Waterfall Methodology

https://type.jp/et/feature/19504/

- What is waterfall
  - A system or project management process that is sequential in nature without revision or iterative changes to the process
  - Though a misconception since the US DOD and IEEE adopted Royce article and removed the iterative process
- Process
  - Planning
  - Design
  - Implement
  - Testing
  - Operate
- Agile
  - Agile is planning at the start and divide it into smaller pieces and iterate them
- Waterfall is suited to process without change
- Benefit of waterfall
  - Keeping quality
  - Scheduling
- Why is the waterfall is considered obsolete
  - Rise of agile, waterfall is inflexible to sudden changes in client demand and iterative design
  - Recent innovation in web services, applications require its ability to meet client and customer demand as ASAP
  - Sam Gukenheimer - of microsoft - when asked by a Japanese representative asking merits of waterfall - he responded by saying that they are no merits to waterfall

https://tracpath.com/works/devops/agile-vs-waterfall/

- Why Agile is struggling in japan
  - How software is developed
  - Software development in US firms, invest in its IT systems capability, many IT engineer work for firms and projects that target its firm directly
- Issues of waterfall
  - Does not prepare for requirement changes during projects
    - Often times clients cannot express their needs immediately
    - Given that business in VUCA leads to ambiguity, this leads to redundant tasks and risk delay
  - Time for software deployment
    - Given iterative change and lack of communication between clients, this leads to dovers of processes

https://simplearchitect.hatenablog.com/entry/2016/06/20/080807

- Waterfall was misunderstood from Royce
  - In order to succeed in waterfall it needs iterative process - at least twice
  - Based on DOD, the iterative and repeat process was cut
- Effectiveness of wtaaerfall in japan
  - Japanese enterprise still uses waterfall

https://www.jstage.jst.go.jp/article/jsim/30/4/30_KJ00009209457/_pdf/-char/en

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