An Introduction to Azure Boards

Azure Boards

Agenda

1. Project and Project Management

2. Project Management Methodologies

3. Scrum and it’s terminologies

4. Introduction to Azure Boards

5. Azure Boards Terminologies

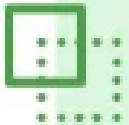
6. Hands on –Understanding Azure Boards

What is a Project?

A clear start and end date

A project has boundaries

A project creates something new

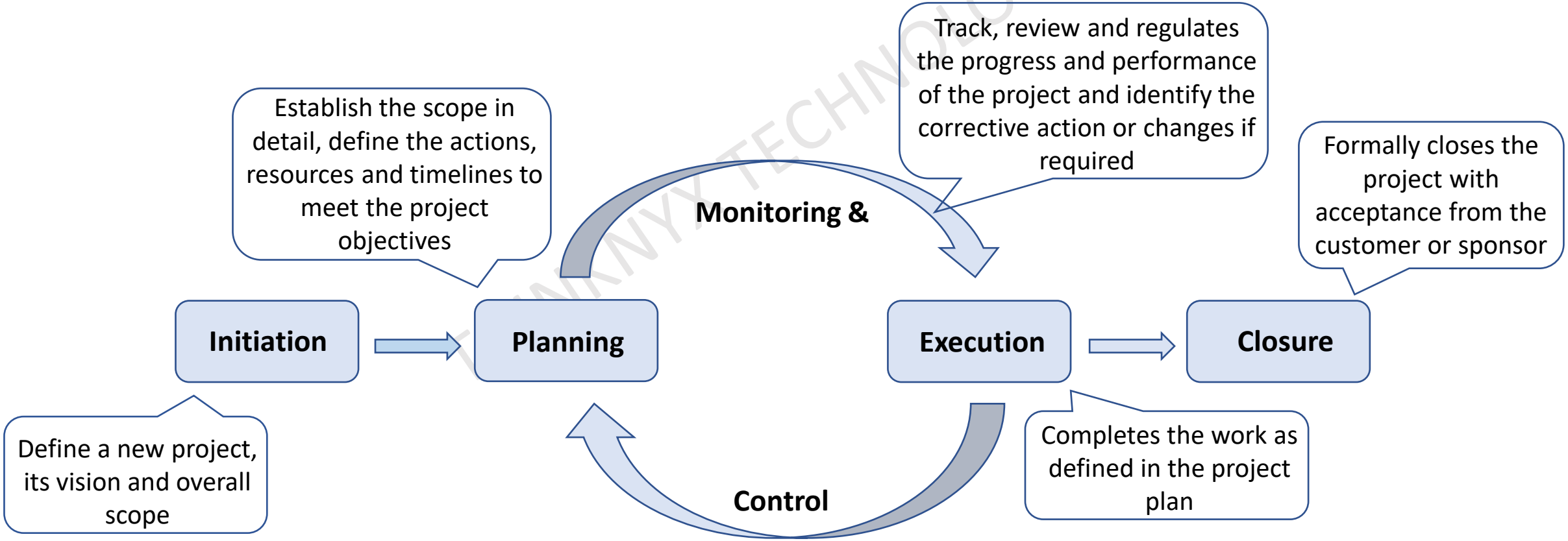


A project is not business as usual

Project Management & it's process?

It is a systematic process of managing project work

It a both, a science and an art



Agile Methodology

- People-focused, result-focused approach to software development
- Encourages change
- Flexible, fast and aims for continuous improvements in quality
- Increased customer satisfaction
- Eliminates the rework
- Combination of both Iterative and Incremental

Values of Agile Manifesto

Thought leaders in the software industry formalized the agile movement in 2001 with the publication of the manifesto for Agile Software Development.

Individuals and Interactions		*Processes and Tools*
Working Products		*Comprehensive Documentation*
Customer Collaboration	**Over**	*Contract Negotiation*
Responding to Change		*Following a Plan*

While there is value in the items on the right, we value the items on the left more

Principles of Agile Manifesto

The twelve principles behind the Agile Manifesto

- Our highest priority is to satisfy the customer through early and continuous delivery of valuable software
- Welcome changing requirement, even late in development. Agile processes harness change for the customer's competitive advantage
- Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale
- Business people and developers must work together daily throughout the project
- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done
- The most efficient and effective method of conveying information to and within a development team is face-to-face conversation

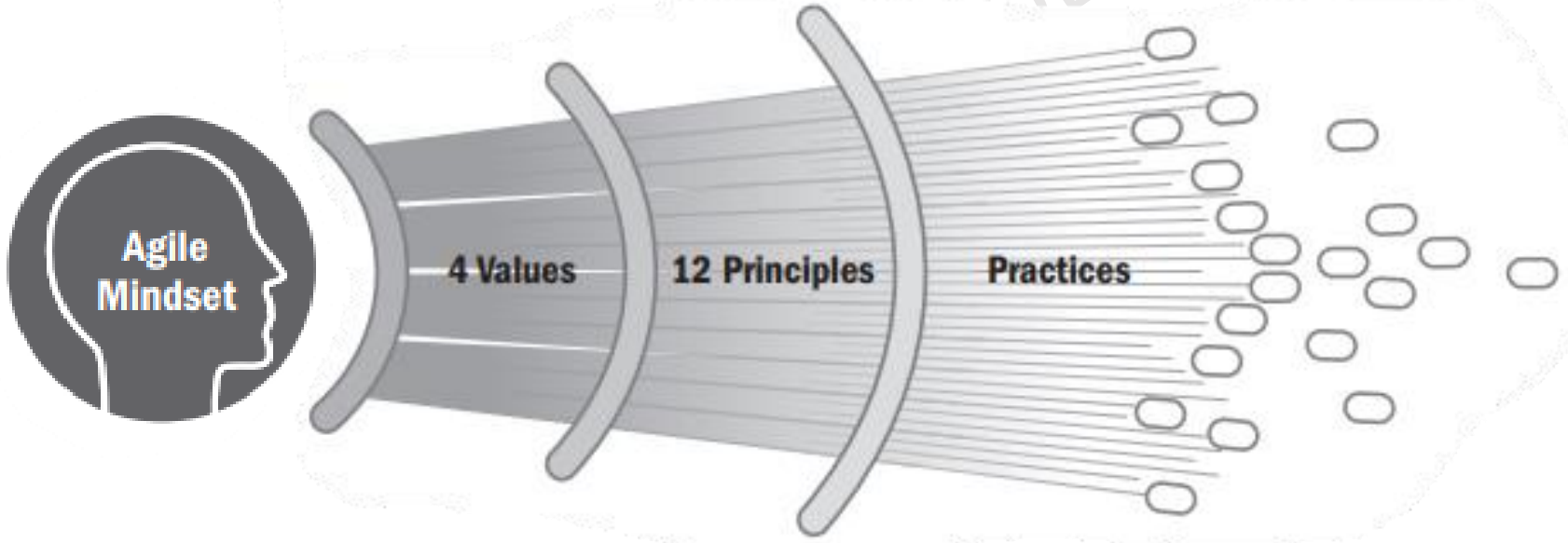
Principles of Agile Manifesto

Continued…….

- Working software is the primary measure of progress
- Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely
- Continuous attention to technical excellence and good design enhances agility
- Simplicity—the art of maximizing the amount of work not done—is essential
- The best architectures, requirements, and designs emerge from self-organizing teams
- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly

Agile – a Mindset

Agile is a mindset defined by values, guided by principles, and manifested through many different practices. Agile practitioners select practices based on their needs.



Scrum

Definition

- Lightweight framework that helps people, teams and organizations generate value through adaptive solutions for complex problems
- Requires a scrum master to foster an environment
- Employs an iterative, incremental approach to optimize predictability and to control risk
- Implement the pillars of Transparency, Inspection, and Adaptation

Values

- **Commitment** to achieve a common goal supporting each other
- **Focus** in the work of sprint to make the best possible progress towards these goals
- **Openness** about the work and the challenges
- **Respect** each other to be capable, independent people and are respected by people with whom they work
- **Courage** to do the right things, to work on tough problems

Scrum Roles

Product Owner

Responsible for the product success

Cares about the business needs and user goals

Own the product on the behalf of business owners

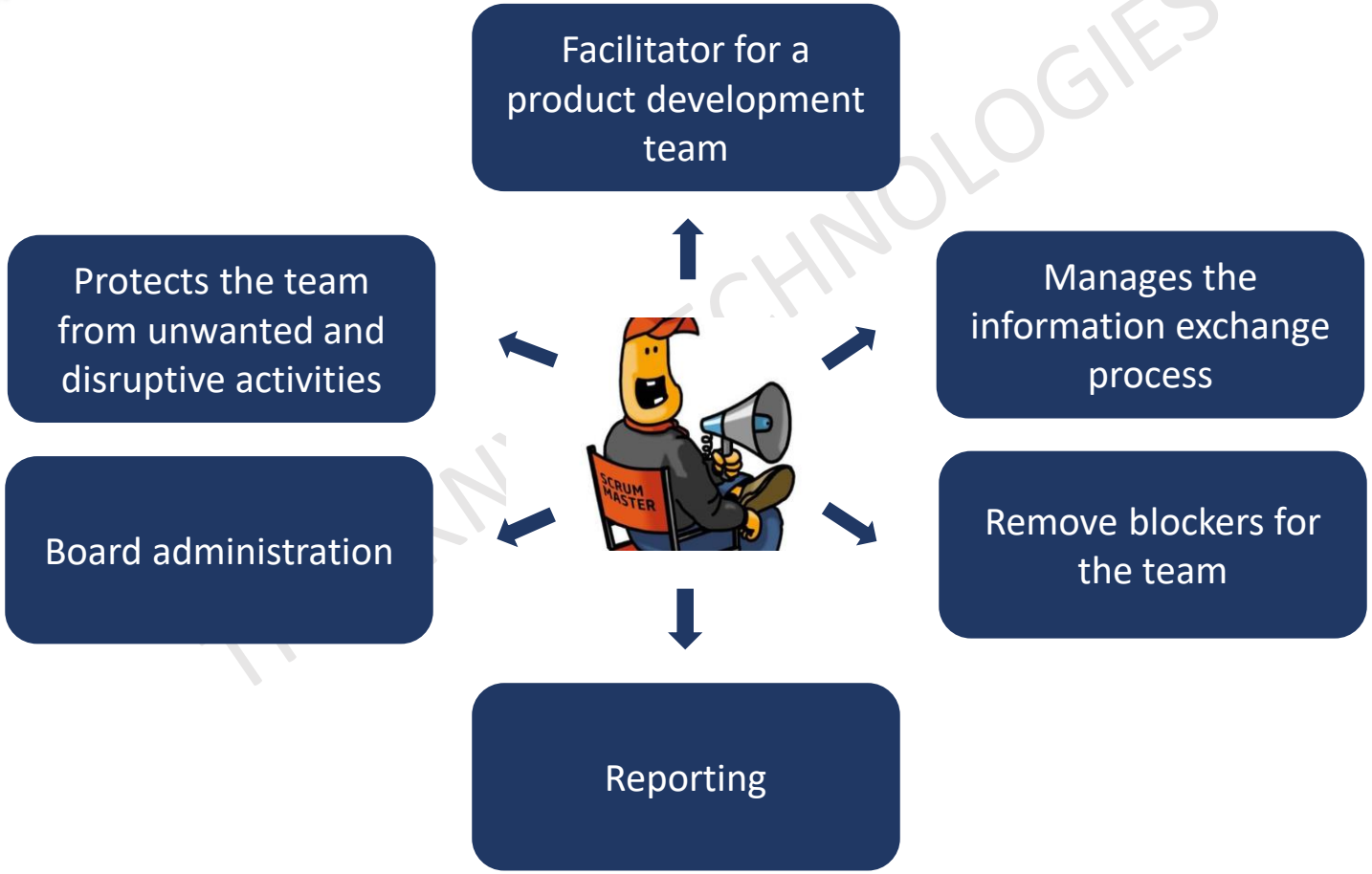
Good team player, collaborates with the development team and stakeholders

Maintain stakeholder's vision while developing the product

Guide the product in the correct direction

Scrum Roles

Scrum Master



Scrum Roles

Scrum Team

Typically consists of 10 or fewer people

Entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint

Cohesive unit of professionals focused on one objective at a time, the Product Goal

Self-managed, meaning they internally decide who does what, when, and how

Cross-functional, meaning the members have all the skills necessary to create value each Sprint

An agile Scrum Team adapts to changes as soon as possible to optimize the product value

Scrum Ceremony

The Sprint

Heartbeat of Scrum, where ideas are turned into value

Fixed length events of one month or less under which all the work will be done

New Sprint starts immediately after the conclusion of the previous Sprint

All the work necessary to achieve the product goal, happens within the Sprint

During the Sprint,

- No changes are made that would endanger the Sprint goal
- Quality does not decrease
- The Product Backlog is redefined as needed
- Scope may be clarified and renegotiated with the Product Owner as more is learned

Scrum Ceremony

Sprint Planning

An event in Scrum that kicks off the sprint, timeboxed for 8 hours in one month sprint

Purpose is to define what can be delivered in the sprint and how that work will be achieved

The resulting plan is created by the collaborative work of the entire Scrum Team

Why is this sprint valuable?
Product owner propose how the product could increase its value and utility in the current sprint.

What can be done in this sprint?
After the discussion with product owner, scrum team selects items from the product backlog to include in the current sprint.

How will the chosen work get done?
The development team plans the necessary work to deliver the sprint goal.

Scrum Ceremony

Daily Scrum

- 15 minutes event, everyone is engaged
- Purpose is to inspect progress towards the sprint goal, attention to problems, people asks for help
- Creates focus and improves self management
- Improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings
- Scrum master ensures that the meeting happens, but the developers are responsible for conducting the daily scrum.
- The meeting is the starting point for the day, afterwards everyone feels energized and can start working right away

Scrum Ceremony

Sprint Review

- Timeboxed to a maximum of four hours for a one-month sprint
- Second last event in the sprint
- Purpose is to demonstrate completed work and collect the feedback
- The Scrum Team presents the results of their work to key stakeholders and discuss the progress towards the Product Goal
- Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment. Based on this information, attendees collaborate on what to do next

Scrum Ceremony

Sprint Retrospective

- Timeboxed to a maximum of three hours for a one-month sprint
- The sprint retrospective concludes the sprint
- Purpose is to plan ways to increase quality and effectiveness
- The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved
- Identifies the most helpful changes to improve its effectiveness

Practices of Scrum

Epic → Features → User Stories → Sub-Tasks

Epic – High level business requirement. Can be broken down into smaller pieces of work.

Features – Small aspect of an Epic. Chunk of work which deliver specific capabilities or functionalities to end-user

User Stories – Small aspect of a Feature. General explanation of a feature written from an end-user's perspective.

Sub-Tasks – Smallest piece of work.

Scrum Artifacts

Sprint Backlog

- Set of items that a team selects from its product backlog to work during the upcoming sprint
- Real time picture of the work that has to be accomplished during the sprint in order to achieve the sprint goal

Product Backlog

- Prioritized list of all the functionalities that we need in the product
- Single source of work undertaken by the scrum team
- The most important items are shown at the top of the product backlog so the team knows what to deliver first

Terminologies of Scrum

Definition of Ready

- Used to determine whether work on a task is ready to be started
- Set of agreements that lets everyone know when something is ready to begin

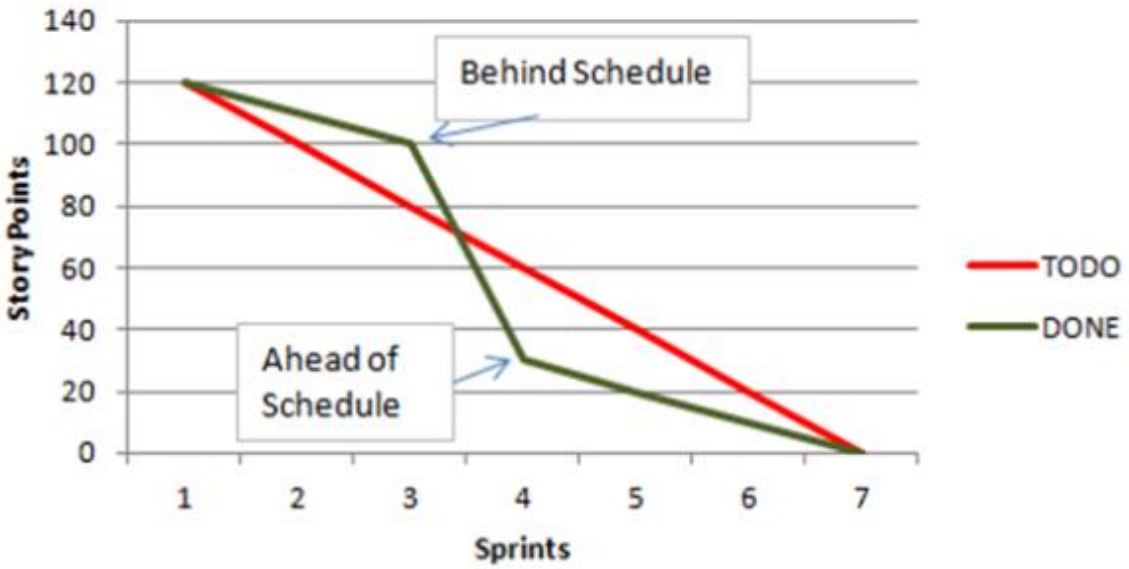
Definition of Done

- Creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment.
- If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review
- Instead, it returns to the Product Backlog for future consideration

Terminologies of Scrum

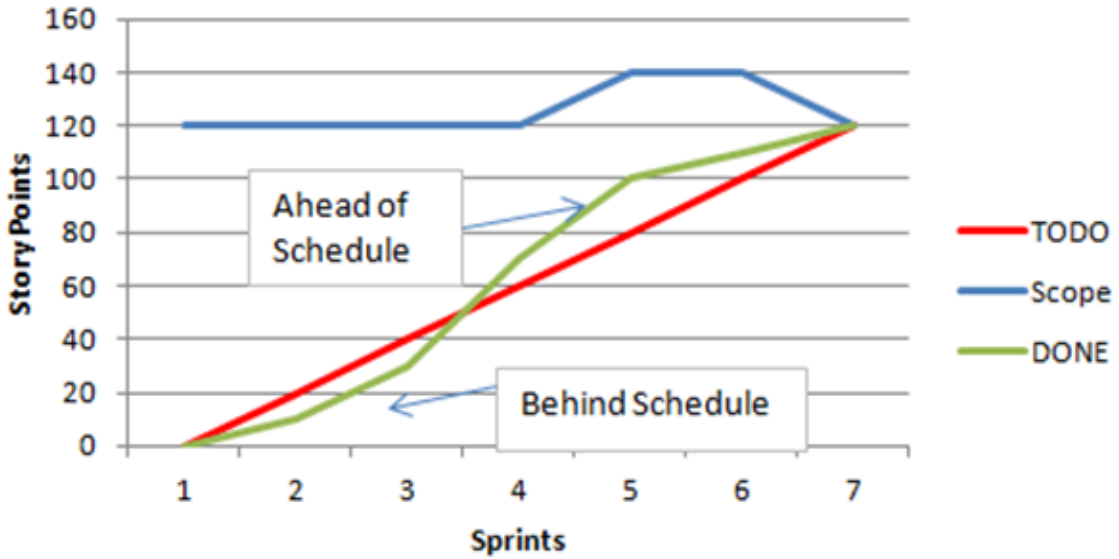
Burndown Chart

Shows the remaining amount of work in a project (remaining effort)

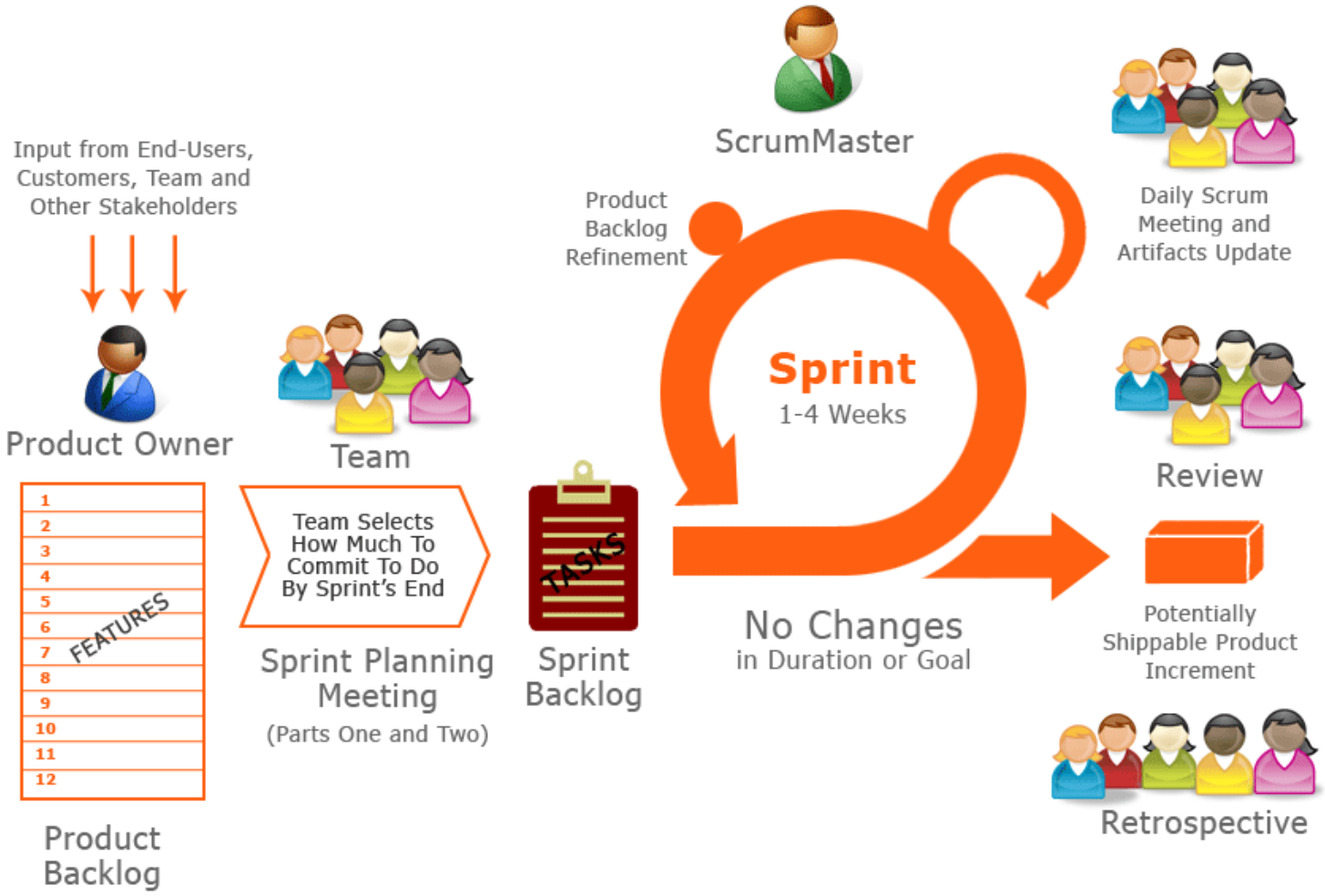


Burnup Chart

Shows how much work has been completed



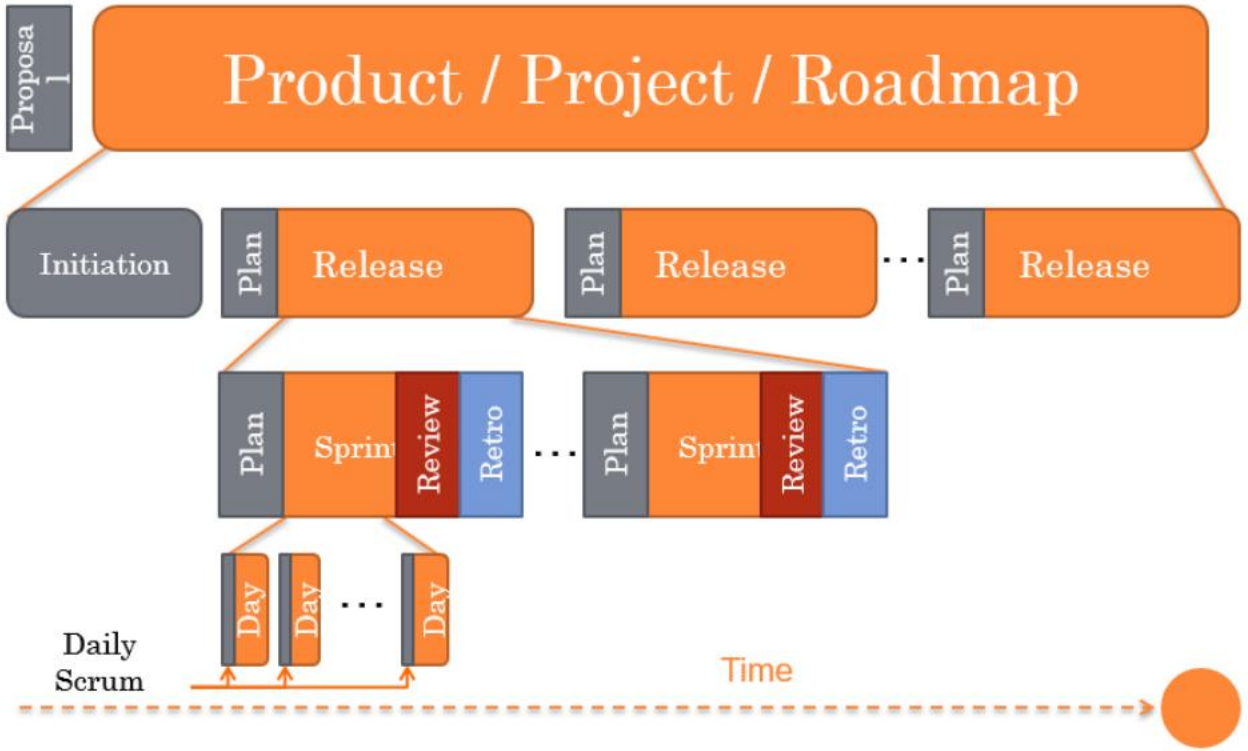
Agile Framework - Scrum

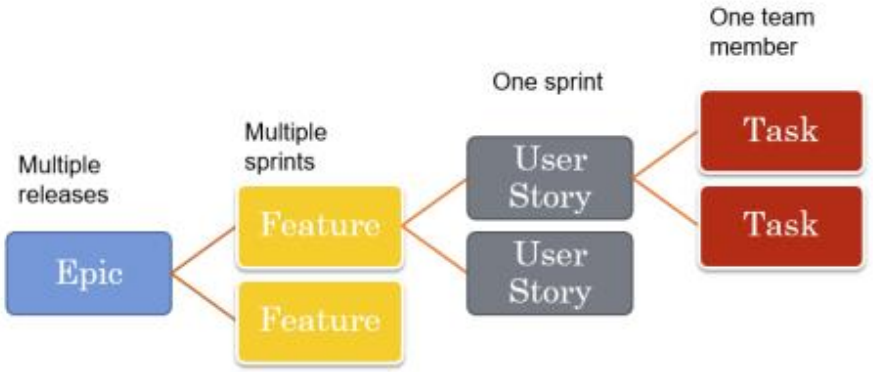


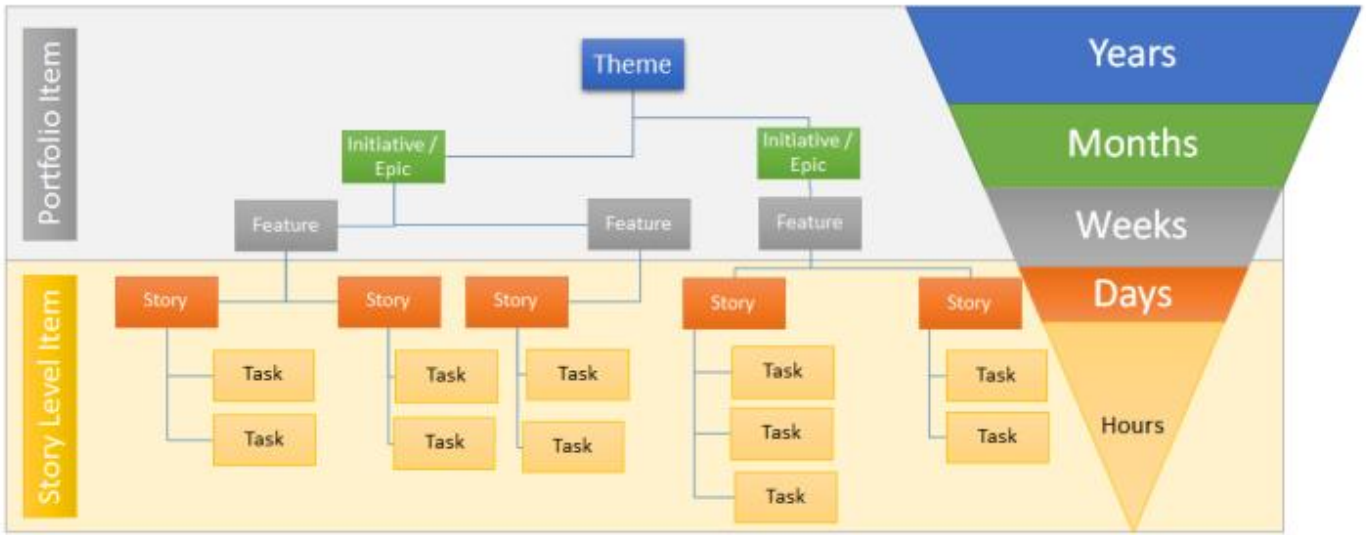
Project Management using Azure Boards

- ✓ Documenting requirements/tasks and bugs
- ✓ Monitoring progress and reporting

A Typical Scrum Lifecycle




Multiple releases
Epic
Multiple sprints
Feature
Feature
One sprint
User Story
User Story
One team member
Task
Task

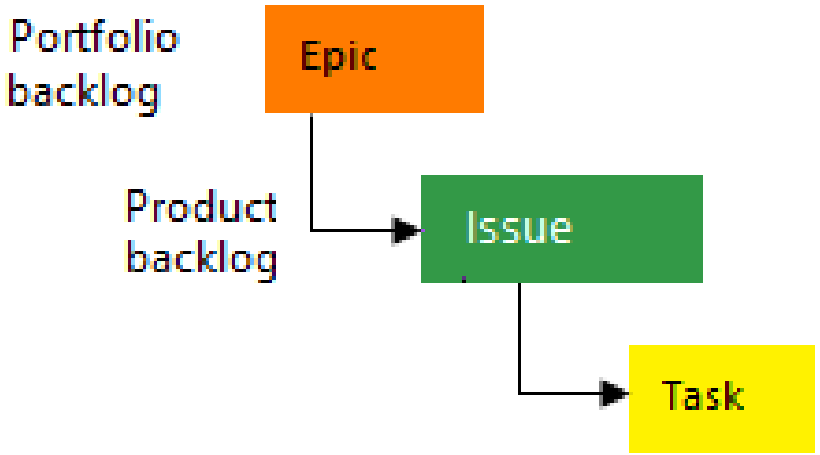

Portfolio Item
Story Level Item
Theme
Initiative / Epic
Initiative / Epic
Feature
Feature
Feature
Story
Story
Story
Story
Story
Task
Years
Months
Weeks
Days
Hours

Azure Process

- A process defines the building blocks of the work item tracking system and supports the Inheritance process model for Azure Boards
- Types of Processes in Azure DevOps
  - Basic
  - Agile
  - Scrum
  - CMMI

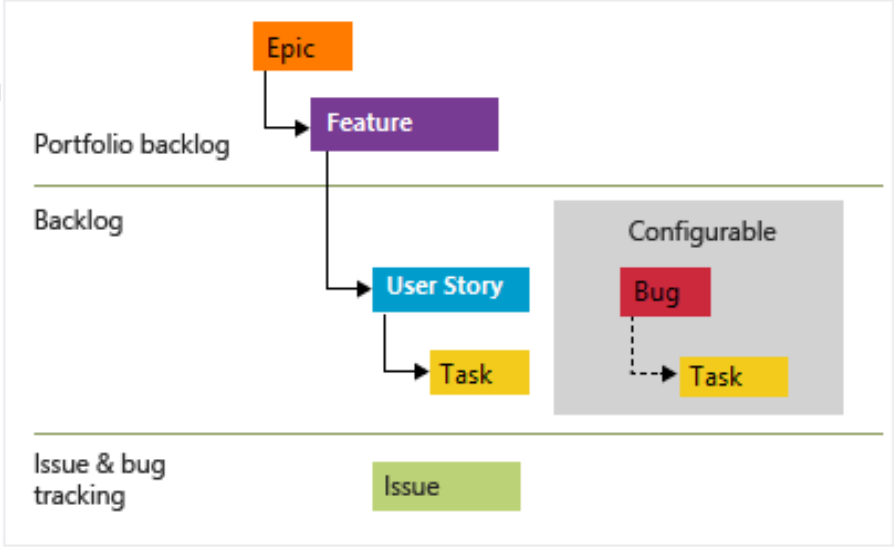
Azure Process - Basic

- Choose Basic when your team wants the simplest model that uses Issues. Tasks, and
- Epics to track work.
- Tasks support
- tracking Remaining Work.



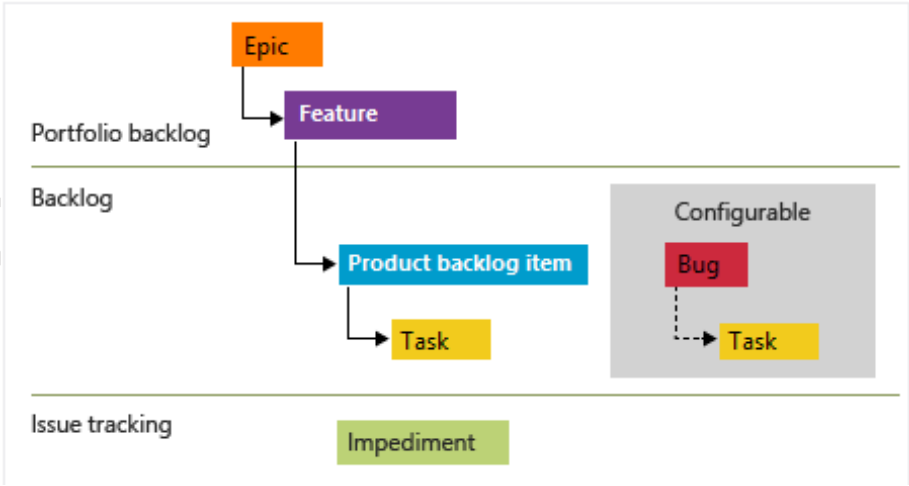
Azure Process - Agile

- Choose Agile when your team uses Agile planning methods, including Scrum, and tracks development and test activities separately.
- This process works great if you want to track user stories and (optionally) bugs on the Kanban board, or track bugs and tasks on the task board.
- Tasks support tracking Original Estimate, Remaining Work, and Completed Work.



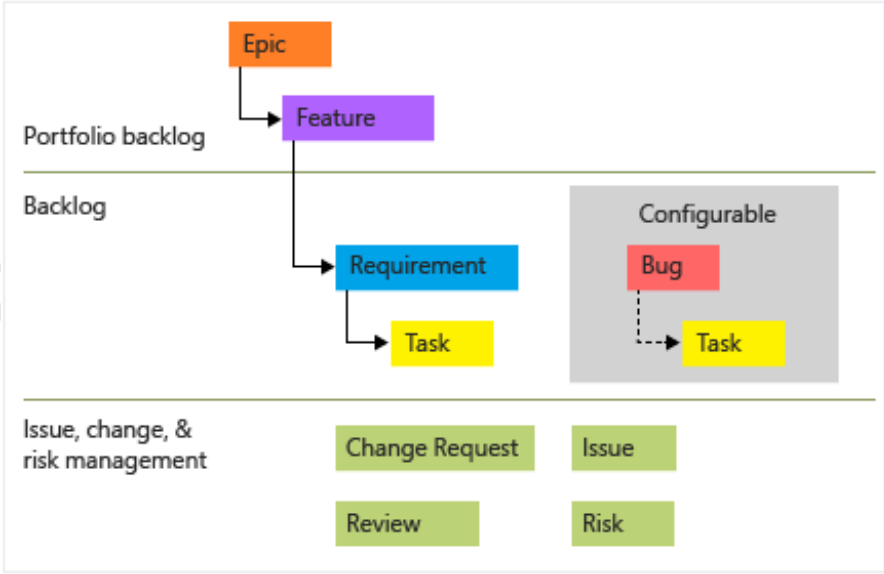
Azure Process - Scrum

- Choose Scrum when your team practices Scrum. This process works great if you want to track product
- backlog items (PBIs) and bugs on the Kanban board, or break down PBIs and bugs into tasks on the task board.
- Tasks support tracking remaining work only.



Azure Process - CMMI

- Choose CMMI when your team follows more formal project methods that require a framework for process improvement and an auditable record of decisions. With this process, you can track requirements, change requests, risks, and reviews.
- This process supports formal change management activities.
- Tasks support tracking Original Estimate, Remaining Work, and Completed Work.



Azure Boards – Work Items

- You use work items to track features and requirements you're developing, code defects or bugs, and issues or risks to your project.
- Each work item represents an object stored in the work item data store and is assigned a unique identifier within an organization or project collection. The available work item types depend on the process you used when creating your project

Work Items Types

Category	Work item type	Controls backlogs/boards
Epic	Epic	Epic portfolio backlogs and boards
Feature	Feature	Feature portfolio backlogs and boards
Requirement	User Story (Agile) Issue (Basic) Product Backlog Item (Scrum) Requirement (CMMI)	Product backlogs and boards and Sprints backlog
Task	Task	Sprint backlogs and Taskboards
Bug	Bug	Dependent on team configuration for tracking bugs

Work Item Fields

- Work item fields are used to track information. Fields are defined for an organization and shared across all projects defined for that organization. You can use one of two tools to review the fields defined for the organization. These tools are available for both Inherited and Hosted XML process models.

Azure Boards

- Azure DevOps Demo Generator

thank you!