifact, the Sprint Backlog. As they do the work in the Sprint, they track their project in a Burndown Chart, to make sure they stay on pace to deliver everything promised. The last artifact is the potentially shippable product that is delivered at the end of each Sprint.

Ceremonies: Every Sprint starts with a Sprint Planning meeting, where the team decides how much of the top priority work they can do this Sprint. Then they meet for 15 minutes every day to check each other's progress, identify obstacles, and manage dependencies. At the end of the Sprint, they deliver and demonstrate their finished work for their Stakeholders and/or Customers. The most important meeting in Scrum is the Retrospective, where the Team designs and tests ways to make their work process better.

responsibility for reviewing and improving important foundational choices like role assignments, cultural norms, funding and contracting rules, deployment practices, and which metrics will be tracked. More than any other approach to business agility, ES offers important structure and practice choices to the people directly engaged in doing the work, rather than imposing one way.
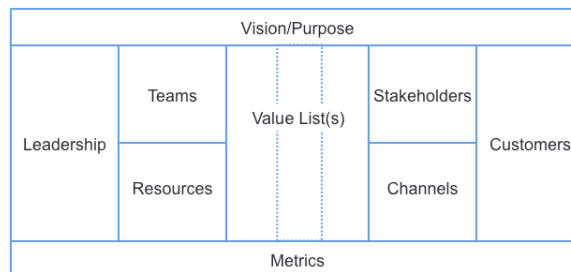
Visualize Everything that Matters on the ES Canvas. ES offers a growing library of canvas templates for software scaling and many business agility applications, including marketing, sales, compliance – even a canvas for enterprise transformation (agile adoption, mergers, etc).

Organize Around	Systems, Products, Functions, or Customers/Segments
Management Style	Centralized, Delegation Collaborative, or Adaptive
Scrum Style	Experimental, Strict (by-the-book), or Advanced/Adapted
Delivery/Deployment	Individual Cycles, Coincident Cycles Continuous Delivery, or Continuous Deployment
Contract Types	Time & Materials, Fixed Price Fixed Date, or Cost+
Cycles	Any length, Recursive (cycles w/in cycles)
Roles	Fixed, Floating, or Shared
Metrics	Velocity, Cost, Revenue UX, CX, and EX Impact in the World

Working with one or many teams, the canvas holds the Product Backlog (generalized to Value List). This will eventually include all of the stories or features to be delivered, refining and detailing as the work progresses, but it will also include the full range of surrounding issues and relationships: vision, leadership, ownership, coaching, resource, stakeholders, deployment, customers.

In ES, so called "Value List Items" can include the user stories and features used in software development, but also any other deliverables. Monitoring, testing, decision making, research, reporting and other sorts of work, can all be managed – including Value List refinement itself.

ES allows teams to visualize repeating, scheduled, and what ES calls "unselectable" work. The latter is known work that cannot be scheduled, work that will be done when someone or something other than the team decides it's time. Now, unplanned work doesn't have to break the Scrum framework.


Adapted from Mike Beedle's Enterprise Scrum, for Software Scaling and Business Agility

The ES Canvas will hold everything that matters. Even the configuration choices are reflected, and reviewable, within the Canvas.

Plan, Collaborate, Review and Improve everything on the canvas, in every cycle. rack the work on the ES ScrumBoard, which includes the initial (to do) canvas, the specific pieces of work pulled for delivery in this cycle, and the delivery (done) canvas. At the start of each Cycle, the team(s) pull some work from the ES Canvas, to be delivered by the end of that cycle.

Individual pieces of work now include not just stories or features, but also documents, infrastructure, etc. – anything required for delivery. These are referred to as "surfers," because they ride the waves (iterative cycles) across the board (wall). At the end of the cycle, all the new work completed and everything remaining on the Initial Canvas is reviewed and adapted as needed.
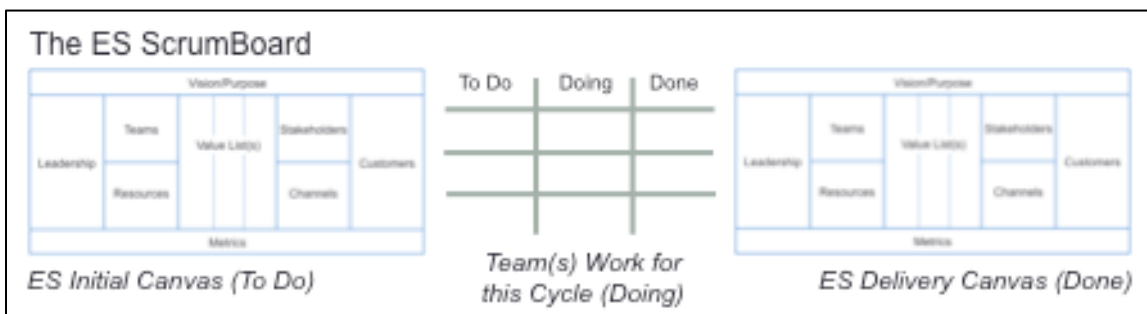
ES is iterative, emergent, evolutionary, all-at-once management. ES preserves and extends the essential patterns of Scrum by expanding choices and choice points offered directly to the working teams.

What Happens to Those Original Scrum Patterns?
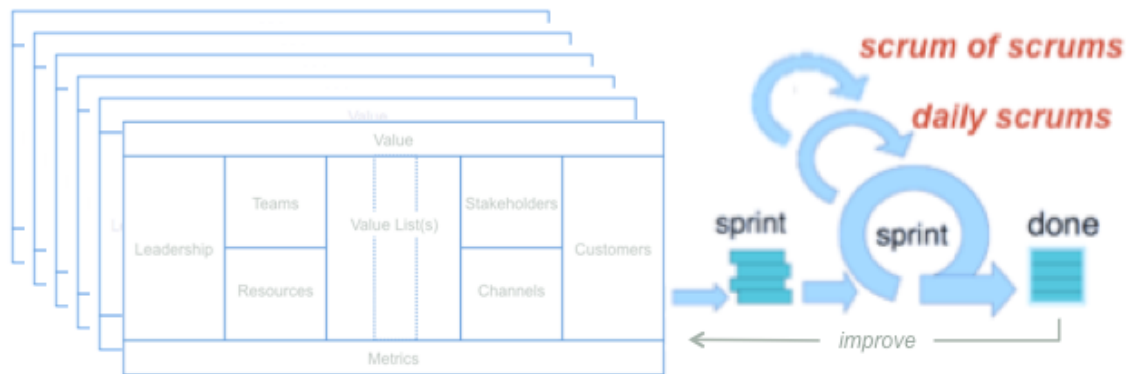
Roles: The three roles are preserved in ES, especially with regard to the Team. Although now the team become multiple teams AND the composition of teams is allowed to be reviewed and adapted over time, by the teams themselves.

In the Owner and Coach roles, ES makes an important adaptation that acknowledges of the realities faced in many organizations. The Ownership and Coaching (generalized from Scrum Master) roles are understood as essential functions, but it is no longer required that a single, real person will fill each one.

Sometimes the function will be served by a team of people. Sometimes those people will be dedicated or "solid" in that role, or they can be "virtual" and step into the role as needed. A large project with six teams might have a single, dedicated Business Owner. The same six teams might require six individual owners. Those six product owners might be able to function as a self-managing ownership team for the project, or they might have a chief owner. That chief person might be directive and controlling or facilitating and supporting in that role. That chief might be participative and "virtual," meaning that he or she is actually one of the six and steps into the chief role only as needed to break ties or report to other groups.

Similar options are offered in the Coaching role. The configuration chosen will depend on many local factors, cost, organizational culture, management style, and individual expertise being chief among them. If you can find a Business Owner who can personally manage a backlog for ten scrum teams, try that out. But if you can't, ES offers many other possible configurations, to preserve the essential function and fit your unique circumstances.

Ceremonies: All of the usual scrum meetings are preserved in ES. Everything in the Value List still needs to be refined. Teams still commit to work in Cycle Planning meetings, sync with teammates in Daily Scrums, and Review finished work with Stakeholders. ES keeps the Retrospective, but gives it a more active, forward-looking direction: Improve.

Original Scrum	Enterprise Scrum
Product Backlog (Items)	Value List (Items)
Product Owner	Business Owner
Scrum Master	Coach
Review and Retrospective	Review and Improve
Ceremonies or Events	Meetings
Sprints	Cycles
Single Teams	Multiple Teams
	Many more adaptations...

In multi-team applications, the teams will usually conduct all of these meetings individually. They might choose to run all-team Review meetings when they finish large pieces of work together – IF they have chosen to deliver in periodic, co-incident releases rather on some other schedule.

Like other scaling approaches, ES will add a scrum of scrums meeting, to help facilitate the resolution of dependencies across teams, with encouragement to keep lines of communication always open. The daily scrum of scrums meeting should be short, like the daily scrum, and be attended by technical representative(s) from each team. It can be convened by a single project coach or coach rotation, depending on how the teams choose to structure the coaching role(s).

Artifacts: As already noted, the ES Canvas expands on the Product Backlog and the ES ScrumBoard adapts the Sprint Backlog. Potentially shippable product is still produced in every cycle. Every team will still track its own velocity and produce its own burndown charts.

When teams choose to deploy in periodic releases, ES supports release planning and forecasting with a release burndown chart. Teams will normalize their cycle data and plot their individual progress and projections in a single chart, to identify the "critical team," analogous to the identification of a critical path in traditional project planning. Where one or more teams are seen missing the release target, the teams can review and adapt.
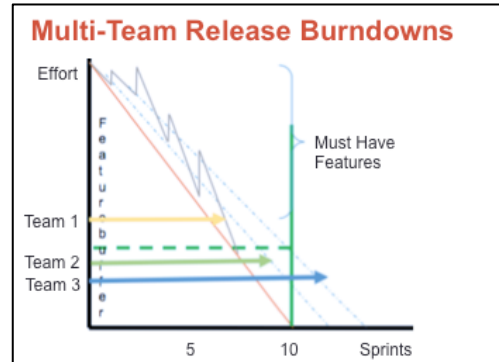
Finally, ES invites teams to consider a full menu of metrics toward more balanced agile management. In addition to team capacity and productivity metrics, ES suggests tracking employee and customer experience metrics, a wider range of business measures, and even indicators of larger impact in the world. True business agility requires balancing needs and co-evolving performance results in all of these dimensions.

Getting Started

The basic steps for developing an instance of ES can be initiated at any time, in any organization. A few days of training and coaching can help orient teams, coaches, owners and leaders to this simple, powerful extension of the Scrum practices – but isn't required.

Early on, or when considering many different possible applications, ES training with simulation exercises can build organizational understanding. Where the organization is ready to move on a specific project, program or transformation, ES coaching can focus the learning directly and immediately on the real work of that situation.

In all cases, the steps for getting started are the same:

1. Define a high-level Vision – purpose drives everything else! (Business Owner)
2. Configure the work and the initial canvas (Business Owner, Team, Stakeholders)
3. Create an Initial Value List – populate the Canvas (with everything that needs to be done/considered) – *see sample canvas on next page.*
4. Prioritize, Refine, Size (as usual, but now all necessary work is included)
5. Pull Work into Cycles (all planning, collaboration, review, improvement is accomplished within the frame of each cycle)

At the highest level, the ES ScrumBoard reflects the whole canvas as To Do, the usual sprint board as WIP, and another copy of the canvas to catch stickies as work is finished. Within the cycle (middle section), there is the usual To Do, WIP and Done.   With multiple teams, they all work from one canvas for the whole project, program or portfolio. There is one shared To Do canvas, one shared cycle view, and one shared Done canvas.

Within the canvas, there might be multiple team value lists (formerly called product backlogs) or just one shared by all teams. Within each cycle, each team will pull its own work and have its own swim lane to move their work within the single, larger scrum board.

When converting or migrating an existing operation into an ES framework, it can be useful to populate a "Done" version of the Canvas, to visualize and agree on what has been accomplished to date. This gives a sense of momentum, makes sure that everyone involved understands where they are in the technical or business development process, and makes it easier to then populate the Canvas of everything that is still to be done.

Value Proposition: Why is our work important? How do we make the world better for our customers? How are/will be our solutions better than any others?

| Leadership Supports, Constraints

How do we fit in and contribute to the larger whole? | Who's on the Team(s)? What practices and tools? How well used? | What things do we DO and DELIVER to create value for Customers? | Whose work informs or depends on our work? How are we inviting and working with them? | Customer Demands, Opportunities

Who is buying, using and what do they really want, need? |
| | What physical, financial, technical resources, other teams, specialists do we depend on? How to work with? | | How does our work get delivered to our customers? How can that be smarter, faster, easier? | |

How do we know we're succeeding? What are we trying to optimize? What are the lightest, simplest, cleanest ways to measure/monitor our progress/balance?

Adapted from Mike Beedle's Enterprise Scrum, for Software Scaling and Business Agility

In practice, taking vertical slices of the work to be done, minimizing dependencies, maximizing transparency and independence are essential to successful ES. Different kinds of work might require different or even unique definitions of Ready and Done. It's important that teams work out together what is required from each to fully complete a whole piece of work.

When more teams are involved, making work Ready might require making agreements across teams. Usually, making these agreements will be the work of Business Owners. Also, when many teams depend on each other, it's even more important that every team meets their definition of Done every cycle. If teams start to miss their marks, technical problems compound quickly into political nightmares. This, of course, is true of any multi-team scaling effort, but in ES the ultimate responsibility for staying out of this trouble rests more directly with teams (working with coaches and owners) than it does in other methods. Nobody's done until everybody's done.

For this reason, it's possible (and desirable) to start small, even with just a single team. The ES Canvas panels can be rearranged to "frame" a single team's scrum board. The team can focus on the work they've pulled for this cycle and capture in the surrounding canvas spaces whatever issues might arise in their daily scrum. At the end of their cycle they can "relax" their focus to review and improve everything that matters to their project. As the team proves they can meet their definition of Done, more teams can be added.

As the work expands into a multi-team effort – in a few weeks or a few years – the seeds for scaling are already present. Just add the new people, revisit the configuration menus and choices, launch the ES ScrumBoard, and keep on reviewing and improving everything already on the canvas.

Vision/Purpose				
Leaders Managers	TO DO	WIP	DONE	Stakeholders
Team(s)				Delivery/ Deployment
Resources				Customers
Metrics/Reports				

ES prides itself on giving teams more practical, real world options than other scaling frameworks while preserving the essence of single-team Scrum. This can make ES seem more complex in the beginning. There are definitely more choices to make explicitly, and fewer solid "rules" to be followed or imposed across all instances. The upside is that everything that teams, owners, coaches, and managers, stakeholders and champions actively choose for themselves as the work begins, ultimately strengthens their commitment to getting the work done.

The natural extension of ES will be from software into hardware, marketing and sales, human resources, compliance, and other business domains. Even highest level leadership can be managed in ES, around customer segments, business units, and whole enterprises. There are ES canvases for start-ups that want to be unicorns and transformations of veritable dinosaurs. Every instance will be unique, and ES is always the same: Configure on Purpose, Visualize Everything, and Deliver (and Evolve) Iteratively (planning, collaborating, reviewing and improving) – with all of your best Scrum skills.

Cascading canvases capture and connect the work of the whole enterprise…
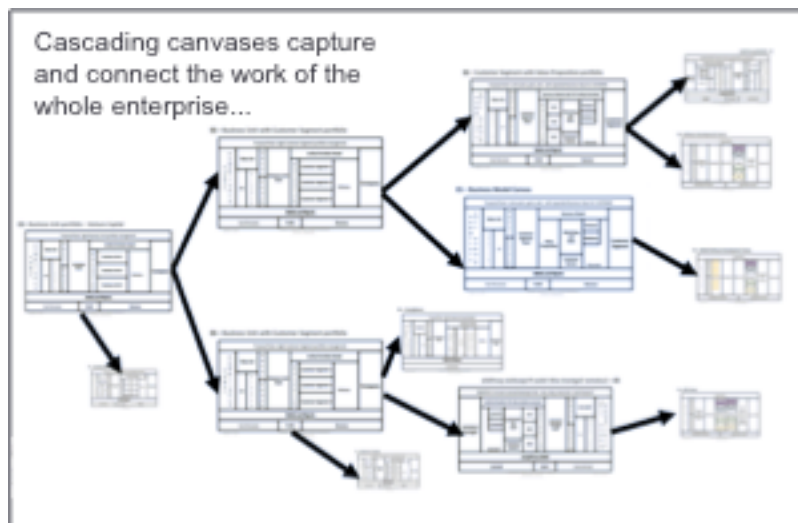
Don't Forget to Have Fun!

Over time, teams and organizations using ES will not only improve their ability to deliver large software projects, programs and portfolios successfully, they will be able to co-evolve the many different layers and facets of the organization into more responsive, customer-centric, employee-engaging, sustainably profitable business portfolios.

It might even turn out to be a lot more fun than the way you work now. If it's not fun, review and improve that! You might even make a special box on the Canvas for that, if you need to. ES makes it possible to "agilize" anything!

Michael Herman has been inviting agility, self-organization, and evolution in organizations since 1991. He's coached teams, trained facilitators, and supported leaders on six continents. He's been a leading voice for Open Space Technology[5], served as scrum master and agile coach, and contributed to a number of innovations in agile practice. He's a certified scrum master and Enterprise Scrum trainer and coach. Michael is based in Chicago and travels as needed, to support the spread of Open Space, Scrum, Enterprise Scrum and other ways of cultivating business agility. Feedback welcome via michael@michaelherman.com.

Notes:
1. EnterpriseScrum.com
2. AgileManifesto.org
3. ScrumGuides.org
4. BusinessModelCanvas.com
5. OpenSpaceWorld.org