THE MOST WELLKNOWN
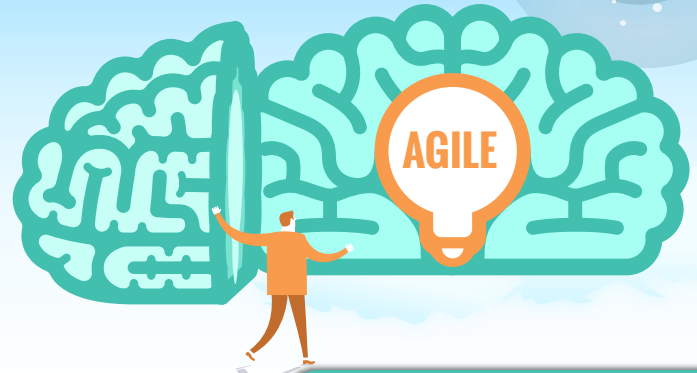
AGILE METHODS & APPROACHES

AGILE

ASD

(Adaptive Software Development)

Iterative development process (Highsmith, 2000)
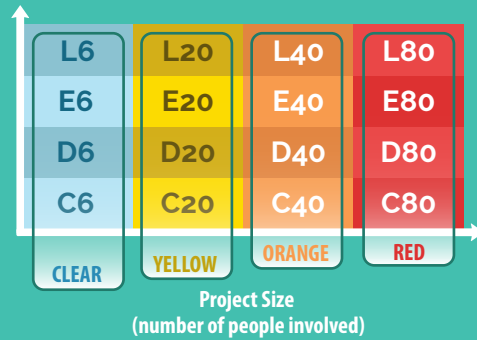
SPECULATE
Initiation and Planning

→ **COLLABORATE**
Concurrent feature development

→ **LEARN**
Quality Review

Crystal

Iterative development method (Cockburn, 2001)

Crticallity (defects cause loss of....)

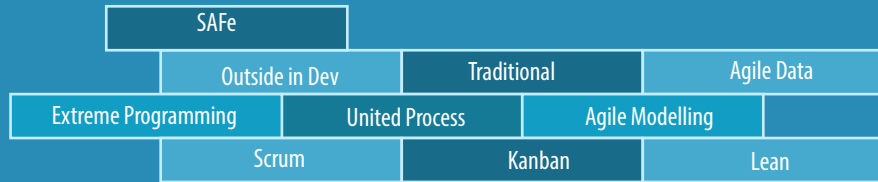|	CLEAR	YELLOW	ORANGE	RED
Life (L)	L6	L20	L40	L80
Essential Money (E)	E6	E20	E40	E80
Discretionary money (D)	D6	D20	D40	D80
Comfort (C)	C6	C20	C40	C80

Project Size (number of people involved)

DAD

(Disciplined Agile Delivery)

An enterprise-wide scalable process framework described as 'a process decision' framework that is a people-first. learning-oriented hybrid agile approach to IT solution delivery', that has 'a risk-value delivery lifescale, is goal-driven, is enterprise aware and is scalable.'
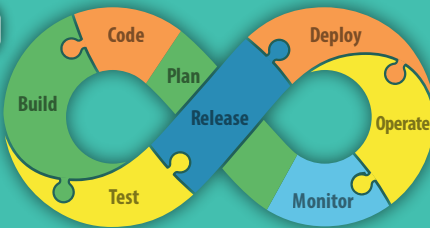
DAD is a hybrid framework

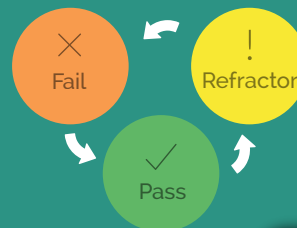| SAFe		
Outside in Dev	Traditional	Agile Data
Extreme Programming	United Process	Agile Modelling
Scrum	Kanban	Lean

DevOps

A collaborative approach between development and operations aimed at creating a product or service where the two types if work and even the teams merge as as much as possible.
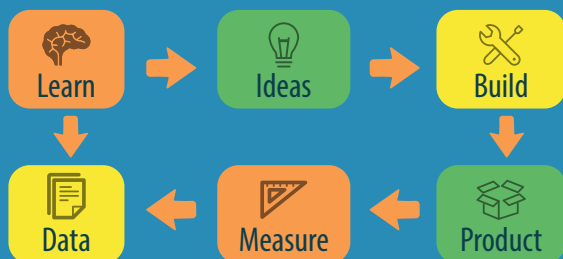
Plan · Code · Build · Test · Release · Deploy · Operate · Monitor

TDD

Test Driven Development

https://en.wikipedia.org/wiki/Test-driven_development
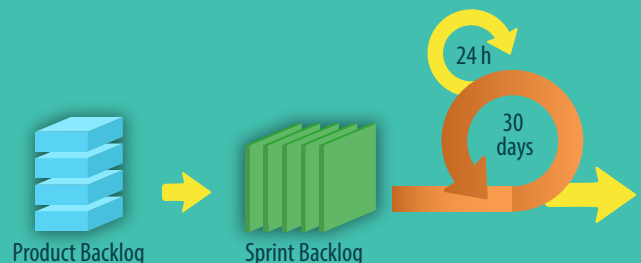
Fail · Refractor · Pass

Lean Startup

Originally an approach to creating and managing start-up companies, but now applied to any business, to help them del;iver products to customers quickly.

Learn → Ideas → Build → Product → Measure → Data

Scrum

An iterative timeboxed approach to product delivery that is described as 'framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.
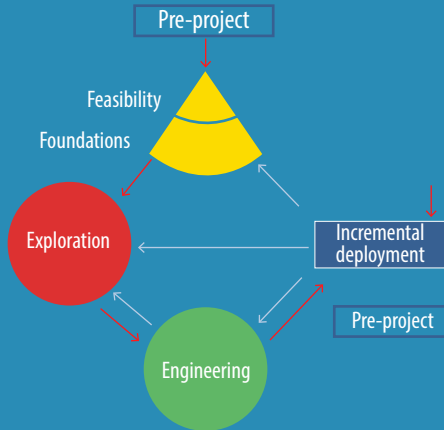
24 h

30 days

Product Backlog → Sprint Backlog

DSDM

(Dynamic Systems Development Method)/AgilePM

An agile project framework that focuses on the iterative delivery of business systems through the use of timeboxing and continual business involvement. It has a defined process and corresponding set of products, as set of roles that operate at all levels of a project, eight guiding principles and a collection of key technioques that can be used throughout project.
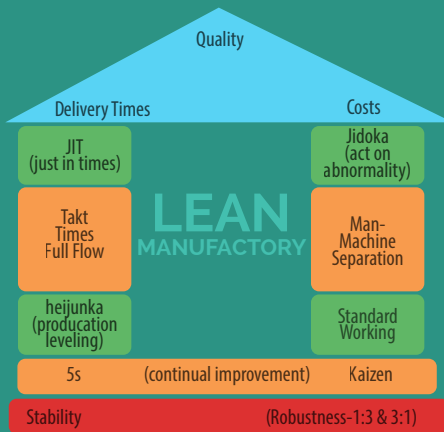
Project Phases in DSDM Atern

- Pre-project
- Feasibility
- Foundations
- Exploration
- Engineering
- Incremental deployment
- Pre-project

Kanban

A way to improve flow and provoke system improvement through visualization and controlling work in progress.

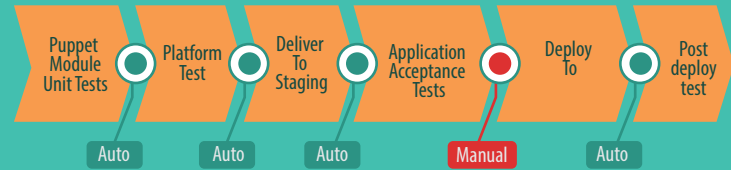| 6	3		5		3	5
Pending	Analysis		Development		Test	Deploy
	Doing	Done	Doing	Done		

Lean

An approach that focuses on improving processes by maximizing value through elimination waste (such as wasted time and effort)

LEAN MANUFACTORY

Quality

Delivery Times — Costs

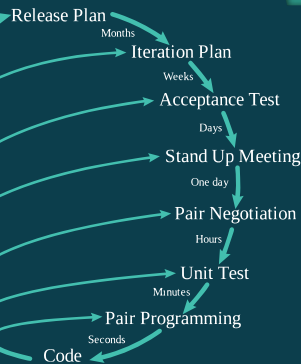| JIT (just in times) | Jidoka (act on abnormality) |
Takt Times Full Flow	Man-Machine Separation
heijunka (producation leveling)	Standard Working
5s	(continual improvement)	Kaizen
Stability	(Robustness-1:3 & 3:1)

Continuous Delivery (CD)

Continuous Delivery doesn't mean every change is deployed to production ASAP. It means every change is proven to be deployable at any time

https://en.wikipedia.org/wiki/Continuous_delivery

- Puppet Module Unit Tests — Auto
- Platform Test — Auto
- Deliver To Staging — Auto
- Application Acceptance Tests — Manual
- Deploy To — Auto
- Post deploy test

Planning/Feedback Loops

- Release Plan
  - Months
- Iteration Plan
  - Weeks
- Acceptance Test
  - Days
- Stand Up Meeting
  - One day
- Pair Negotiation
  - Hours
- Unit Test
  - Minutes
- Pair Programming
  - Seconds
- Code

XP

(eXtreme Programming)

Iterative software engineering pratice that can be used on its own but often exists in tandem with Scrum or Kanban, where XP covers the creation of the software and Scrum or Kanban is used as an overarching framework to control the work

SAFe

(Scaled Agile Framework)

Large-scale application of agile across across an organization. PRINCE2 and PRINCE2 Agile could be used in SAFe where a piece of work is of a sufficient size or level of difficulty that it should be run as a project.

AGILE

Holocracy
by Brian Robertson; 2007
http://www.holacracy.org/
https://en.wikipedia.org/wiki/Holacracy

The Mikado Method
http://www.amazon.com/Mikado-Method-Ola-Ellnestam/dp/1617291218

Theory of Constraints
by Brian Robertson; 2007
https://en.wikipedia.org/wiki/Theory_of_constraints

Radical Management
by Steve Denning
https://en.wikipedia.org/wiki/Steve_Denning

JAD
Joint Application Development by Chuck Morris, Tony Crawford late 1970s