... before we begin!



# 





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# Managing the process

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GR5069: Applied Data Science for Social Scientists

Spring 2024 Columbia University

#### a tale of two approaches...

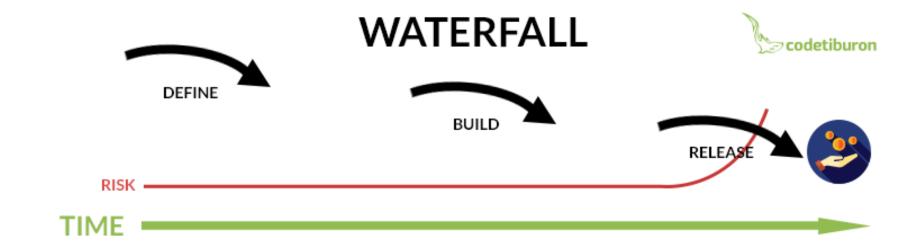


figure: codetiburon



#### for our purposes, waterfall is



sequential approach to manage development processes



where completing a stage is a **prerequisite** to start the next one



aiming to release a single final product

#### a tale of two approaches...

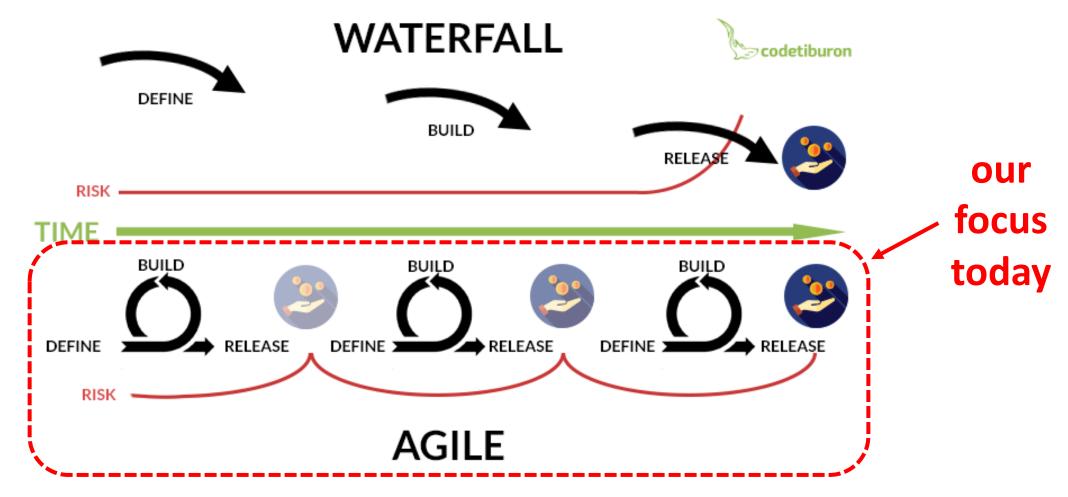


figure: codetiburon



#### for our purposes, Agile is



iterative approach to manage development processes



focused on **continuous releases** 



that incorporate **adjustments** at every iteration based on **user feedback** 



enabling planning for unplanned work

#### Agile as a dynamic and user-centric approach

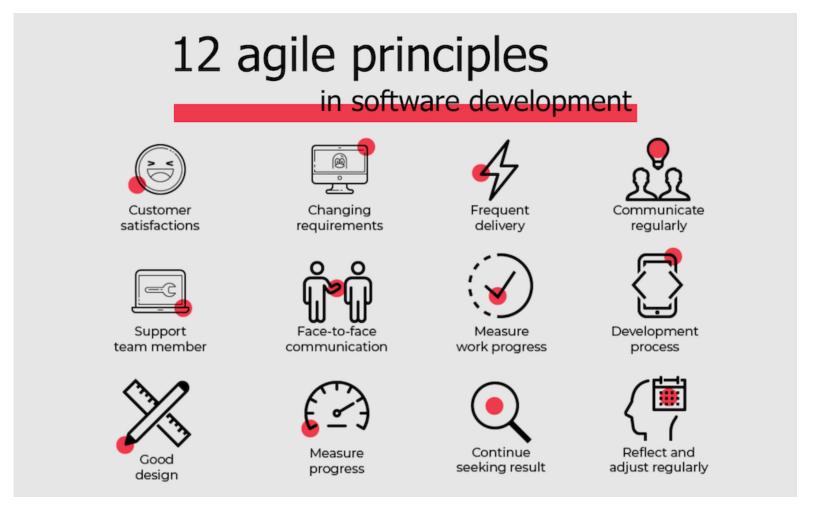
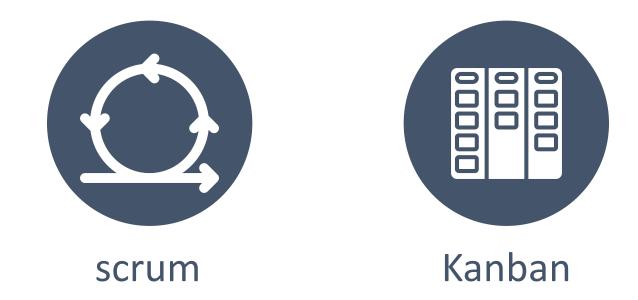


figure: designveloper

#### with a little help from my (Agile) friends!



two commonly used **methods** to **implement** the Agile philosophy to **build** and **evolve** digital solutions

#### scrum as a structured method to be Agile

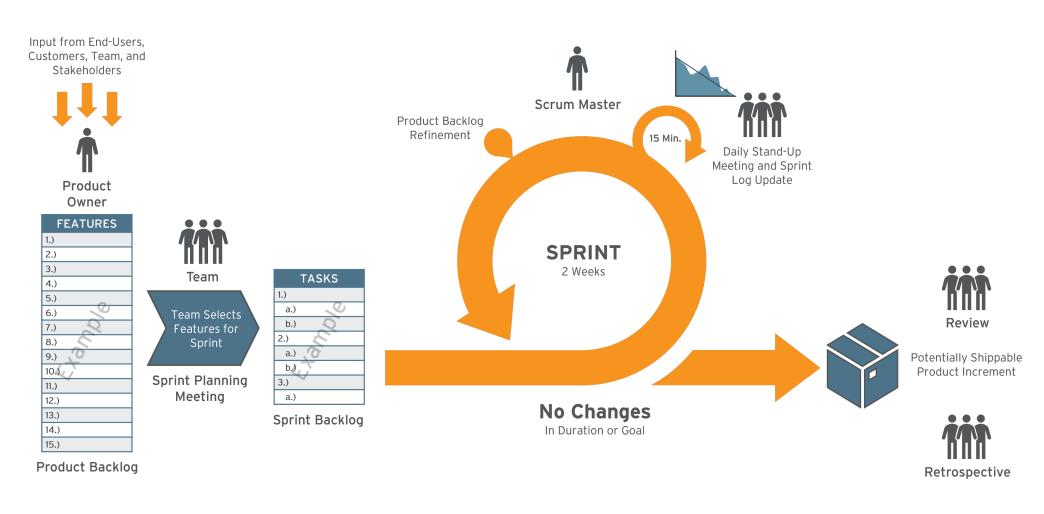


figure: <u>clientek</u>

### for everything else, there's kanban cards

#### KANBAN BOARD

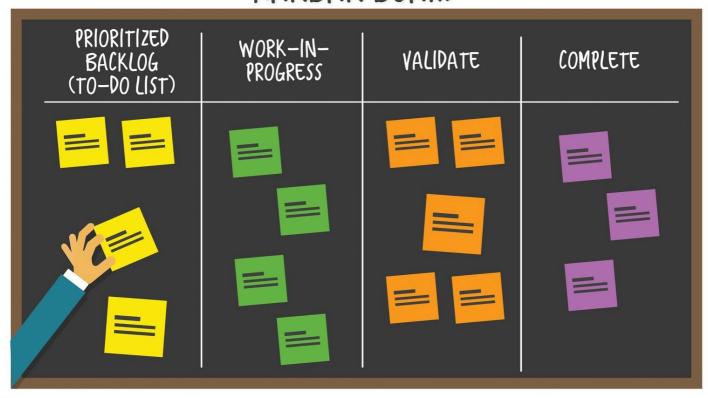
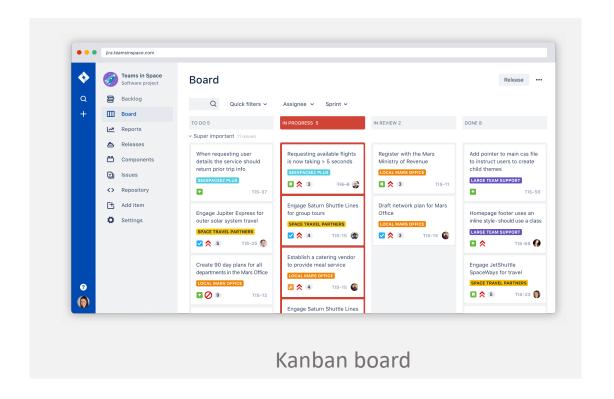
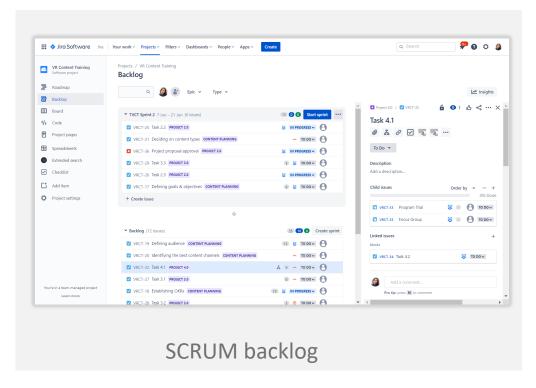


figure: <u>talentvis</u>

### plenty of (software) tools to be Agile











#### a key concept to grasp: MVPs!





#### for our purposes, an MVP is



a **version** of a product



with just enough features to be usable



that enables collecting **feedback** 



#### important to clearly <u>understand</u> MVPs!

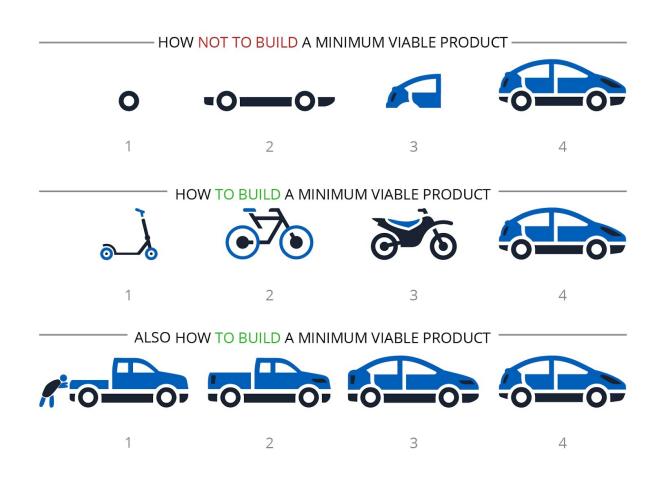


figure: <u>altkom</u>

#### building MVPs has useful advantages



safe way to validate solution



early user feedback



lower upfront costs

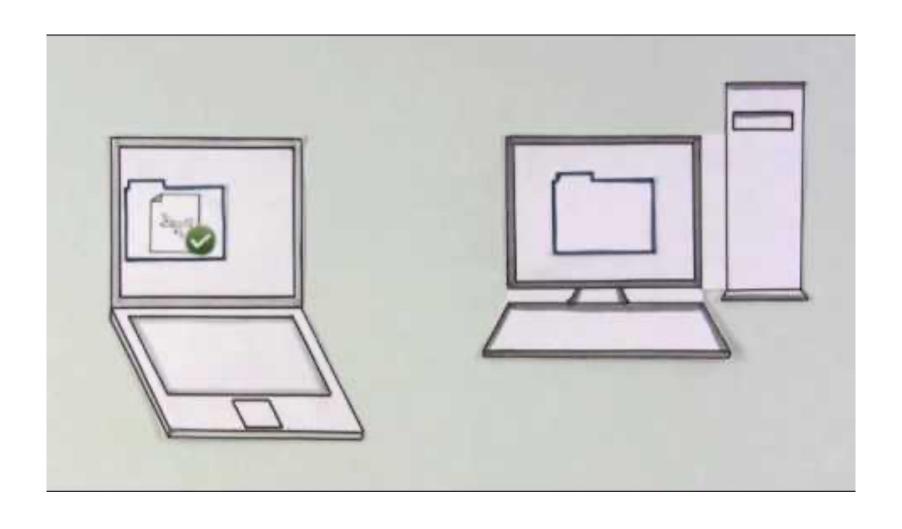


easier iterative development



faster time-to-market\*

## from the hall of fame of MVPs: Dropbox



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