Agile Foundations

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What is Agile?

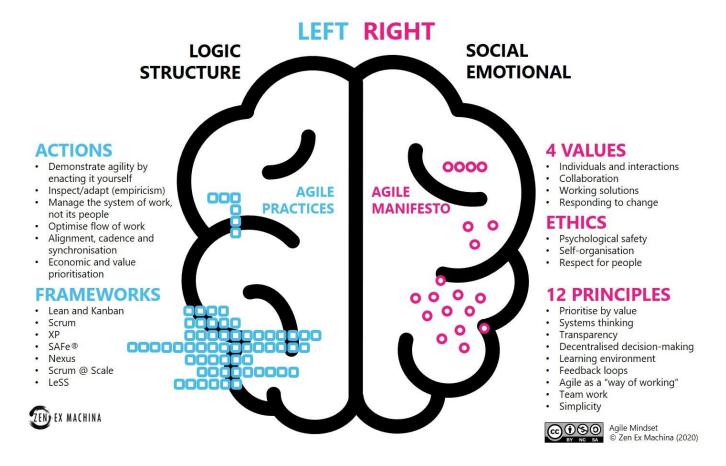
Methodology vs. Mindset

Agile is not a thing you do; it is a thing you are.

(Hodgson, 2020)

AGILE MINDSET

"DOING" AND "BEING" AGILE



What Does it Look Like?



- Openly sharing information so people are informed
- Communicating "why" (not just the "what")
- Sharing goals, mistakes, and ways we are trying to improve
- Seeking opportunities to communicate with other areas
- Tracking our work visually
- Giving an update at Stand-Up
- Giving honest and constructive feedback
- Being open when someone asks us a difficult question
- Promoting alignment to the company's goals
- Giving context when others in the room might not have it.

Does Not Look Like

- Withholding valuable information
- Engaging in "the meeting after the meeting" behavior,
- Tattling to/on our boss before having a Crucial Conversation
- Only getting information from limited sources
- Taking feedback poorly
- Not asking for more information
- Making assumptions
- Hiding our intentions
- Not making communication a 2-way street
- Filling in the "gaps of unknown" with a story



Looks Like

- Asking questions until we understand
- Over-communicating important concepts
- Seeking facts
- Actively striving for things like mutual purpose, mutual understanding, and message alignment
- Understanding our team's Vision, Value,
- Using a picture or diagram to describe complex, difficult to understand concepts
- Defining acceptance criteria in requests we make
- Asking additional questions when you sense someone else may not have clarity

Does Not Look Like

- Leaving a meeting without knowing if we have an action item
- Fostering stories, not seeking facts or root cause
- Not having a clear agenda or holding a meeting without a purpose/planned outcome
- Not documenting and communicating outcomes and decisions
- Not having the right people in the room
- Not defining or agreeing on the problem we are trying to solve
- Not having a clear owner for: an issue, process, project, etc.



- Having a mindset of "we are in this together"
- Identifying an issue and proactively try to resolve it
- Looking for opportunities to perform our job better
- Allowing people closest to the work to take the lead on making decisions
- Asking questions like: "what would you recommend?" "What do you think?"

Does Not Look Like

- Waiting for the boss to ask us to do something when we know it needs to be done
- Dictating how to achieve something
- Micro-management, needing to control
- No tolerance for mistakes
- Hiding mistakes
- Failing to address problems because they are outside our area of responsibility

- Encouraging and allowing space for creative problem-solving
- Clearly expressing what Done looks like for "what" instead of "how"
- Having team brainstorming & decisionmaking sessions
- Not investigating suggestions for improvement
- Not involving impacted teams when improving processes "Command and Control"

Adaptability Looks Like

- Re-prioritizing a backlog
- Being open to try a new idea (even if you don't fully understand or agree)
- Viewing change as a healthy aspect of growth
- Asking questions like "What would you recommend?" or "How do you see it?"
- Ask: "Can we do it differently" and "how can we make this better?"
- Learn a new skill that your team needs
- Genuinely ask for feedback and tweak according to others' input
- Regularly look at processes and improve them

Does Not Look Like

- Resisting change
- Relying on the status quo "this is the way we've always done it"
- Having a mindset that things need to be done "my way"
- Digging in your heels
- Having a "That's not in my job description!" mindset
- Sticking to a plan just to stick to it

Portfolio Management

Overview

It is the activity to understand and identify the optimal mix of projects, products, services, and initiatives within the organization. The goal is to ensure that investments are well balanced, agile, effective, and linked to enterprise goals and overall strategy.

Project Gates provide process and structure for project requests in order to reduce risks and maximize value. Some of the things that teams, and Leadership assess include....

- Does it align with the corporate strategy?
- Do we understand what it is we are being asked to solve?
- Do we understand the solution and are we ready to execute on it?
- Have we accounted for all the known risks?
- How are we going to support it?
- Have we assessed the value of implementing the solution vs the investment?

Quarterly Release/Increment

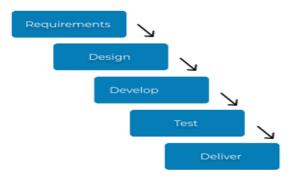
Purpose:

- Align the Project Portfolio to current Strategy to ensure we are focused on the right work
- Establish a common set of goals and priorities for all workforce to ensure we are change ready and able to adapt to changing business needs
- Plan within realistic people and financial constraints

Frameworks

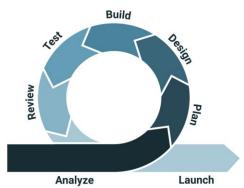
Waterfall

A framework where a project is mapped out into distinct, sequential phases, with new phase beginning only when the prior phase has been completed as each phase is completely dependent on the previous ones.



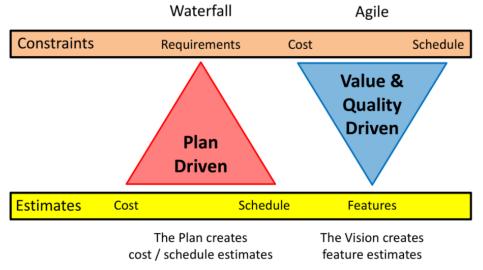
Agile

Agile is a set of methodologies centered round the idea of iterative development, where requirements and solutions evolve through collaboration between self-organizing crossfunctional teams. Scrum and Kanban are two of the most widely used Agile methodologies.



	Waterfall	VS.	Agile
্লি Work Assignment	Project management		Self-organizing team
Responsibilities	Delineated		Shared
Task Ownership	Separated		Shared all for one, one for all
Status Report	By Project Manager		Transparency, shared knowledge
Requirements	Defined up-front signed-off		High level, detailed in collaborations
Plans	Detailed plans upfront		Evolutionary planning
Changes	Not welcome		Allowed and expected

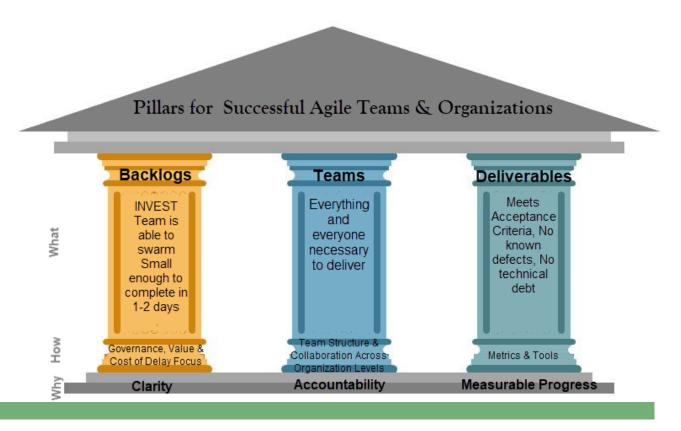
Shifting Focus: From Effort to Value



Sliger and Broderick: The Software Project Manager's Bridge to Agility

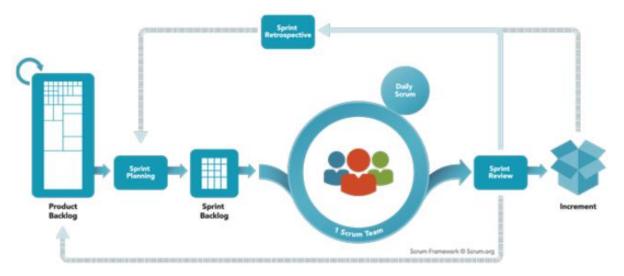
Shifting Focus: The Pillars for Success

The pillars of success for a team or organization in adopting Agile are Backlogs, Teams and Deliverables. The What for each pillar describes an ideal state with the intent of incrementally improving how we build backlogs, teams and deliverables to get as close to the described ideal state as is possible to attain (Cottmeyer, 2016).



Scrum

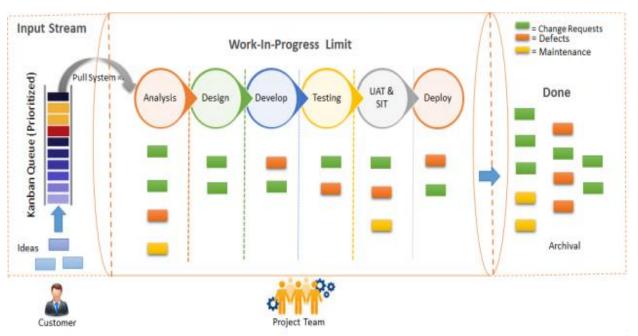
A methodology within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value. *Scrum* itself is a simple framework for effective team collaboration on complex products (What Is Scrum?, 2020).



Kanban

A visual system for managing work as it moves through a process. Kanban visualizes both the process (the workflow) and the actual work passing through that process

Goal of Kanban is to identify potential bottlenecks in the process and fix them so work can flow through it cost-effectively at an optimal speed or throughput (Karuna, 2015).



Scrum vs. Kanban

	Scrum	Kanban
Ceremonies	Daily stand-up, sprint planning, sprint review, sprint retrospective	, , ,,
Iterations	Yes (sprints)	Continuous flow
Estimation	Yes (points)	Flexible
Teams	Usually cross-functional	Can be specialized
Roles	Product owner, scrum- master, Team	Team + Needed roles
Work In Progress	Controlled by sprint content	Controlled by workflow state

Agile Events Stand Up/Daily Scrum

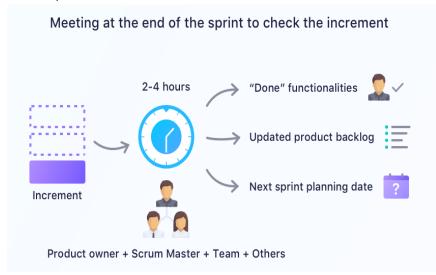


Successful daily stand ups improve a team's

- Communication
- Identify issues and impediments
- Builds a sense of camaraderie

Team members have the opportunity to speak to each other. The purpose is to keep people focused on what they have done, will do and if they have any roadblocks.

Review/Demo



The purpose....

- Provide Stakeholders a demonstration of finished work
- Inspect and adapt the Product Backlog if needed
- Discuss any planned work not completed during the sprint or by the target date, why and the impact(s) to the Product Backlog.
- Provides a forum for Stakeholder feedback and visibility of the work planned for the Product Backlog
- Creates collaboration and transparency and leads to trust between team and Stakeholder.

Retrospective



Teams are provided the opportunity to look back and reflect on how they can improve in all things

- Behaviors
- Technical improvements
- Process improvements
- Anything to improve to become a High Performing team.

Ideas and team driven solutions that come from retrospectives are often catalysts for team change and can influence organizational change.

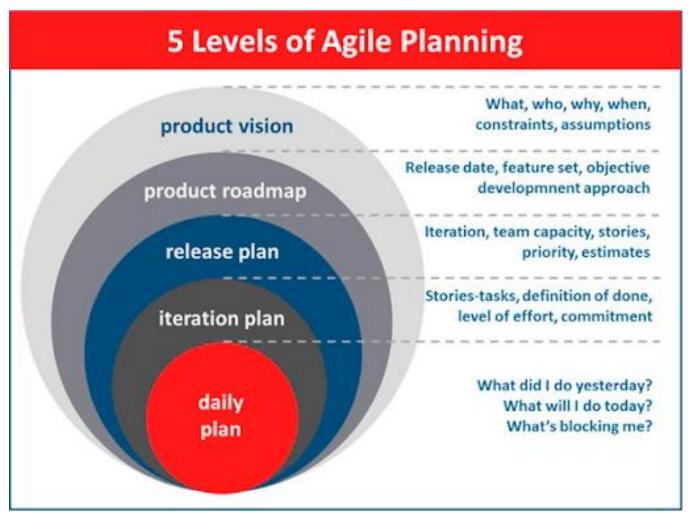
Planning

Project Planning in Agile

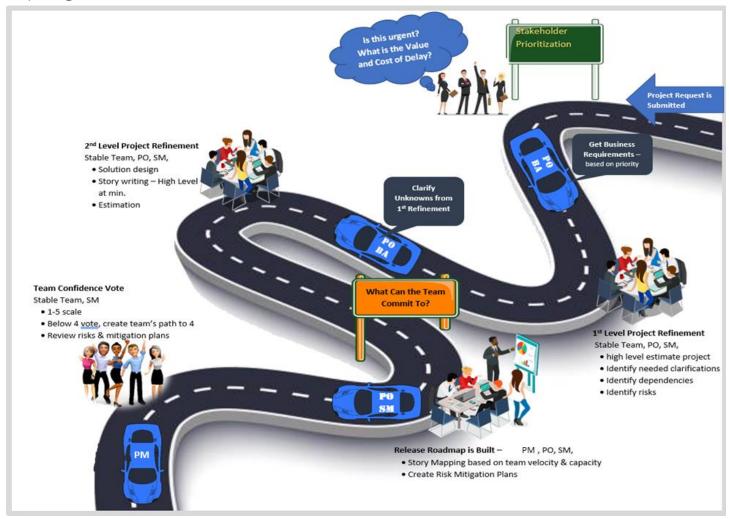
Agile project management is intended to be flexible enough to handle projects with potentially moving, changing and evolving requirements and agile enough to be able to provide the end customer with functional portions of the overall final solutions as needed (Lynn, n.d.).

Being focused on the successful utilization of Agile tools for story writing, estimation, backlog refinement and sprint planning, teams establish predictability in velocity. Having these strengths and predictability of what a team can commit to and deliver each sprint, allows the ability to build more accurate project plans.

(Services, 2011)



Preparing a Release Plan



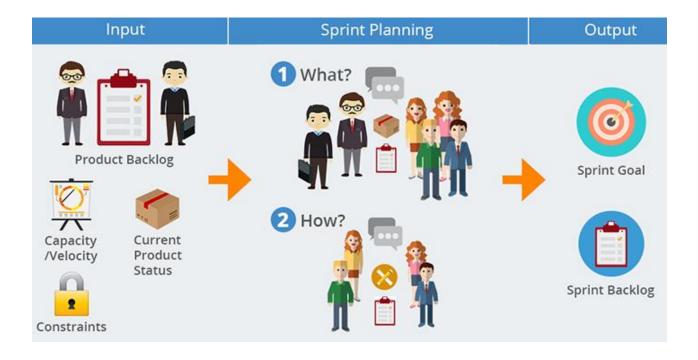
Progressive Elaboration

A process of collaboration that can be used to build a Release or Project Plan



Sprint Planning

With a prioritized backlog, Sprint Planning ensures the team is working on the right thing at the right time and over time, establishes a team's capacity of what they can deliver. One of the goals with working in iterations is for a team to become predictable in what they plan to deliver and what they do deliver during a sprint. This enables more accurate road maps and delivery of features, which builds trust and dependability between the team and their customers.

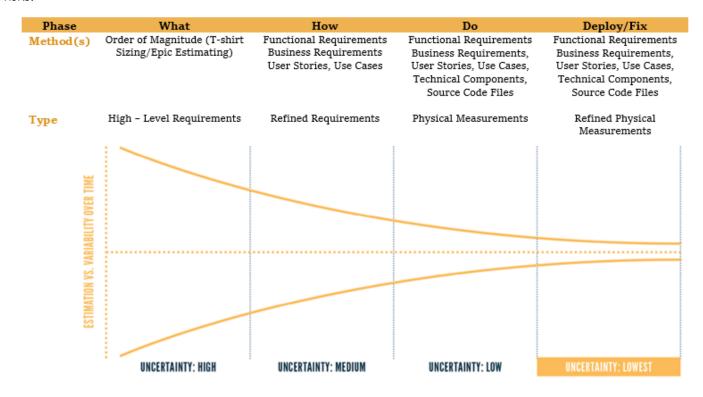


The Product Backlog Iceberg Sprint High Release Future Releases Future Releases Risk Knowledge

Work that is clearly defined creates a shared understanding of what needs to be done to solve the business ask. Discussions during a Backlog Refinement session will expose hidden complexity or cross team dependencies early. Discovering this during the sprint could affect the delivery or completion of the work and could result in a downward effect on future planned work.

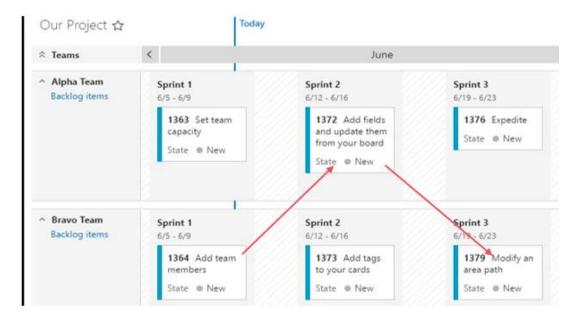
Cone of Uncertainty

With each project comes the cone of uncertainty as requirements are clarified and solutions are designed. From project ideation to stable teams taking in the work for execution is a practice of continuous collaboration and refinement of the solution(s) and feature deliveries. Below are some phases to enable collaboration to work through uncertainties, ambiguities, and risks.



Cross Team Dependencies

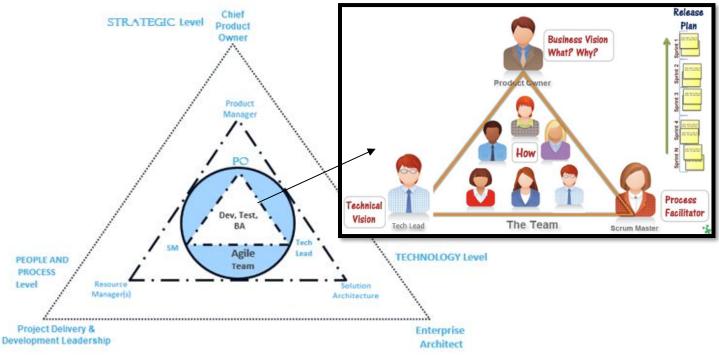
Once cross team dependencies are identified at a story level, a project board, either physical or electronic can be used to maintain dependency alignment across teams for larger efforts.



If the dependency on another team is smaller scale, there are options in most tools to tag the stories to create a visual of the stories that have dependencies on another team's work or is a dependency for another team's work. To maintain alignment, communication expectations between teams would need to be established.

Team Roles

Leadership Triangle Roles (Product Owner, Scrum Master, Tech Lead)



Product Manager

Provides:

- Long & short-term vision of the entire product line based on business strategy and priorities
- Clear product requirements that drive business value
- Prioritized feature roadmap
- Product portfolio vision aligning the product and service roadmaps
- Strategy for decommissioning products
- Customer voice
- Manage internal and external customer relationships and expectations
- Drive customer adoption, business value understanding, and organizational readiness
- Alignment with other teams to ensure collaboration and alignment
- Insight to the industry, trends in the industry, and the technology solution's position in the industry and market
- Alignment of the total cost-of-ownership for a product and/or sub-product with the roadmap vision and the vision of the entire portfolio

Product Owner

Provides:

- Vision & goals (sprint & release)
- Customer's voice
- Product functional direction & guidance
- Clear business requirements

- Prioritized backlog
- Identification and mitigation of risks

Scrum Master

Provides:

- Transparency
- Orchestration of the removal of impediments
- Protection from distractions
- Guidance to stay true to the Agile Manifesto and follow the Agile Principles
- Coaching
- Team empowerment

Technical Lead

Provides:

- Technical vision, direction & guidance
- Aligning work with Architecture best practices, standards, and approved technologies
- Enablement of XP Practices (as applicable to the team & associated work)
- Insight to prioritization and technical dependencies
- Awareness to what is no longer needed
- Visibility of technical debt items
- Mentoring

Team

Provides:

- Business and technical translation
- Process and data identification
- Customer's voice
- Clear business requirements
- High quality solutions
- Maintenance of a high-quality product
- Collaboration on acceptance criteria for each backlog item
- Creation of test cases from acceptance criteria
- Execution of test cases with verifiable results
- Completion of multiple levels of testing
- Identification of automation opportunities
- Design and create sound & effective technical solutions
- Insight to prioritization and dependencies
- Assurance that the acceptance criteria is met for each user story
- Demonstration of product functionality

Metrics

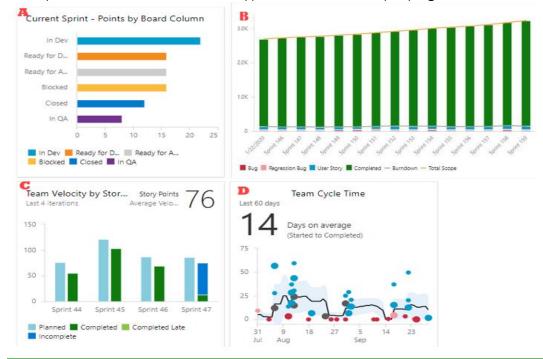
Size is estimated, velocity is measured, duration is derived, and cost is calculated. For information on types of estimation, refer to the Agile Playbook.

Why Metrics?

- To enable teams to see areas of improvement
 - Work item slicing & estimating (ie: not following the INVEST format, not accounting for all aspects of the process from development to testing to delivery, missing requirements, etc.)
 - Scope/requirement clarity
 - Missing skill sets on the team or being single threaded
- To be able to visualize the health of the work commitment (ie: project, sprint, release, etc.)
 - o Allows for early awareness of risks and impacts
 - o Enables early risk mitigation
- To enable teams to become predictable
 - o Allows for a more accurate target delivery of projects and milestones
 - Enables the ability to reflect on impacts if changes in scope or priority changes
 - "If we say yes to this, the impact to the roadmap is this...."
 - Strengthens Stakeholder relationships by being able to set expectations and meet them

Radiators

Examples of some of the various types of radiators displaying team metrics



High Performing Teams

Psychological Safety - S.A.F.E.T.Y. Model

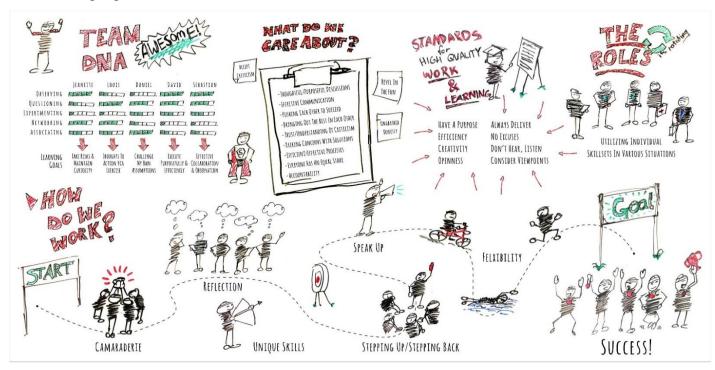
Psychological safety has been identified as a critical factor for effective work teams and maintaining it is an important factor for optimizing performance and well-being (Dan Radecki PHD, 2018, p. 22). When our psychological safety has been attacked, our response does not come from our logical brain, it mostly comes from our amygdala, which is where our fight or flight responses originate from. By becoming aware of our reactions when this happens, we can work to strengthen our Prefrontal Cortex (PFC) to manage the amygdala's automated biases and threat responses (Dan Radecki PHD, 2018, p. 31).



Team Norms & Working Agreements

With a Team Charter, you build a shared understanding of how your unique teammates will best work together - by outlining the essential elements of your team's communication and defining a set of concepts and skills that will focus and guide you. It's a roadmap you create at the beginning of the journey to make sure your team is clear about where they're heading, and to give direction when times get tough.

This document is independent from department or organizational Standard Operating Procedures. For more information regarding the Why, How and When of creating team norms and working agreements, see the document Team Norms Foundation.



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