FAST
AGILE

Agile for the Age of Disruption

FLUID SCALING TECHNOLOGY:

FOR AGILE

AND AGILE AT SCALE

Guide Version 2.12

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The greatest danger in times of turbulence is not the turbulence;
it is to act with yesterday's logic. – Peter Drucker

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Self-organisation is the life force of the world,
thriving on the edge of chaos
with just enough order to funnel its energy.

- Frederick Laloux

What is Fluid Scaling Technology?

Fluid Scaling Technology combines Open Space Technology[1] and Open Allocation[2] to create a lightweight, simple to understand, and simple to master method for organising people around work - that scales.

FAST is the acronym for Fluid Scaling Technology.

Fluid Scaling Technology for Agile is FAST Agile.

Fluid Scaling Technology is a system for organic collaboration on creative endeavours, from small to large scale.

Where and When to Use FAST

FAST is ideally suited for business environments or challenges that show complexity, rapid change, or where there is a need for innovation. FAST is ideal for software development, product development, and agile at scale - because of their typically complex nature. FAST is applicable to most complex collaborative endeavours and is not limited to just the software domain.

We are beginning to see organisations that are learning how to use
the power of self-organisation to be more agile and effective.

They have eliminated rigidity—both physical and psychological—
in order to support more fluid processes
whereby temporary teams are created
to deal with specific and ever-changing needs.
(Wheatley)

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[1] Open Space Technology is most often shortened to just Open Space, or its acronym OST.
[2] Open Allocation is a system of working where individuals choose what they want to work on and rely on influence and attraction to gain followers should they wish to lead an effort. Work is undirected and individuals self-manage.

How is FAST Different?

- FAST is built on fluid teaming rather than static teams to maximise adaptability.
- FAST is the same process at the small through to the large scale.
- FAST is not built on Scrum. Instead, FAST is built on Open Space Technology.
- FAST operates as a pure complex system.[3]

  (FAST also accommodates complicated and simple work.)
- FAST increases employee engagement through autonomy.
- Dependency management mostly takes care of itself.
- Drastically less time spent in meetings.
- FAST is lightweight.
- FAST is simple to master.
- Constrained expertise is easily shared as there are no static silos.
- Emergence is valued over heavy planning.
- FAST is optimised for design, discovery, and delivery - not just delivery.
- FAST is as much a Teal[4] framework as it is an Agile framework.
- FAST is an alternative to complicated agile and agile scaling.
- FAST was purposefully crafted to avoid the pitfalls that result in ineffective agile.
- Teams form around work in FAST, instead of the inverse.
- The FAST Collective plays a vital part in product discovery.
- FAST enables all four aspects of Autonomy as defined by Daniel Pink -
  Time, Technique, Team, and Task.

> "The greatest danger in times of turbulence is not the turbulence;
> it is to act with yesterday's logic." – Peter Drucker

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[3] Scrum is a boundary transition technique between complex and complicated, i.e., not a pure complex system. Kanban is a complicated system. *What's next for Agile? With Dave Snowden* https://youtu.be/EGgyksE_kgg

[4] Teal is an organisational theory that advocates enabling workers' self-management and to adapt as an organisation grows. It was introduced in 2014 by Frédéric Laloux in his book on *Reinventing Organizations.*

High-level Overview of the FAST Process

Bring everyone together to work as one Collective.

Visually represent business goals on a wall.

Let the Collective self-organise into teams to break down and do the work.

On a short cadence, synch and repeat the above step.

FAST does not build on static teams. Instead, it creates a fluid lattice where teams dynamically form, change, dismantle, and reform. To transition from static teams to a fluid lattice structure, merge teams into a FAST Collective.

The Collective participates in cadence at the FAST Meeting, an event inspired by Open Space. The FAST Meeting is a planning and synchronisation event where priorities are highlighted and teams dynamically form around work. Once teams have assembled, they break away, plan, and deliver what value they can with the remaining time in the cycle.

At the end of the cycle, the Collective comes back together. Each team shares their progress to ensure that everyone in the Collective is in sync with the current state of development and discovery. Making use of the Collective being already gathered, these steps are repeated, and teams again form around work for the next Value Cycle.

Note - Value Cycle period is not prescriptive. A two-day cadence is a recommended starting experiment. FAST is a flow system, not an iterative method, so Value Cycles are not time boxes to fit work into. There is no reason a Collective could not have a two-day cycle followed by a three-day cycle in a week should that be of appeal. A Collective needs to discover the shortest synchronisation period that feels right.

Build products with motivated, self-directed individuals.
Give them the autonomy, environment and support they need,
and trust them to get the job done.

FAST Values, Principles, and Pillars

FAST Values

- Autonomy.

- Shared Purpose.

- Mastery.

- Technical Excellence.

- Collaboration.

- Self-organisation.

FAST Principles

- Do the right thing.

- Mentor and be mentored.

- Be a T-shaped generalising specialist.

- Emergent design and architecture.

- Law of mobility. (Freedom to switch teams at any point if it makes sense.)

FAST Pillars

- Self-organising Systems (Includes Natural Order and Emergence).

- Open Space Technology.

- Open Allocation.

- Theory Y Governance [McGregor].

- Agility / Adaptability.

- Lean Startup / Experimentation.

- Self-management.

FAST Roles

Product Manager

The Product Manager's role is not one of authority and command but more inspiration. Responsibilities include – motivation, encouragement, communicating a clear vision, recommunicating the vision often, direction setting, standard-setting, providing feedback and modern product management. (Think Marty Cagan.)

Member

A Member is a **T-shaped team player** committed to delivery, collaboration, communication, listening, continuous learning, and personal mastery.

T-shaped people - are generalising specialists. They are highly skilled at a broad set of valuable things (the top of the T) and have specialisation and expertise (the vertical leg of the T). Members need to have generalist skills as there may be times when one's domain(s) of expertise are not required, but one can still contribute with generalist skills.

A team player – is an individual with the capability and preference for working collaboratively. Such a person cares more for team success than their own and is always ready to help other team members, so everyone crosses the finish line together.

Team Steward

Team Steward is a natural leadership[5] role where a Member has chosen to steward some work in a Value Cycle. Just as teams are fluid in FAST, team stewardship is fluid and not static.

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[5] Natural order and natural leadership emerge from self-organising systems.

Feature Steward (Optional)

As teams are not static in FAST, it can make sense for at least one person to stay with a feature/opportunity/outcome to see it all the way through to completion. Feature Stewards provide continuity across Value Cycles and serve as a point of contact for stakeholders. A Feature Steward is not required to work continuously on the feature they are stewarding, only to have a continuous understanding of the work. Stewardship can change with mutual agreement.

FAST Artefacts

Fluid teaming and the ability to represent and track complex nonlinear work in Product Maps and Discovery Trees is how FAST distinguishes itself as a purely complex system.

Product Map – The Big Picture

Product Mapping is an extension of Jeff Patton's Story Mapping [Patton]. The difference is that a Product Map focuses on high-level elements only, e.g. bets, capabilities, opportunities, aspects, desired outcomes, business goals, initiatives, themes, and features.

Figure 1 - Product Map

A Product Map is a way to visualise what the Collective are doing as a whole. The map shows progress at a high level by the ratio of started, not started, and done.
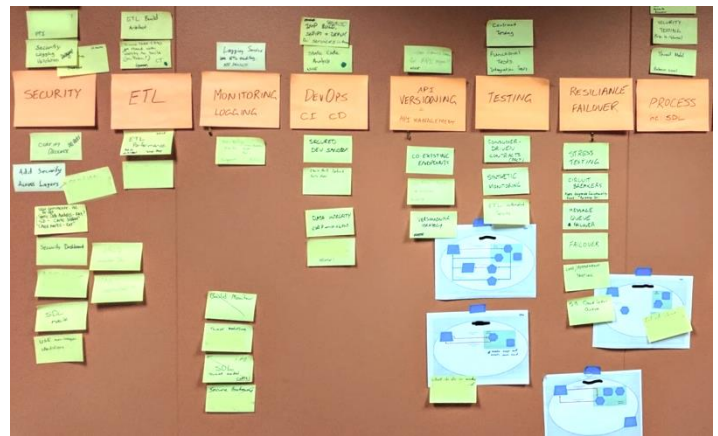
Finer-grained details of high-level items are represented in Discovery Trees.

Discovery Trees – Thinking Big While Working Small
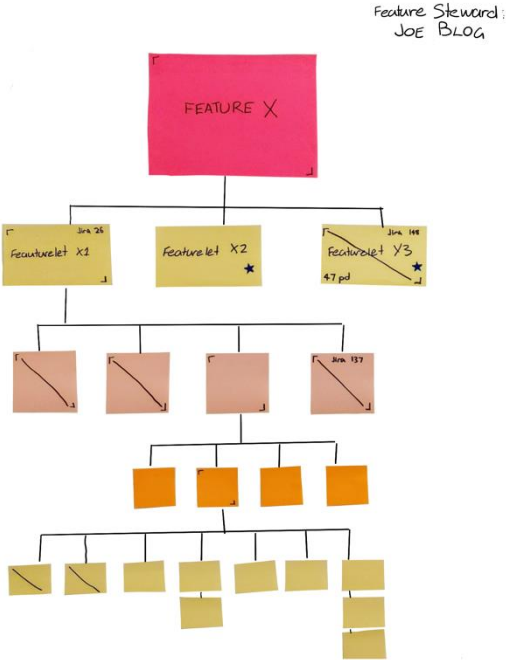
Feature Steward:
JOE BLOG

Figure 3: Discovery Tree
Showing nodes started, not started, and finished

Whenever work starts on a high-level item, create a Discovery Tree.

A Discovery Tree represents the complexity of work while giving context to work items.

Break down work to understand, discover, or plan. But only just enough and just in time. As work recursively gets broken down from a high-level item into smaller subcomponents, a structure of branch and leaf nodes reveals itself. The tree will accordion as discoveries and progress are made and nodes resolved.

The current progress toward node completion is evident by the ratio of nodes started, not started, or completed (or removing completed nodes from the tree).

"It's in the doing of the work that we discover the work we must do."
Woody Zuill

A Note on Linear Work in FAST

A linear track of work on the Product Map should use linear representation methods, e.g., a Kanban board for support tickets. A FAST Collective can work on linear and nonlinear work tracks simultaneously.

Marketplace

The Marketplace visually represents a marketplace of work for a Value Cycle. The board shows what is happening in the current Value Cycle and who is on which team. (The FAST Marketplace Board borrows from Open Space's Bulletin Board[6].)

Each column on the Marketplace Board might represent a physical collaboration area. To constrain work in progress (WIP), limit the number of places available in the Marketplace. On the board, this might mean restricting or removing columns.

The Collective Agreements – How We Self-manage

The Collective Agreements is a living document that describes the rules and mechanics of self-management within the Collective. Collective Agreements create and protect harmony and psychological safety. The Agreements capture how we want to be when together and how we want to treat and be treated by one another. At a minimum, it should include:

- How do we make decisions?
- How do we resolve conflict?
- How do we change the Collective's Agreements?
- Where do we keep the Agreements?

Take caution not to go down the bureaucracy rabbit hole. Keep it light.

FAST Meeting

There is one meeting in FAST - the FAST Meeting. The FAST Product Manager typically facilitates the FAST Meeting, where the current Value Cycle is declared closed, and the next started.

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[6] The Bulletin Board is sometimes called an Agenda Wall at an Open Space Conference.

FAST Meeting goals:

- Collective Consciousness - The Collective stays in sync with product development.
- Dynamic Assembly - Emergence of teams around work.
- Shared Vision – A worthy purpose to rally around, communicated often.
- Empowered Execution – Team autonomy in the execution of work.

FAST Meeting phases:

Phase 1. Closing the current Value Cycle - Collective synchronisation via show & tell.
Phase 2. Starting the next Value Cycle - Reiterate purpose and vision, set direction.
Phase 3. Self-organising into teams around work - Create and open the Marketplace.

Phase 1: Closing the Current Value Cycle

- Collective Synchronisation via Show and Tell

A representative from each team briefly summarises their team's work in the last Value Cycle, highlighting value delivered and discoveries made. Show and tell may include brief, concise demonstrations if helpful.

Once all teams have completed their show and tell, the Value Cycle is closed. Clear the Marketplace Board in readiness to repopulate again in the next Value Cycle.

Phase 2: Starting the Next Value Cycle

- Reiterate Vision and Set Direction

Each FAST Meeting is an opportunity for the Product Manager to align, rally, and reinspire the Collective by reiterating the product vision, mission(s), and purpose. In addition, the Product Manager may choose to set priorities or direction for the Value Cycle. The Product Map can be a useful visual aid for this, and why having it on permanent display in the forum is recommended. (See Office Layout section re forum.)

Phase 3: Emerging Work & Self-selecting into Teams

- Create and Open the Marketplace

The idea for a marketplace of work comes directly from Open Space Technology and is the underlying process for facilitating self-organisation and *Dynamic Reteaming* [Helfand] in FAST. Any Member can stand up in front of the Collective and declare their intent to steward a goal. The goal may be related to priorities just announced. Or not. For example, a team may decide to do refactoring or architectural work. FAST is a high-trust environment. The FAST Principle of *Do the Right Thing* should always be one's initial assumption.

Once volunteers have stopped coming forward to steward work or the WIP limit has been reached, the Marketplace is declared open. Collective Members then self-select into whichever team they feel they can contribute the most value to, or learn and grow the most from. Members go to the Marketplace Board and put their names into the slot associated with the goal they are interested in working on for that cycle.

Teams might be a component, feature, discovery team, or other, dependent on the work. Teams have the autonomy to do whatever they feel is the best and right thing needed to add value. It can sometimes make sense for parallel workstreams (probes) on the same challenge. For research and innovation, this is particularly true.

Adjust if Needed

Adjustments are unlikely and unusual, but they would happen now if needed. If the Product Manager perceives incongruence with current priorities or a veering away from vision or mission, they may suggest changes to team makeup or work items selected. Use adjustments rarely and cautiously in a self-managed system such as FAST.

Announcements (Optional)

The Collective being gathered is an opportunity to make announcements. Announcements may be unrelated to work in the Value Cycle but are still relevant to the Collective.

FAST Meeting is Over: Starting Work

- Resolve Dependencies, Architect, Design, Plan, and Collaborate

The dynamically formed teams now go to their chosen development area and plan. Each team tasks out their work and agrees on how they will collaborate. Should a team identify that they are likely to clash with another team or have dependencies, they meet with the other team(s) and discuss. To resolve dependencies or clashes, they might:

- Merge.
- Pick up some other work.
- Have a design discussion, then plan if and how to divide labour.

Resolving dependencies this way can happen at any point in the cycle.

The best architectures, requirements, experiments, and designs
emerge from self-organising teams.

FAST Cadence and Flow

FAST is a flow system that uses cadence to:

- Synchronise the Collective to a shared understanding (via show and tell).
- The pause between cycles is a sensing point to adjust teams, or work items should a better fit make sense. What was discovered in the last cycle? Has our understanding of the work or customer changed? Did any metrics change? Etc.
- Revisit the purpose and vision of the product and company. Repetition, repetition…

Cycles are not time boxes. Sign-off can happen at any point. Therefore, continuous delivery/deployment is a compatible natural fit and highly recommended for FAST.

FAST is a facilitation process for dynamically assembling teams
around emerging work.

Small, Large, & Enterprise Scale FAST

FAST is a method that works small scale, large scale, and everything in between. It is the same process throughout, with only a few minor differences.

Note - A Collective is typically responsible for only one product or value stream in its entirety, but multiple products for a Collective is feasible. In the case of multiple products, the Product Manager can be singular or plural.

Small-scale FAST – Fewer Than 14 People

Use small-scale FAST when a Team has (roughly) fewer than fourteen people. Small-scale FAST can replace/supersede Scrum[7].

In small-scale FAST, the collaboration units that a Collective break into are smaller than in large-scale FAST. The smallest collaboration unit in small-scale FAST is two people, and pair programming is recommended when two. Mob Programming [Pearl] works well for collaboration units larger than two people.

Large-scale FAST – 14 to 200 People

Large-scale FAST is for a Collective of around fourteen or more people. Collaboration units are typical agile software team sizes, e.g. 3-13 people.

Once a Collective grows too far past Dunbar's number (150), split and spin off a new Collective.

A FAST Portfolio describes multiple Collectives. Working in this mode, FAST Product Managers meet for portfolio discussions.

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[7] *What Comes After Scrum?* by Ken Schwaber.
https://kenschwaber.wordpress.com/2012/10/05/what-comes-after-scrum/

FAST in the Enterprise

John P. Kotter describes in his book *Accelerate: Building Strategic Agility for a Faster-Moving World* how an enterprise can operate under a dual system, where both traditional and non-traditional portions of a company coexist. The reasoning and applicability of his ideas are a perfect match for deploying FAST inside a traditional enterprise.

FAST can integrate with other enterprise methods such as BOSSA nova [Eckstein, et al.], FLEX, and SAFe.

FAST Prerequisites and Considerations

Co-location, or Not

The most effective and efficient method of conveying and receiving information is via face-to-face conversation.

A co-located Open Space Conference was the original inspiration behind FAST. During the COVID-19 pandemic, the only option for Open Space Conferences was to host virtually/online. The technology worked, and patterns for distributed online Open Space were proven. These patterns and technologies promise that FAST can also work in a distributed system when co-location is impossible.

People interactions are always richer and less prone to signal decay when done face to face. Therefore, to improve Collective performance through higher quality communication, and increase innovation from serendipity, co-locate if possible.

Office Layout

An ideal office layout for FAST would be a large central forum to facilitate the FAST Meeting and team collaboration areas coming off, or nearby.

Hiring, Onboarding, and Offboarding

A FAST Collective needs a critical mass of self-directed collaborators. Therefore, hiring and onboarding strategies need consideration for getting the right people. Similarly, offboarding strategies for those not suited for this way of working[8]. Also, try to identify people capable of collaborative high performance and committed to continuous learning.

Collaborators: In the book *Tribal Leadership* [Logan, et al.], the authors describe a tribe only emerging once there is a critical mass of collaborators (Tribal Leadership Stage 4). Collaborators are more interested in winning as a collective than as individuals.

Self-directed: Self-organisation requires a critical mass of the Collective to be self-directed.

High-Performance: Google's Project Aristotle[9] revealed the characteristics of high-performance teams. Two traits found in the study of high-performance teams were that individuals spent equal time talking and had higher-than-average social sensibilities.

Continuous Learning: Look for individuals who commit to continually improving themselves and striving for mastery of their craft.

Organisational Support and Slack

Focus on providing the environment, workspace, and tools to help the Collective perform at a high level. This is mostly a matter of protecting the Collective's autonomy and staying out of the way for emergence and self-organisation to occur spontaneously. Governance should follow Douglas McGregor's Theory Y [McGregor]. Consider how to build slack into the system [DeMarco].

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[8] Some Can Handle Self-Management. Some Can't. Here's Why
https://corporate-rebels.com/from-static-to-dynamic-relationships-and-its-traps/

[9] https://www.nytimes.com/2016/02/28/magazine/what-google-learned-from-its-quest-to-build-the-perfect-team.html

Diversity

While the Collective needs to be cohesive, it should not be homogenous. Diversity of thought is important for innovation. The Collective may sometimes run parallel experiments against the same hypothesis because of diverse views. Parallel experimentation is recommended for complex challenges.

FAST and Self-management (Teal)

FAST can intentionally be used as part of a Teal transformation [Laloux], work seamlessly with a current Teal structure, or work outside Teal altogether. It is up to each organisation to determine constraints, self-management, and self-direction levels for a Collective. Documenting these boundaries in the Collective Agreements is an option.

FAST Forecasting - Wisdom of Crowds

Traditional estimation methods were designed for complicated linear systems, i.e., reductionist and deterministic. In contrast, complex systems are nonlinear, i.e., non-deterministic and non-reductionist. Therefore, attempting to use traditional methods for breaking down and estimating complex problems is a mismatch and burdensome on developers and a waste of time.

FAST recommends using *The Wisdom of Crowds* [Surowiecki] for forecasting complex work. Wisdom of Crowds estimation is a quick, simple, and lightweight process. Ask everyone in the Collective for their guess and average them. Whilst Wisdom of Crowds is the recommended forecasting method in FAST when there is a genuine estimation need, it is not currently a formal part of FAST.

FAST Forecasting happens during the FAST meeting between phases 2 and 3.

Note - If a value stream in the Product Map is not complex, Kanban and throughput can be used to manage and forecast that stream of work independently.

Continuous Improvement & Excellence

Reflect and Adjust

FAST is not prescriptive on methods for implementing the principle of reflect and tune. Each Collective should experiment and discover what works best. Some ideas and options:

- Form a FAST Guild that meets on cadence to reflect and tune.
- Host regular Open Space Events for the Collective with the theme Reflect and Tune.
- Add a *Turn Up the Good* section to the FAST Meeting.

At regular intervals, reflect on how to become more effective,
then tune and adjust behaviour.

Personal Mastery

Personal mastery is continuous improvement at the individual level. FAST fulfils two of the three internal/intrinsic motivators Daniel Pink addresses in his book *Drive* [Pink] - Purpose and Autonomy. However, do not ignore the third motivator - Mastery. Find ways to invest in and support every member's mastery of their craft. Some examples: guilds, communities of practice, daily learning hours, training, conference budget, meetups, research time, kata time, book club, and book budget.

Technical Excellence

A Collective **must** find ways to address the agile principle of technical excellence.

Continuous attention to technical excellence and clean code enhances agility.

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*Self-organising systems demonstrate the ability of all life
to organise into systems of relationships that increase capacity.*

Margaret Wheatley