

Glossary

Agile

An approach to software development following the principles of the [Agile Manifesto](#), valuing collaboration, iterative improvement, self-organizing cross-functional teams, and working software

Backlog

The list of work items for the team, sorted in the order they should be performed

Blameless Postmortem

- A description of the incident
- A description of the root cause
- How the incident was stabilized or fixed
- A timeline of events, including all actions taken to resolve the incident
- How the incident affected customers
- Remediations and corrective actions

Build, Measure, Learn

- Build – minimum viable product
- Measure – outcome and internal metrics
- Learn – about your problem and your solution
- Repeat – go deeper where it's needed

CALMS

Culture, automation, lean, measurement, sharing

Code Refactoring

Changing the structure of code, its factoring, without changing the external behavior of the code

Conway's Law

“Organizations which design systems... are constrained to produce designs which are copies of the communication structures of these organizations.”

—Melvin Conway

DevOps

“DevOps is the practice of operations and development engineers participating together through the entire service lifecycle, from design through the development process to production support. ... DevOps is also characterized by operations staff making use of many of the same techniques as developers for their systems work.”

—<https://theagileadmin.com/what-is-devops/>

Greenfield Project

A project that doesn't have constraints imposed on it by prior work

Iteration (aka Sprint)

A single time-boxed development cycle, at the end of which something of business value is produced

Jidoka (自動化)

Autonomation; intelligent or humanized automation

Just in Time (JIT)

Increasing efficiency and decreasing waste by receiving goods only as they are needed

Kaizen (改善)

Continuous improvement—change for the better

Kaizen's Guiding Principles

- Good processes bring good results.
- Go see for yourself to grasp the current situation (gemba)
- Speak with data and manage by facts
- Work as a team
- Kaizen is everybody's business

Kanban

A lean methodology characterized by visualizing work on boards and minimizing the amount of in-flight work at a time

Key Performance Indicators (KPIs)

Metrics used to determine how effectively you're meeting your objectives

Lean

Lean software development is a translation of lean manufacturing principles to the production of software, following seven principles:

- Eliminate waste
- Amplify learning
- Decide as late as possible
- Deliver as fast as possible
- Empower the team
- Build integrity in
- See the whole

The Seven Wastes of Lean Software (Muda)

1. Partially done work
2. Extra features
3. Relearning
4. Handoffs
5. Delays
6. Task switching
7. Defects

Minimum Viable Product (MVP)

An initial deliverable of a product with just enough features to engage early customers and start gathering feedback for future development

Muda (無駄)

“Waste” – Work that absorbs resources, but adds no value

Mura (斑)

“Unevenness” – Work coming in unevenly instead of a constant or regular flow

Muri (無理)

“Unreasonable” – Unreasonable work imposed on workers and machines

Nemawashi (根回し)

Informally and quietly laying the groundwork for a proposed change or project, by talking to the people concerned to gain their support

Persona

Definition of an archetypal user of a system

Pair Programming

A development practice where two developers work on the same code at the same time with one coding and one advising (if with more than two developers, “mob programming”)

Plan Do Check Act (PDCA)

- Plan: Identify your problems and come up with an approach
- Do: Try some solutions
- Check: Study the results
- Act: Implement the best solutions
- Repeat

Refactoring

Restructuring existing software code without changing its external behavior

Scrum

An agile methodology characterized by stand-ups, sprints, and a set of specific roles and ceremonies (meetings)

Scrum Master

The facilitator for a product development team that uses scrum, responsible for coaching the team on scrum practices

Service-Level Agreement (SLA)

An agreed level of service as measured by a specific metric

Stand-Up (or Scrum)

A short daily meeting the team uses to sync up with each other—standing is optional but ensures it goes quickly

Statistical Process Control (SPC)

Use of statistics to monitor and control process

Story Points

A method of estimating the implementation complexity of individual user stories

Theory of Constraints

A methodology for optimizing flow by identifying the limiting factor in a system, improving it until it is no longer the bottleneck, and repeating the process

The Three Ways

1. Systems thinking
2. Amplifying feedback loops
3. A culture of continuous experimentation and learning

User Story

A requirement written from the point of view of a user and the functionality they desire

Work in Progress (WIP)

How many pieces of work a person or team are working on in parallel, keeping WIP limits low creates efficiency

Working Agreement

A set of normative behaviors agreed upon by an agile team to represent how they intend to treat their work and each other