

ITI8740/ITX8522: Software Development Team Project

06. Minimal Viable Product

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Minimum Viable Product

2001. Frank Robinson. CEO of SyncDev:

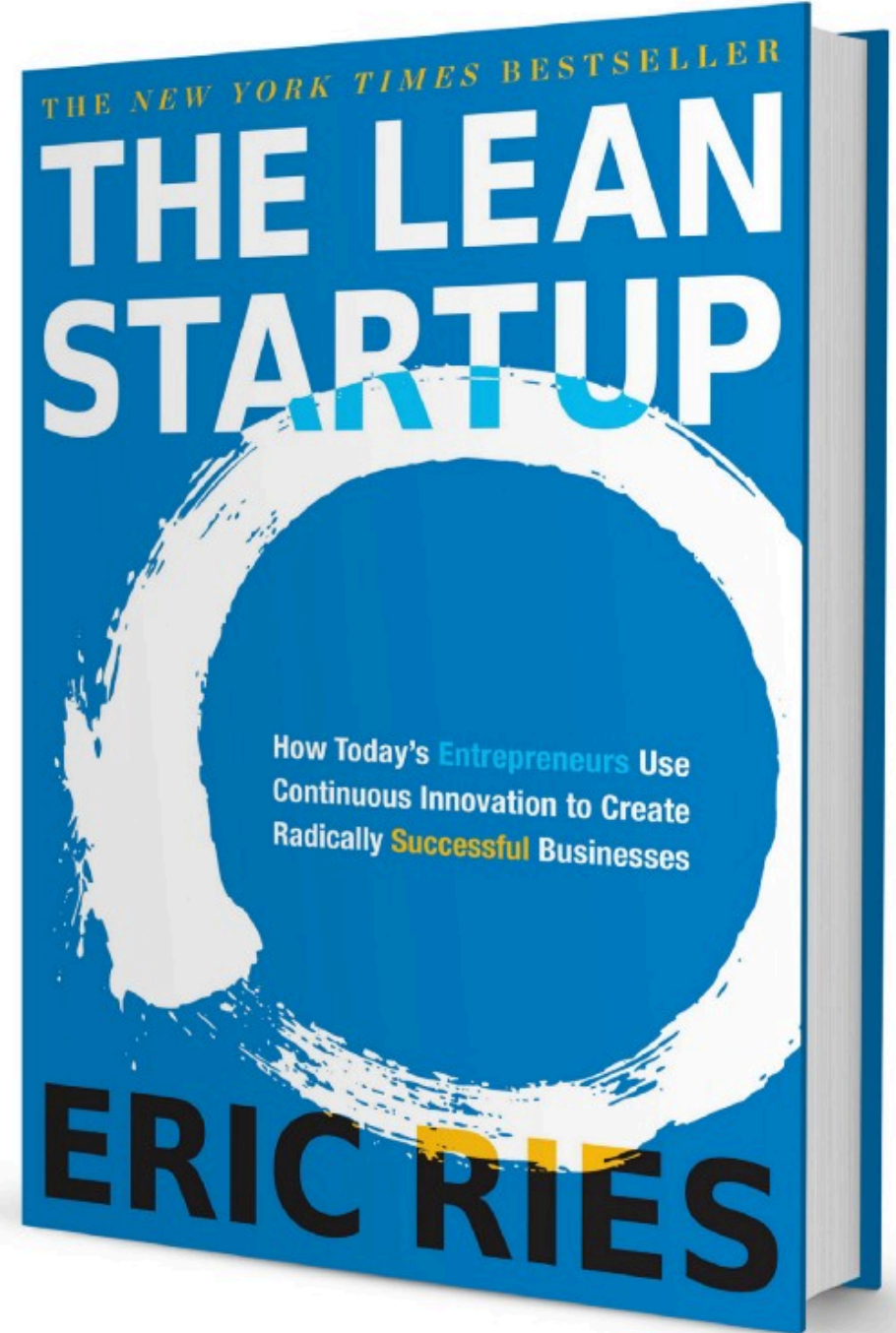
Unique product that maximizes return on risk for the customer.

or

A simplest version of a deployable product

Minimum Viable Product is that version of a new product that allows a team to collect the maximum amount of validated learning about customers with the least effort.

Eric Ries. Lean Startup



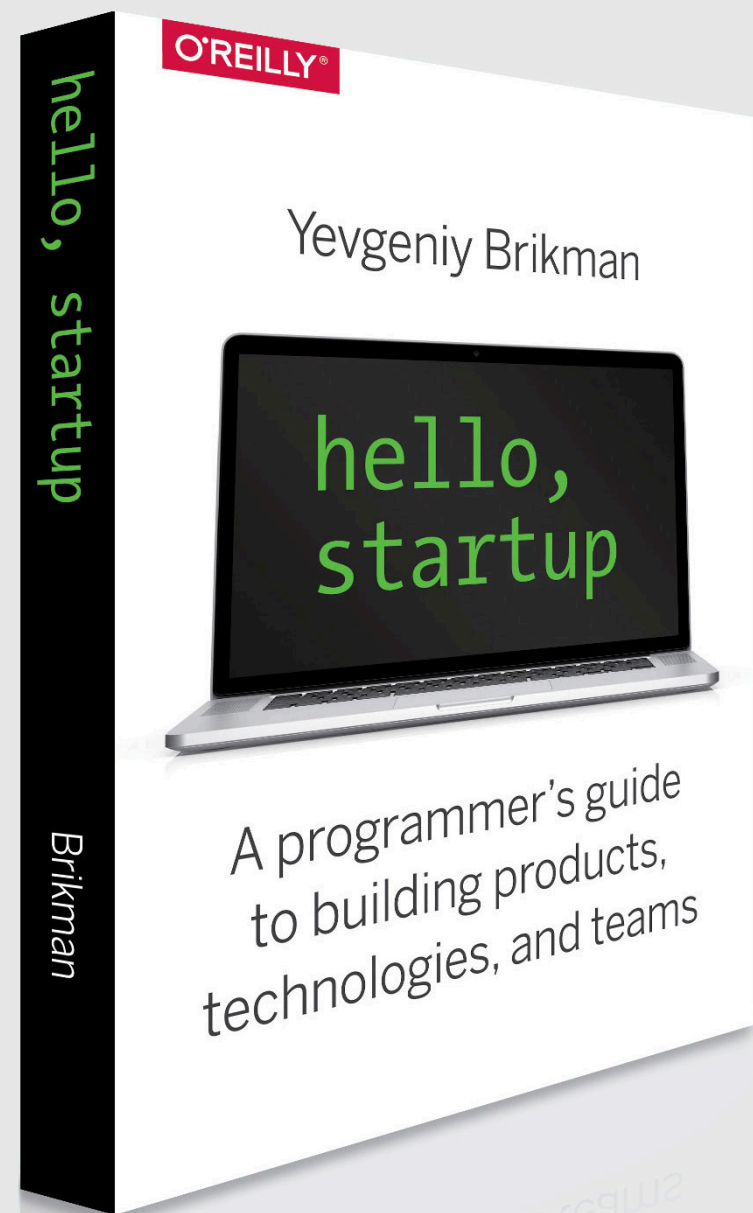
A Minimum Viable Product is the smallest thing you can build that delivers customer value (and as a bonus captures some of that value back).

Ash Maurya. Running Lean



An MVP is a process that you repeat over and over again: Identify your riskiest assumption, find the smallest possible experiment to test that assumption, and use the results of the experiment to course correct.

Jim Brikman. Hello Startup.



MVP is ..

- A *tactic* for cutting back wasted engineering hours
- A *strategy* to get the product into early customer's hands as soon as possible
- A *tool* for generating maximum customer learning in the shortest possible time.

Steve Blank. The father of customer development



The goal of the MVP is to build the smallest possible feature set.

The goal is to test your understanding of the customer's problem and see if your proposed solution will prompt him to use or buy the product based on its most important features alone.

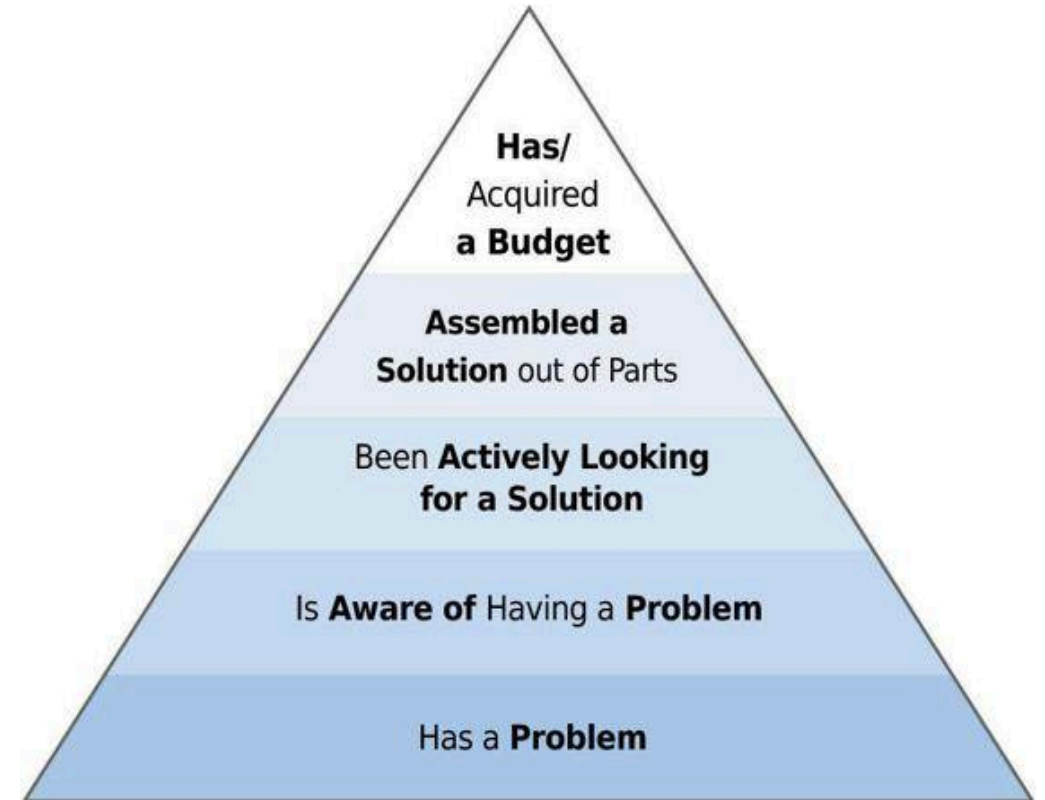
Most users want finished products, but **earlyvangelists** are the perfect target for the MVP. Tailor the initial product release to satisfy their needs. If no one thinks your MVP solution is interesting or sufficient, iterate or pivot until an adequate number say “yes.”

Steve Blank. Startup Owner's Manual. 2020

Earlyvangelists

1. Have the problem
2. Know they have the problem
3. Have the budget to solve the problem
4. Have already cobbled together their own makeshift solution

The real goal is learning, revenue is a side-effect.

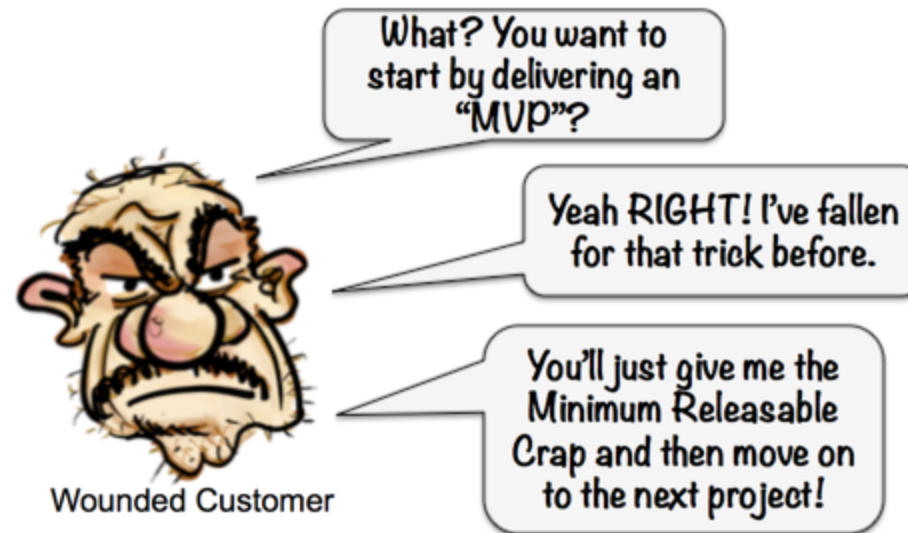


MVP is not just a product with half of the features chopped out, or a way to get the product out the door a little earlier. In fact, the MVP doesn't have to be a product at all. And it's not something you build only once, and then consider the job done.

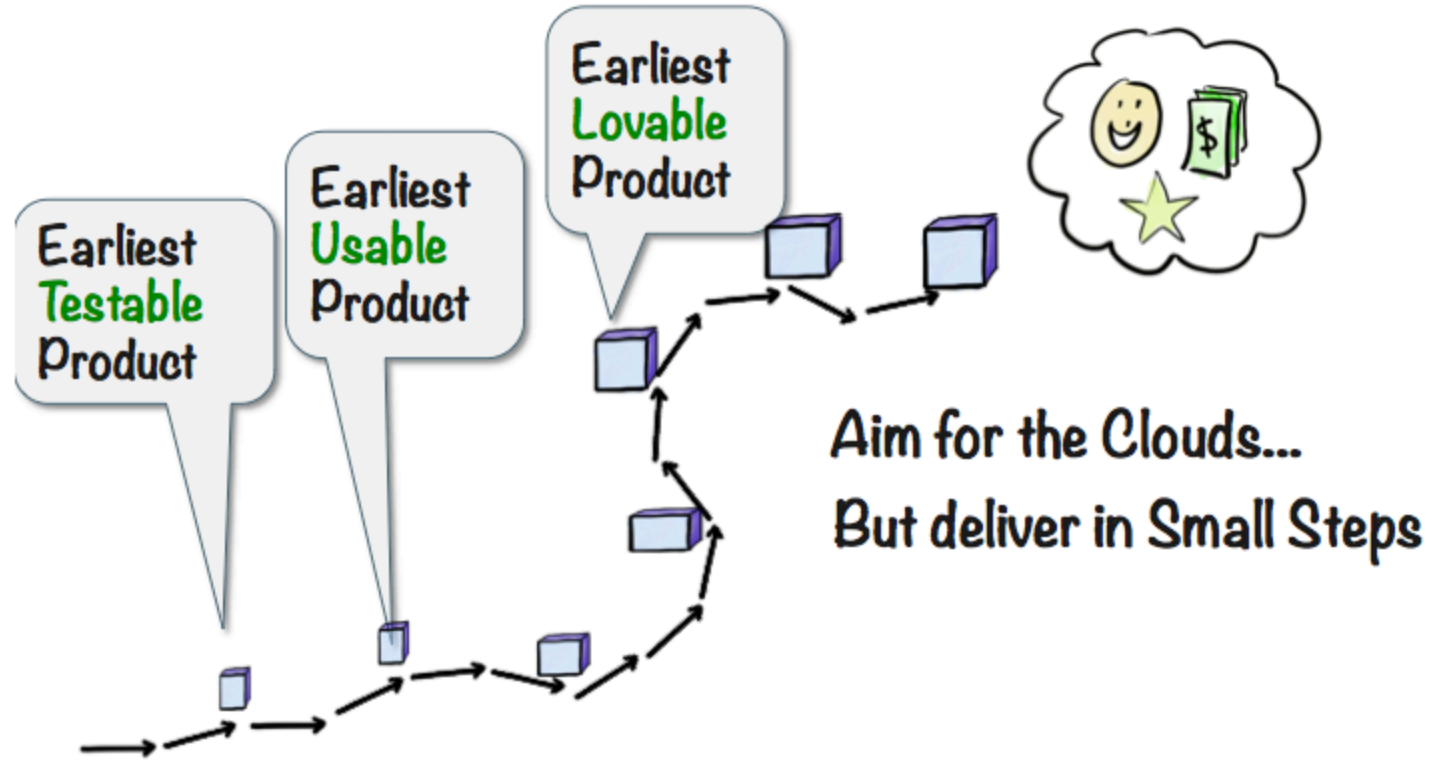
"What is the smallest or least complicated problem that the customer will pay us to solve"

For some customers:

MVP = MRC (Minimum Releasable Crap).



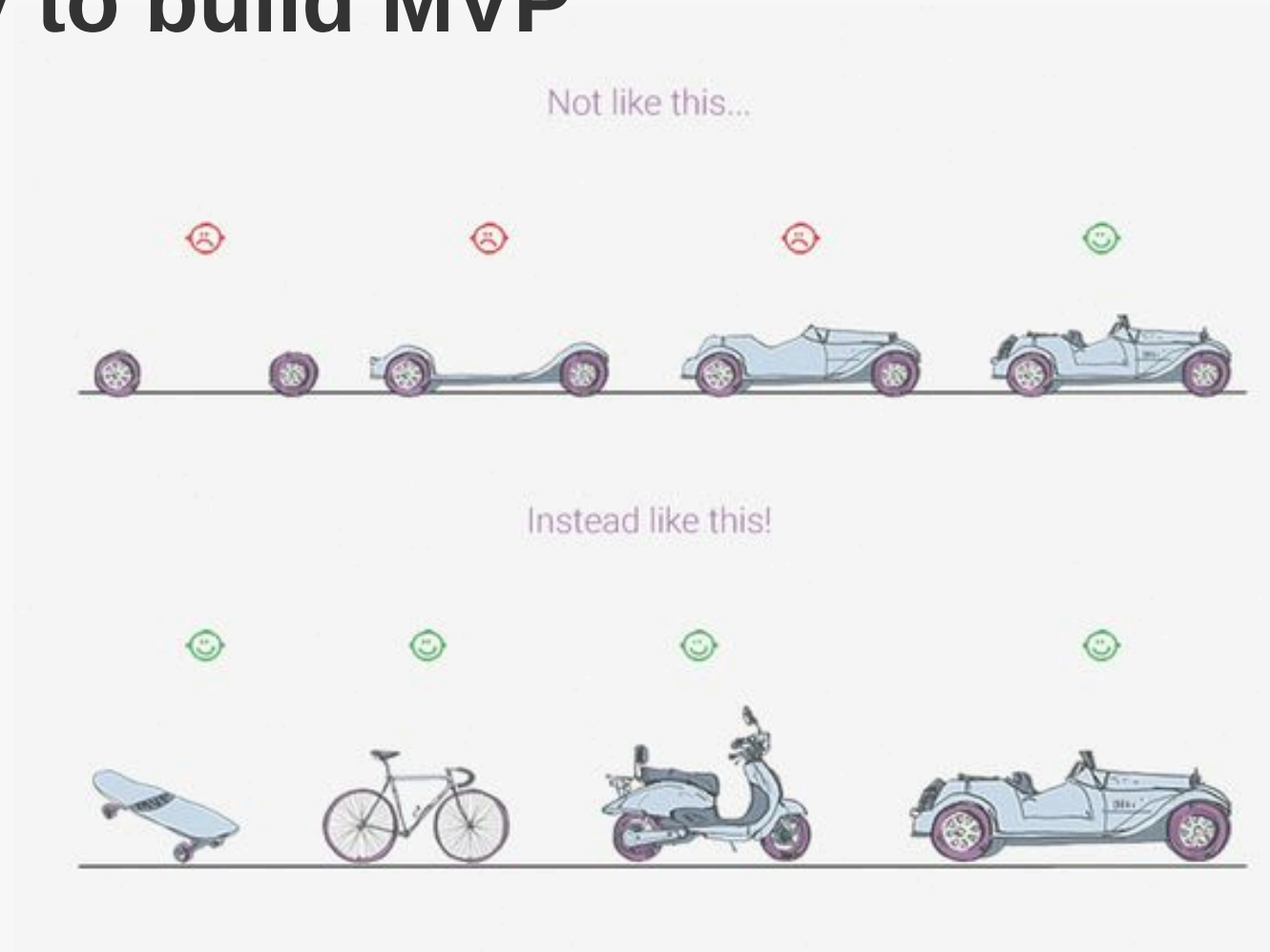
Minimum viable \Rightarrow Earliest testable/usable/lovable



Examples: Spotify & Minecraft

<https://blog.crisp.se/2016/01/25/henrikkniberg/making-sense-of-mvp>

Good Way to build MVP



... and even better one

HOW **NOT TO BUILD** A MINIMUM VIABLE PRODUCT



1



2



3



4

ALSO HOW **NOT TO BUILD** A MINIMUM VIABLE PRODUCT



1



2



3



4

HOW **TO BUILD** A MINIMUM VIABLE PRODUCT



1



2

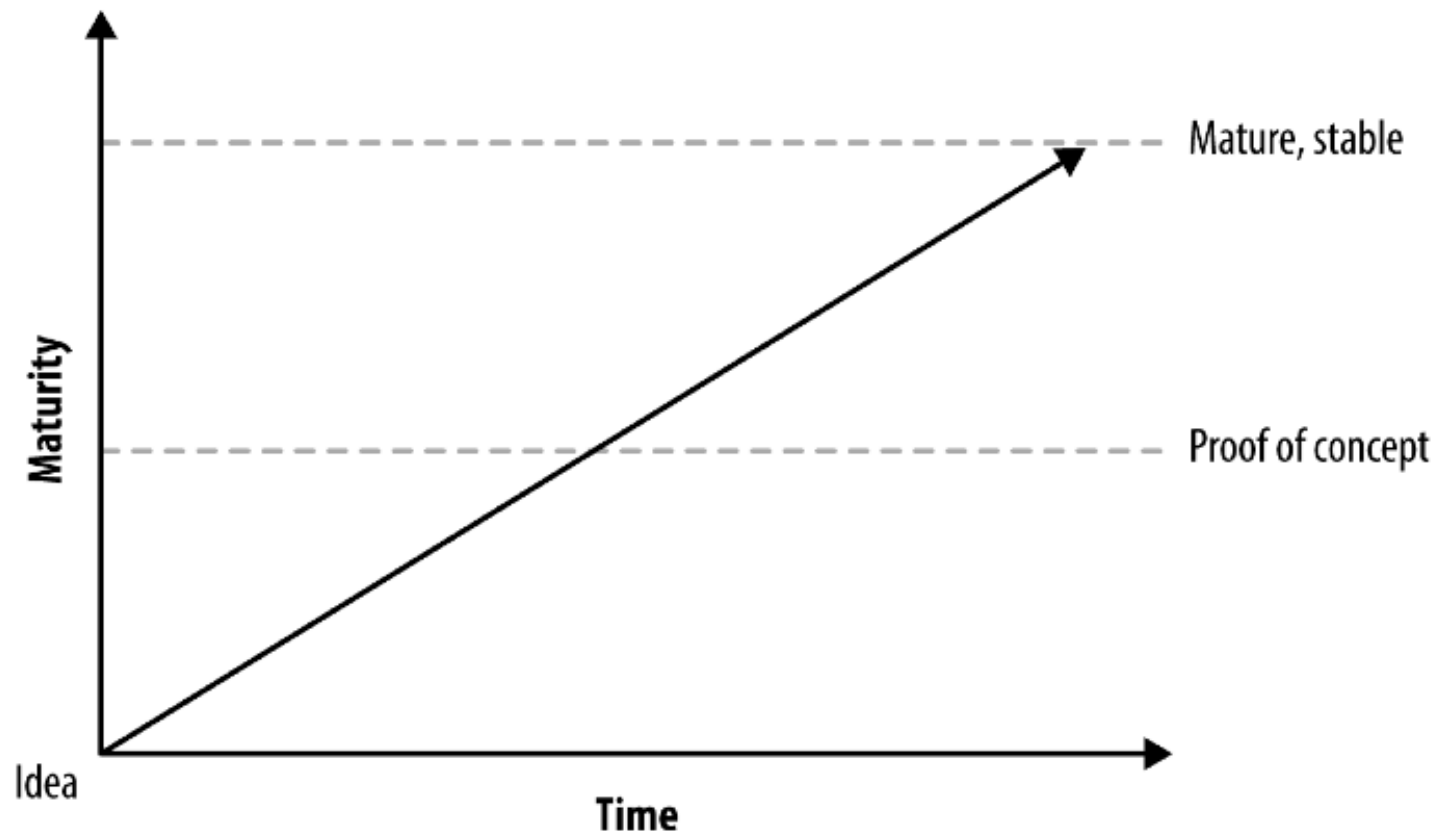


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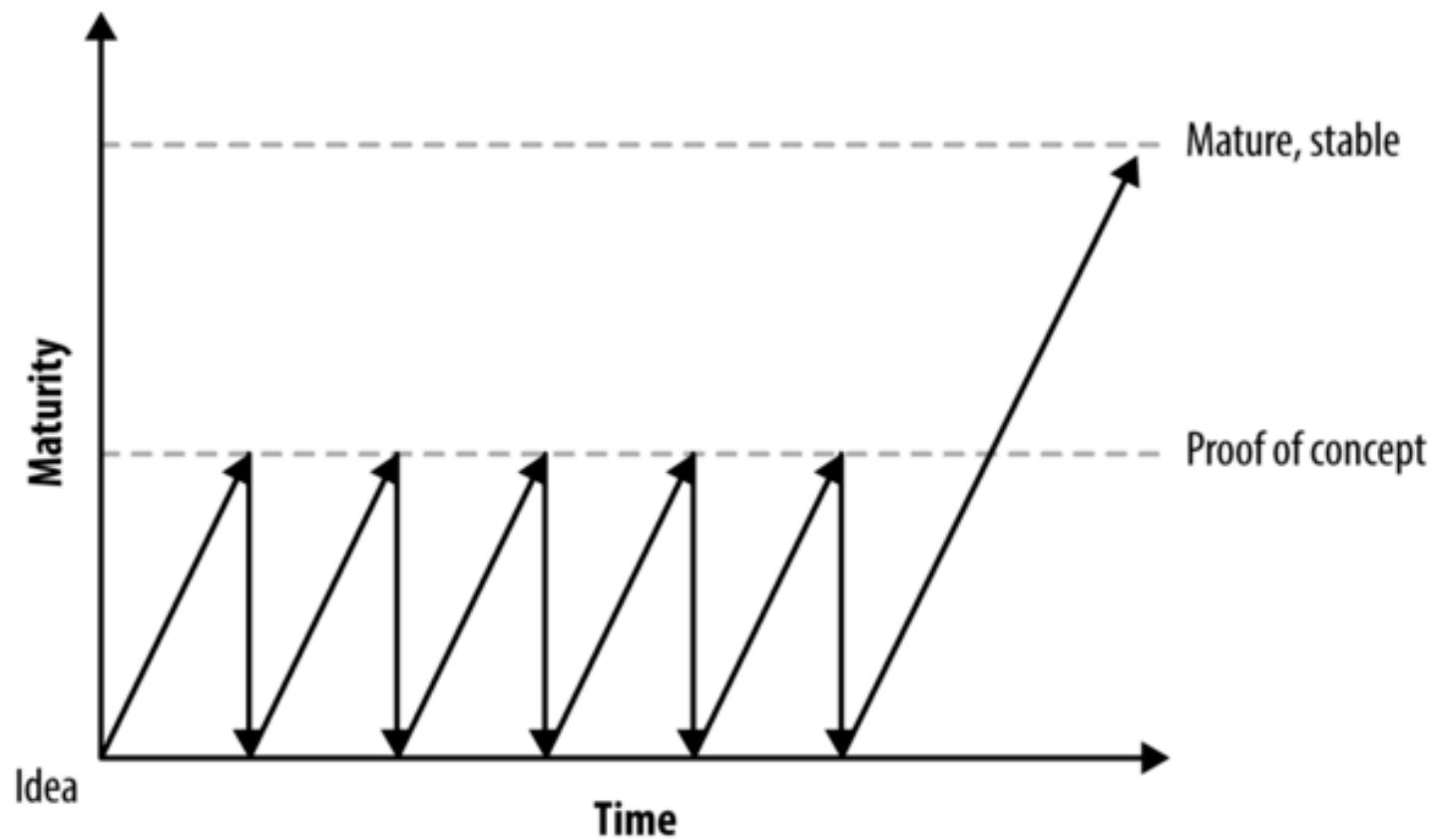


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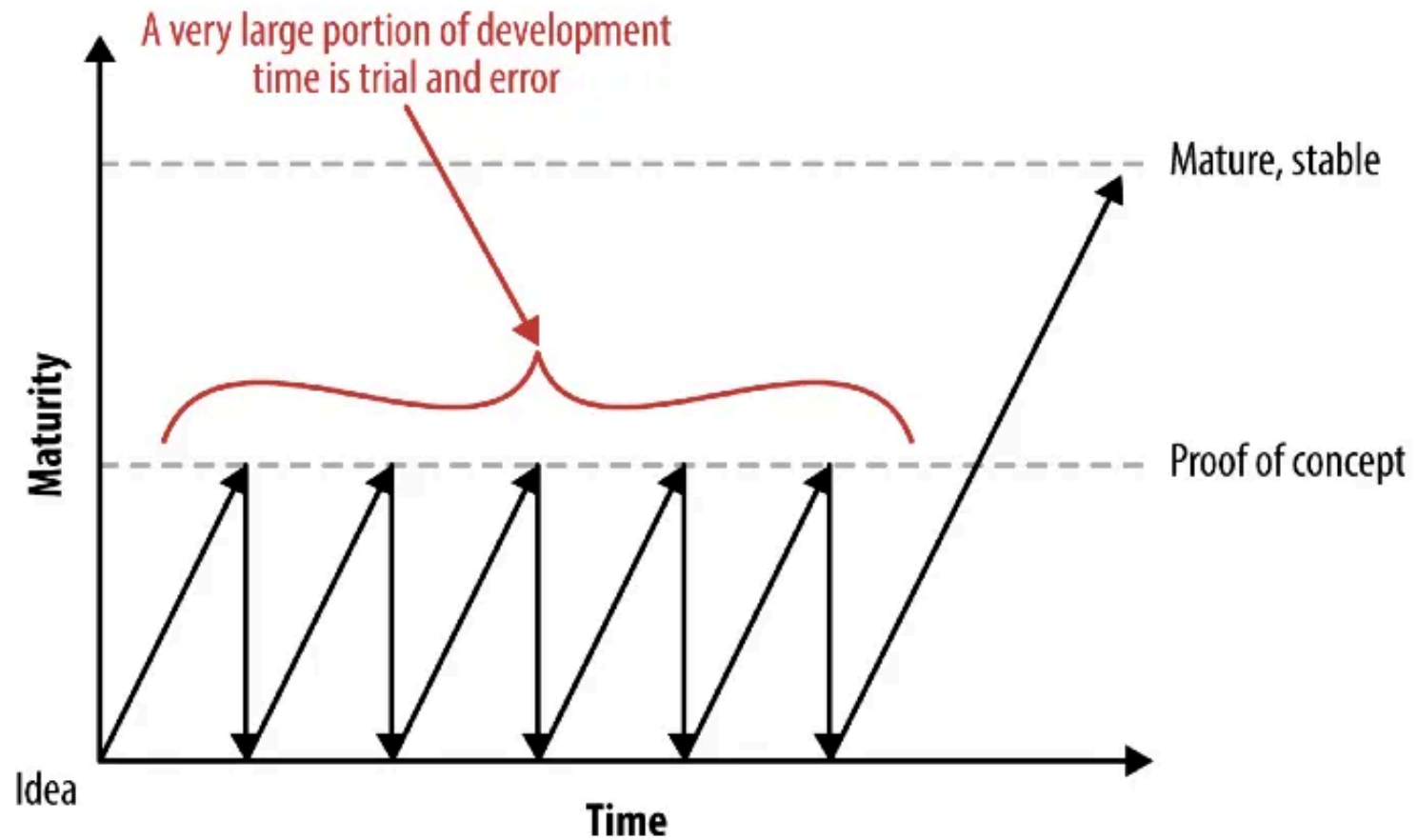
Regular Product Development



MVP Development



MVP Development



MVP is a prototype that focuses on the most important part of a product or service.

Typically offered to a group of potential customers, the most important aspect is viability in order to test the core of the value proposition; to learn from it; and to be able to replicate the idea

Low and High Fidelity MVP

- **Low-fidelity.** Quickly validate a idea or new product features with minimal effort. Gauge the interest and needs of customers and define the core features for product.
- **High-fidelity.** Typically the next stage of development, a much more detailed representation of your product. You could think of this as a path to defining *minimum marketable product* – one to launch to an initial customer base once you've validated your app idea.

have already
a company by building
a light bulb and a vacuum cleaner
are perfect early evangelist candidates. They can
sales; they'll tell others about the product and spread the
Moreover, they can be potential advisory board candi
boards in Chapter 6).

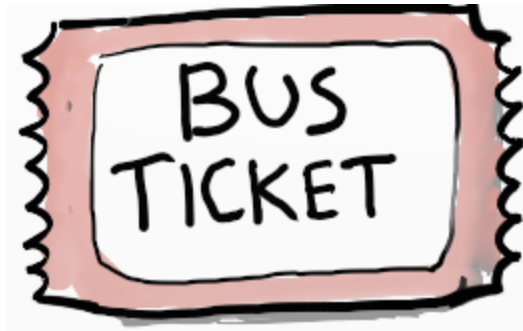
Build a Minimum Viable Product (MVP) F
The idea that a startup builds its product for a small
rather than devising a generic mainstream spec is rad
revolutionary.

**The goal of the MVP is to build the
smallest possible feature set.**

On the day the company starts, there is ver
startup has is a vision of what the problem, p
Unfortunately, it's either a vision or a hallucina
who its initial customers are or what features t
developing an entire full-featured first release
the founders can think of. We now know this
and each, as customers don't use, want or

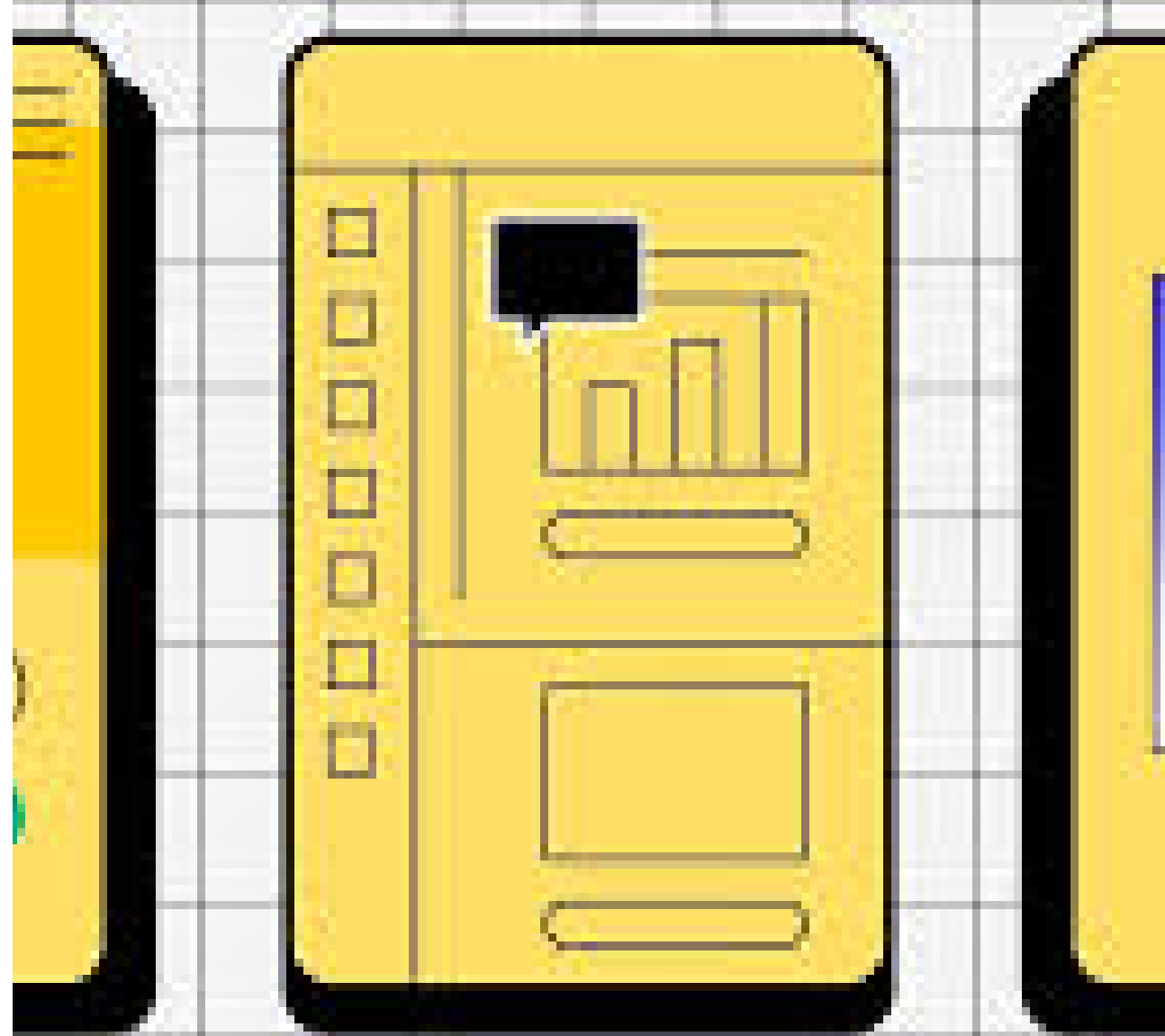
Low Fidelity MVP:

"What is the cheapest and fastest way we can start learning?"



Low-Fidelity MVP: Examples

- Landing-Page
- Social Media
- Explainer video
- Email



High-Fidelity MVP: Examples

- Single-feature
- **Piecemeal:** use existing third-party tools for product features.
- **Concierge:** Emulates a solution with multiple functions while a human performs its main functions.
- **“Wizard of Oz”:** As before, but user is not aware of human assistance
- Crowdfunding



Define the Features

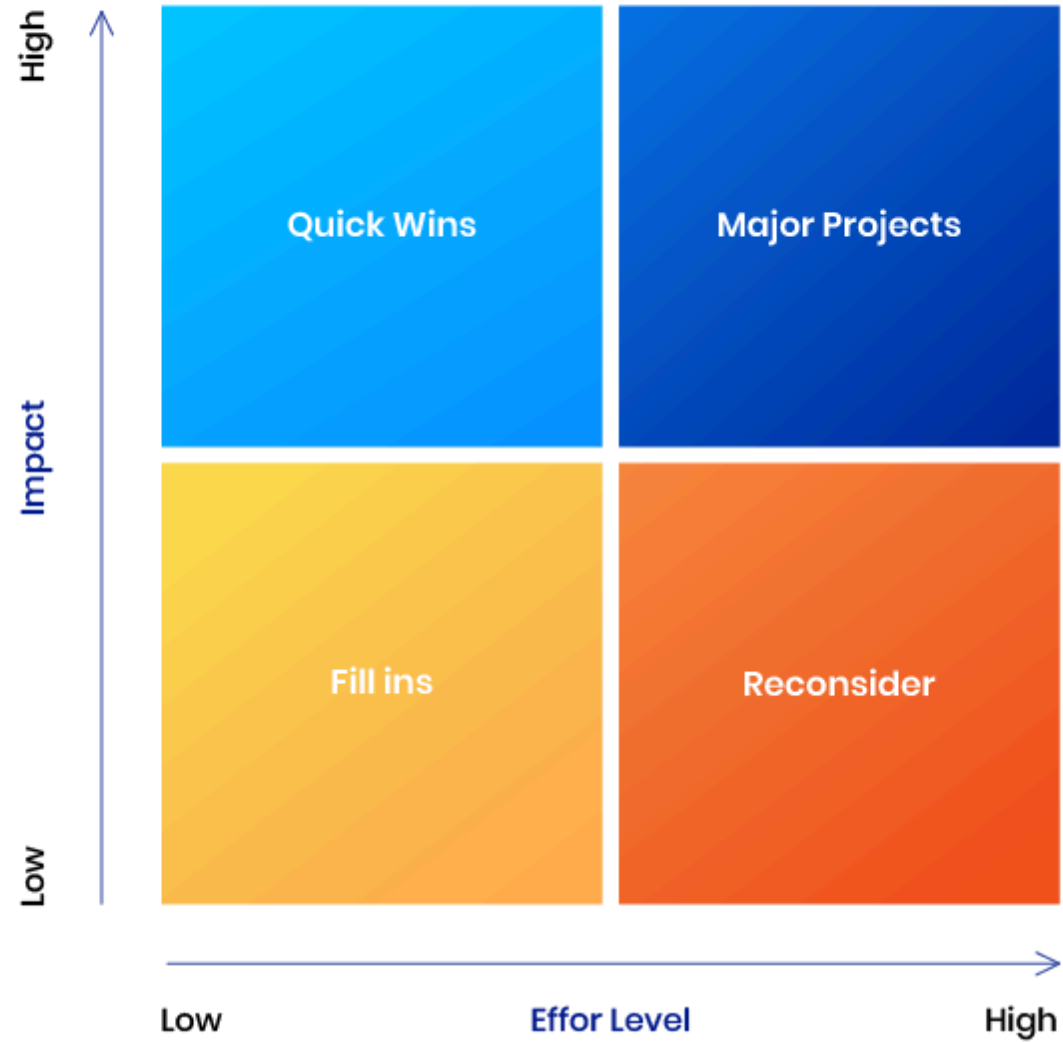
- Define your target audience.
- Find out their biggest issues.
- Decide how your product will solve these issues.
- Learn how customers solve these issues right now.
- Research who your direct competitors are.
- Research who your indirect competitors are.
- Define killer features.

Scoping the Features

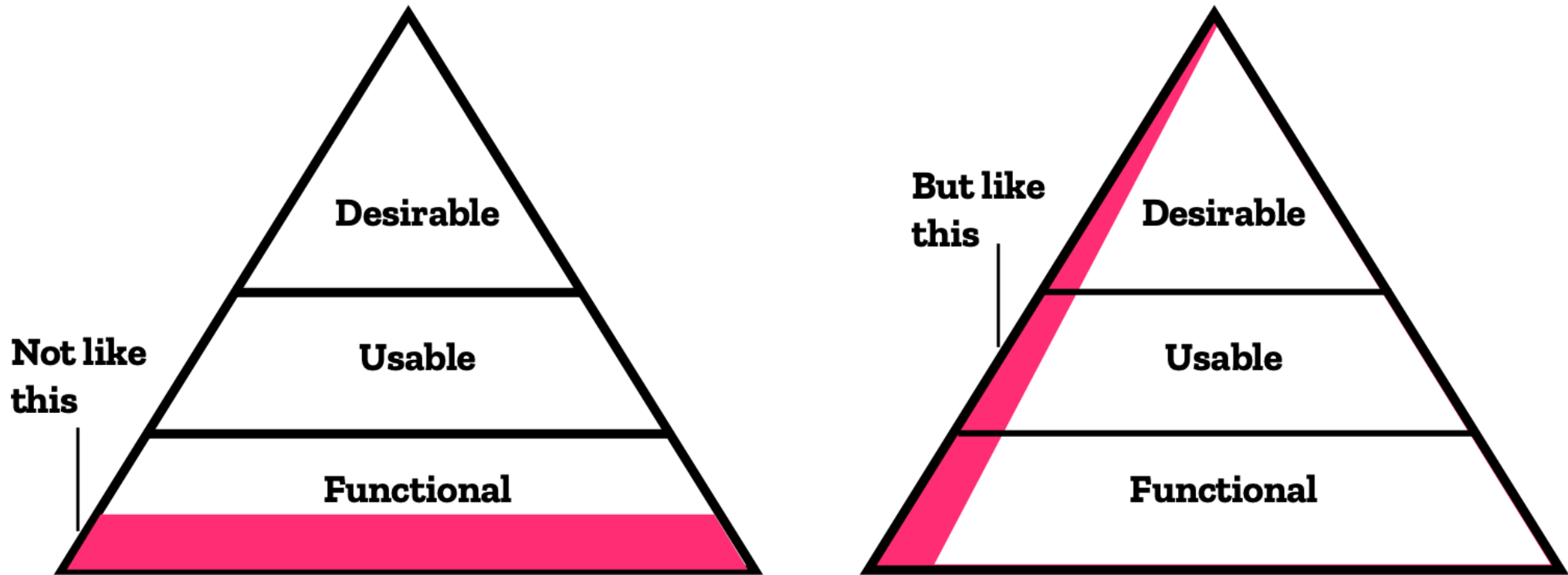
- *Business value:* Can we measure the cost of a feature?
- _Relation between the feature cost and its https://sloboda-studio.com/blog/how-to-decide-on-mvp-features/complexity:_ How complex is a new feature? Can we use a simpler one?
- *Timing:* How much time do we need to create a new feature?

See: <https://sloboda-studio.com/blog/how-to-decide-on-mvp-features/>

Effort and impact prioritization



Minimum viable product



Early Market

People who want the newest things

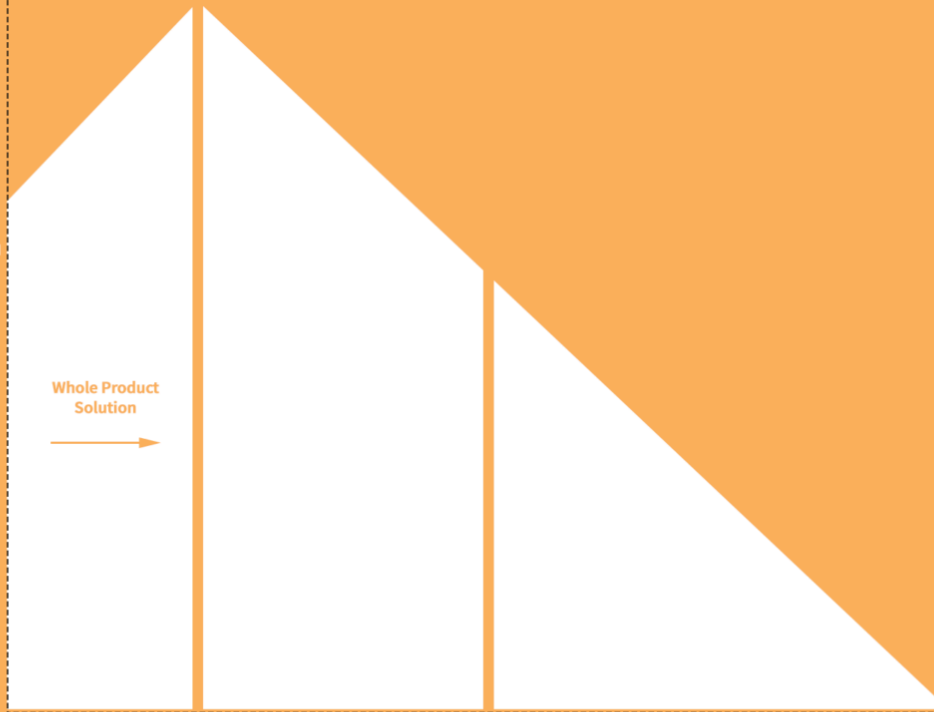


Innovators: 2.5%

Early Adopters: 13.5%

Mainstream Market

People who want complete solutions and convenience



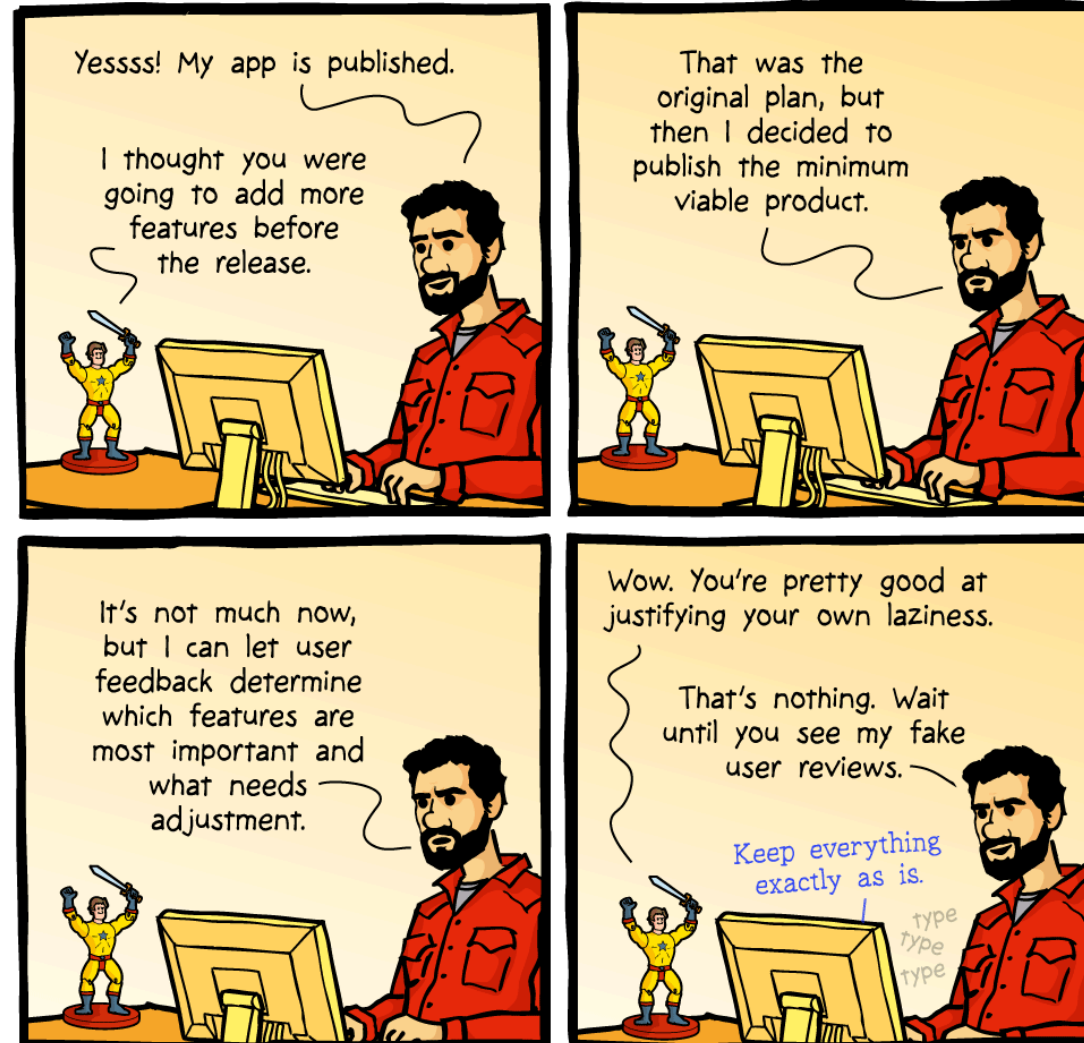
Early Majority: 34%

Late Majority: 34%

Laggards: 16%

The CHASM

Sometimes little is too little



Outcomes of MVP

- The hypothesis is **completely correct**: development continues
- Hypothesis is **partially true**: customer feedback helps to refine the idea
- Hypothesis is **refuted**: at least most of the funds are retained that would have been used or implementation.

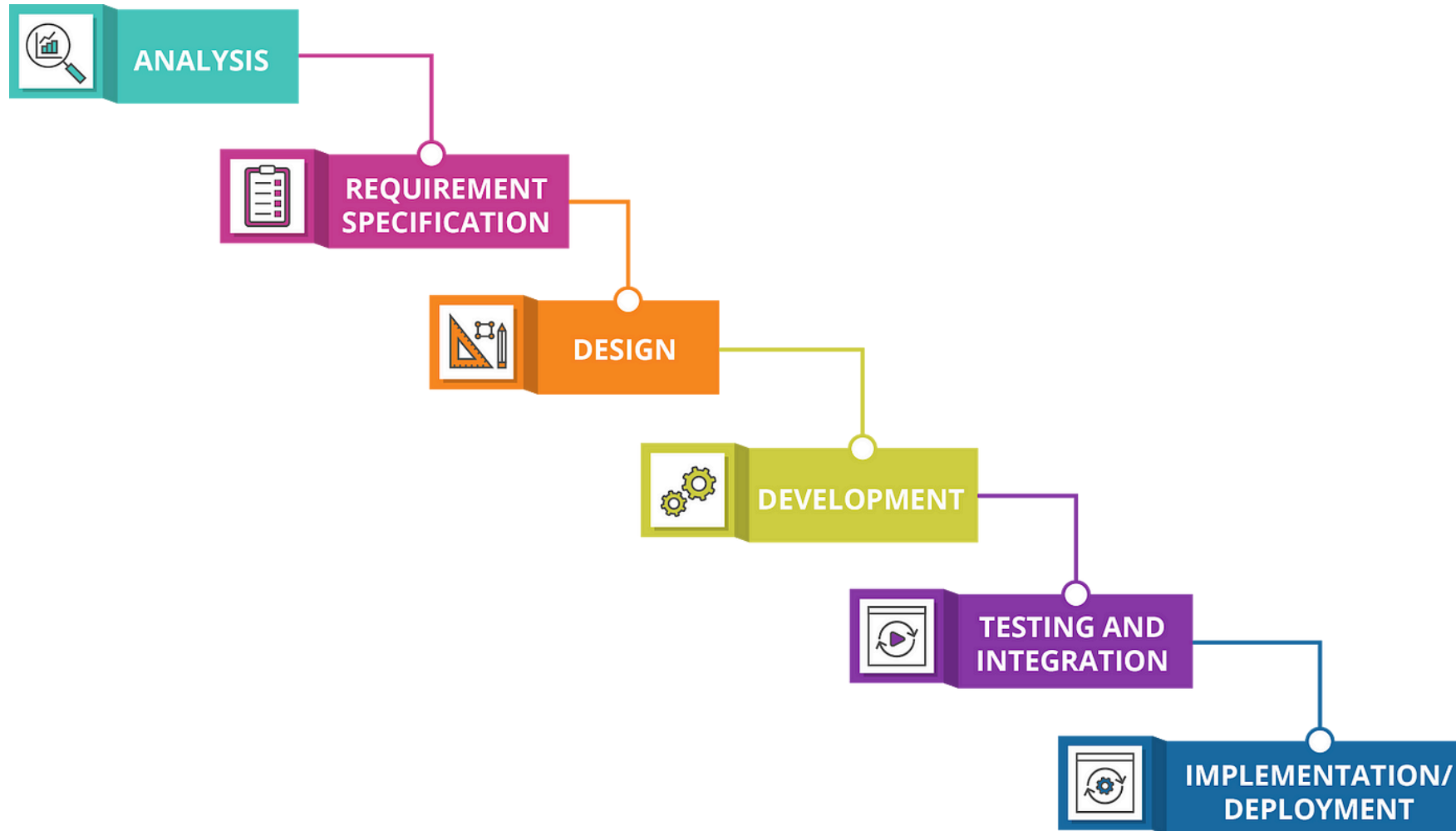
Key takeaways

- MVP is a process not a one-off thing.
- Figure out the minimal testable product for your specific case.
- MVP is not an excuse for a s***y product.
- Frontend-oriented for especially business-to-customer cases.

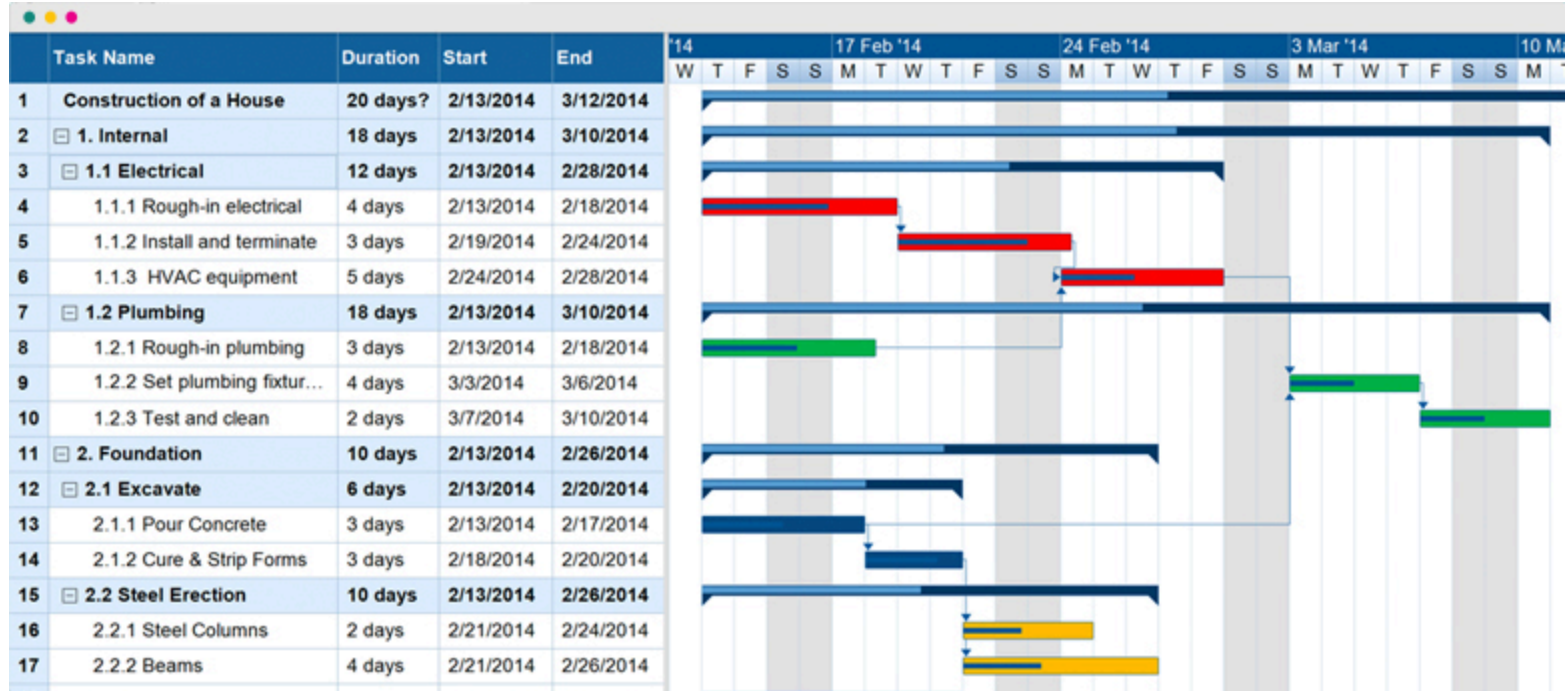
Overview of Methodologies

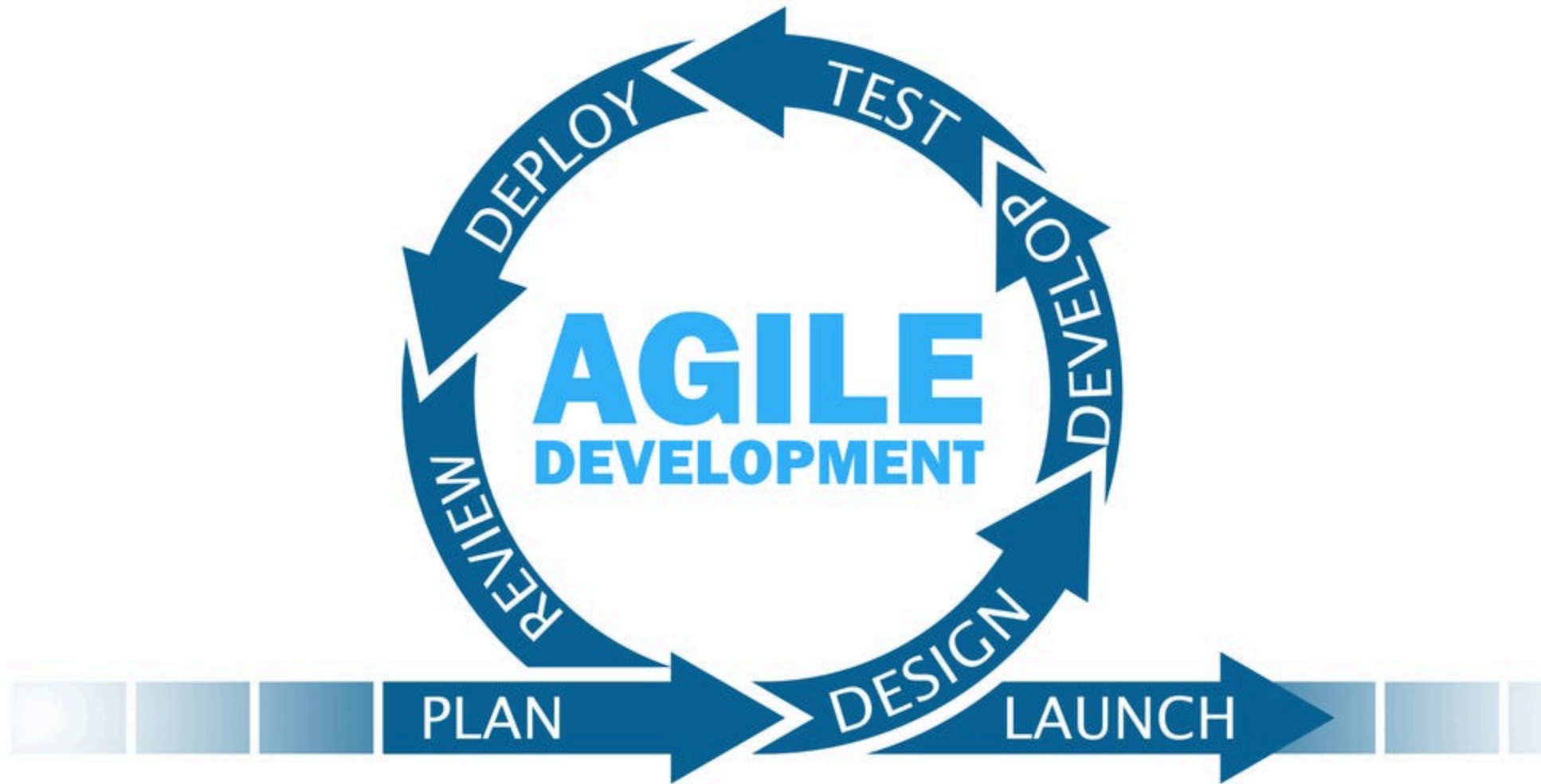
Two different approaches.

Waterfall Development









Benefits

- Reduction of uncertainty
- Minimal time to market
- Measurability
- Traceability
- Right action right time

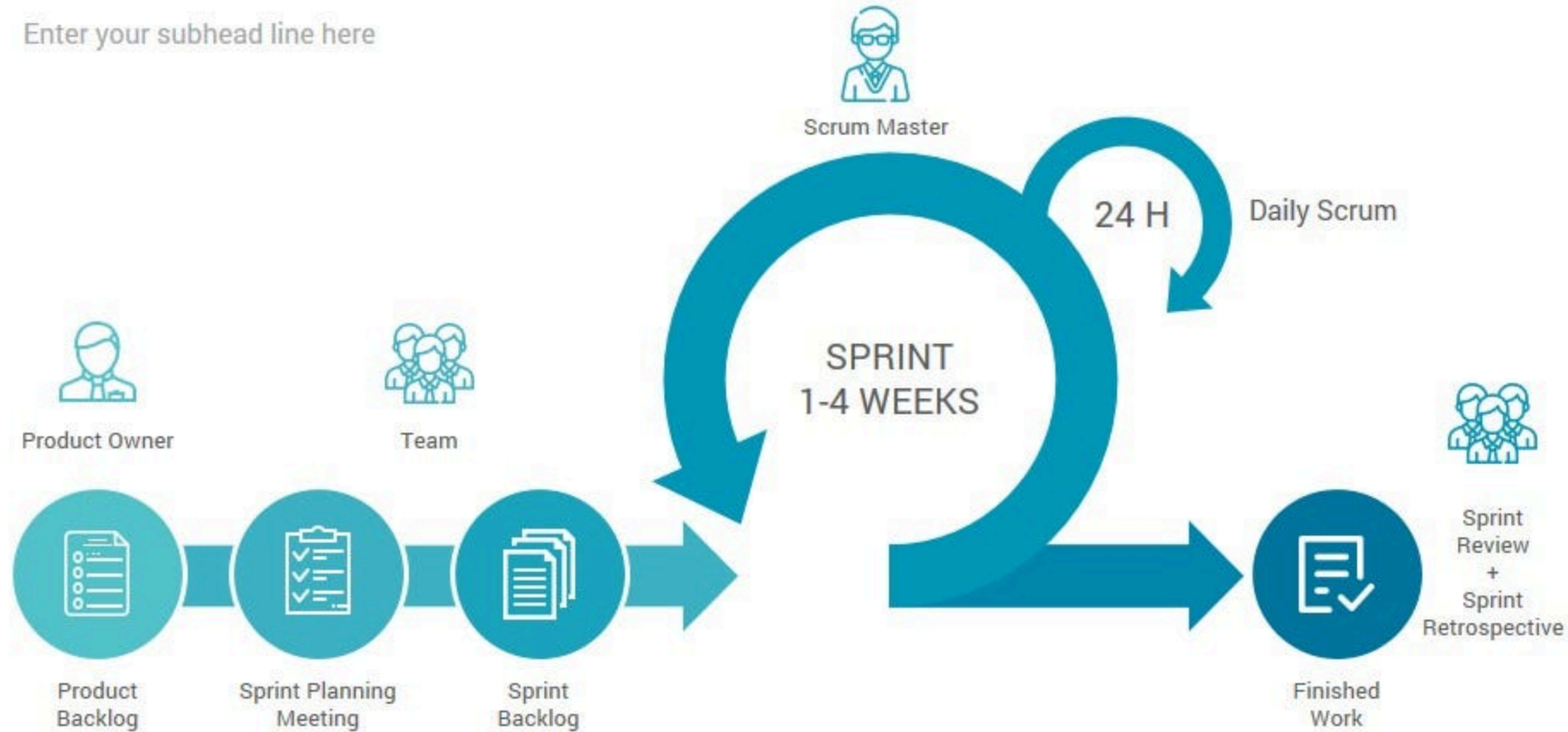
AGILE

Manifesto for Agile Software Dev.

- INDIVIDUALS AND INTERACTIONS OVER PROCESSES AND TOOLS
- WORKING SOFTWARE OVER COMPREHENSIVE DOCUMENTATION
- CUSTOMER COLLABORATION OVER CONTRACT NEGOTIATION
- RESPONDING TO CHANGE OVER FOLLOWING A PLAN

Scrum Process

Enter your subhead line here



Scrum: Roles

- **Product Owner** - Represents the stakeholders and is the voice of the customer.
- **Development Team** - Self-organizing, cross-functional team of people who are responsible for building the actual product.
- **Scrum Master** - accountable for establishing the Scrum process

Scrum: Elements

- **User Story** Informal, general explanation of a software feature written from the perspective of the end user. Its purpose is to articulate how a software feature will provide value to the customer.
- **Sprint** - short, timeboxed period when a team works to create a done, usable, and potentially releasable product increment.
- **Product Backlog** - prioritized list of all the functionalities that we need in the product. It is a single source of truth for all the product requirements.
- **Sprint Backlog** - Set of Product Backlog items that we select for the sprint.

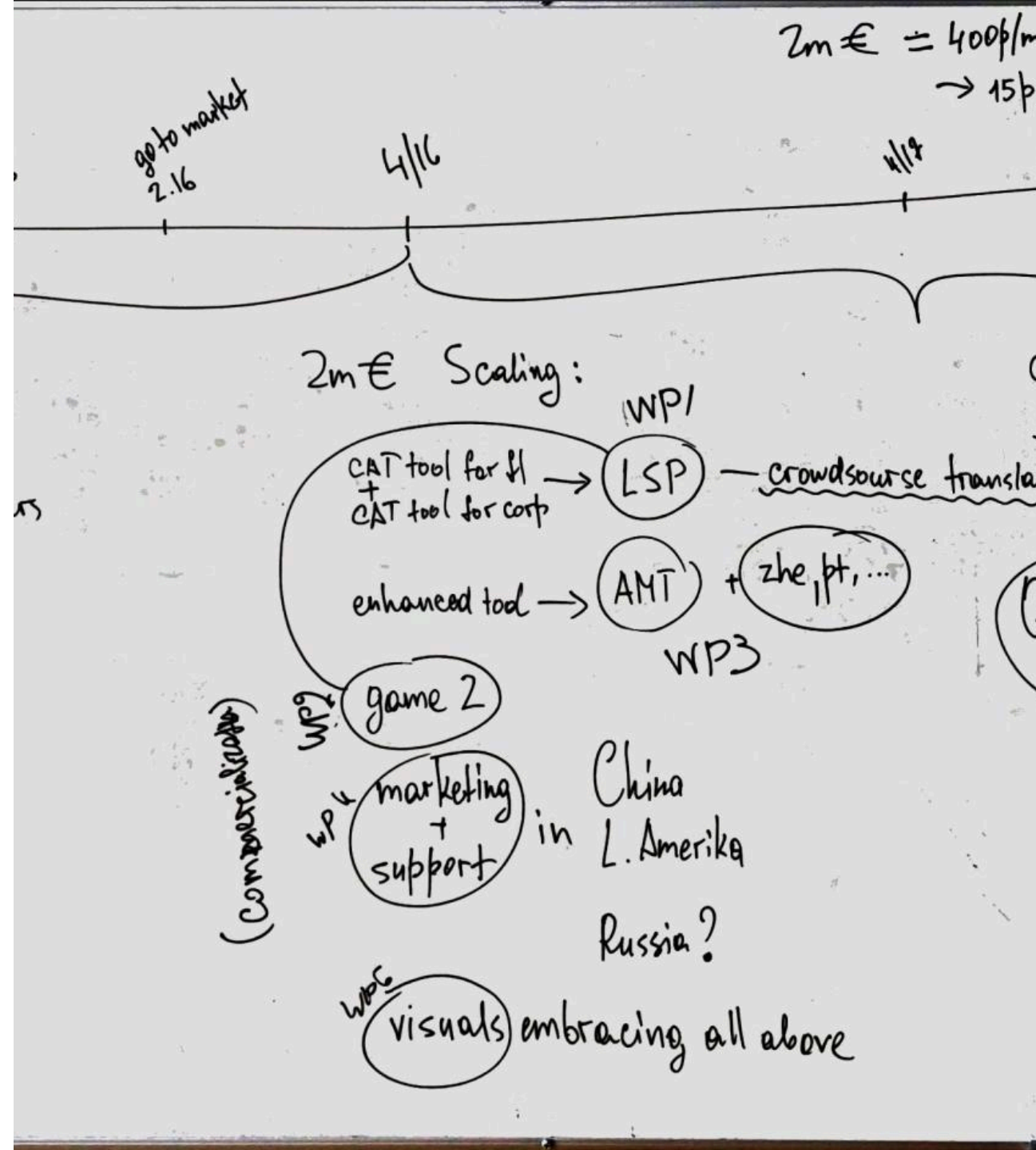
Scrum: Practices

- **Sprint Planning** - event in Scrum that kicks off the sprint by defining the scope of delivery and how to accomplish that work.
- **Stand Up (Daily Scrum)** - 15 minute PPP event to keep track of progress.
- **Sprint Review** - event that takes place at the end of the sprint to inspect the increment and adapt the product backlog.
- **Retrospective Meeting** - event that solely focuses on improvements on every aspect of Sprint

Scrum: How does it work in practice?

Prerequisites

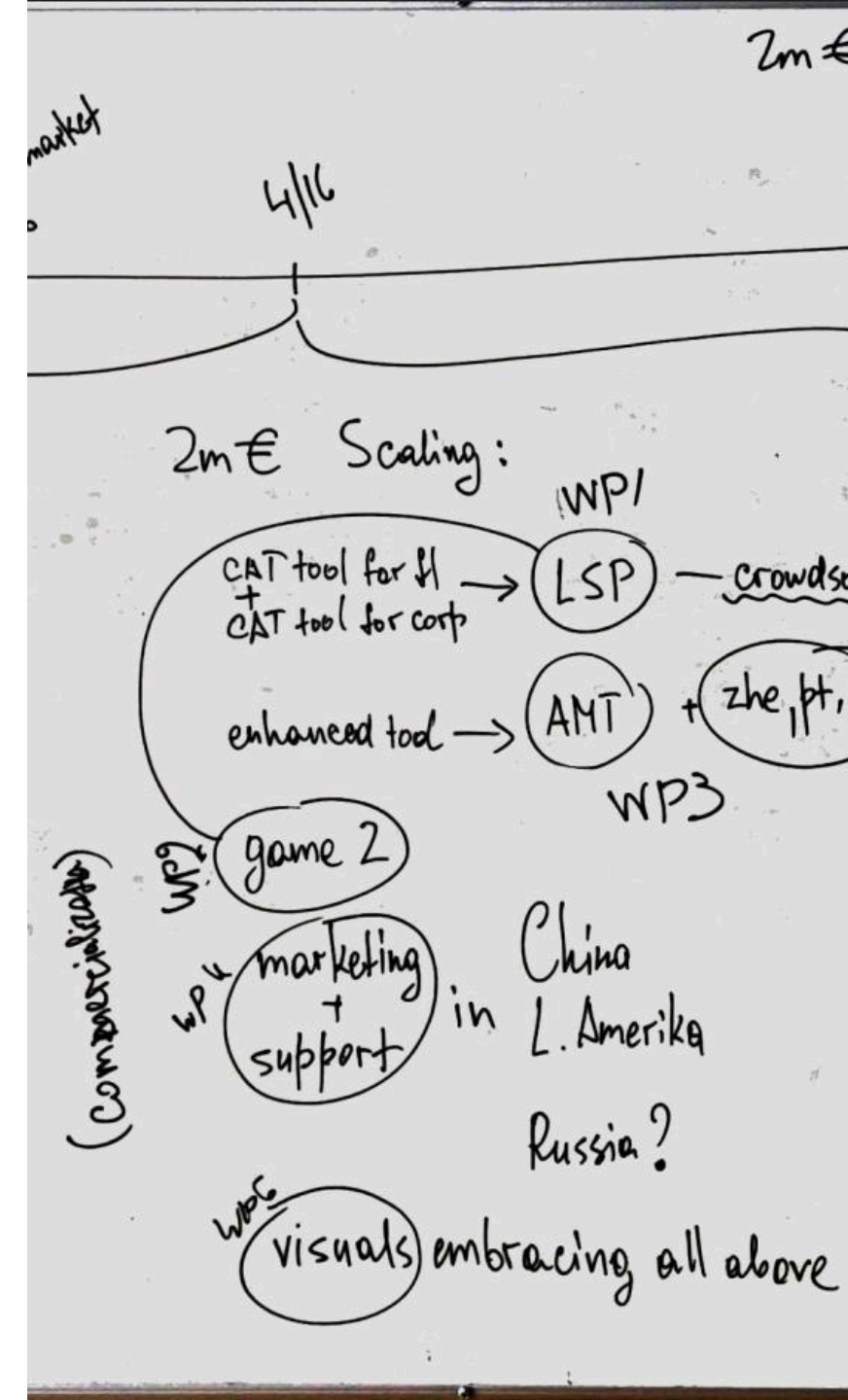
- Describe the desired end result in general terms.
- Define the sprint cycle length.



Scrum: How does it work in practice?

Running the sprint

- Set general goals for next sprint
- Brainstorm
- Build consensus what to build next
- Define clear tasks and clear measure of success
- ... work ... and share the testing load
- Evaluate the results



TO-DO

CHI - Aleksei Dorn
vin
duplied

DIRTY GAME
THAT'S IT

MARTIN/
YVES

GAME 1.1
TIME CODING
IF TIME < X/HIN

SEARCH /
OPTICAL

WFB
Subpage to support
and content / design

Martin/
sam/
Paul

WFB
CAT TOOL - SHOW
TARGET VIEW
MOBILE VIEW - STEP
OF CAT GAME

WFB
LANGUAGE PAIRS C
INSTEAD OF COLLECT

GAME
BASED REWARDS
SCREEN UPDATE

GAME / PROFILE
TEXT REWARDS
COLLECTIBLES (ITEMS
TEXT REWARDS)

Game
Touch based / clearly
change (sounds)

Game
Sound in feature
loop in video to
hand

GAME / LOCAL
REDS ON WINDOWS
CONFIGURATION
(LEADERBOARD
TRACKING)

GAME - REWARD
CALCULATION
TO BEAT
(OBTAIN)

AUTH / API
authentication method

GAME #1
kiki's conversation

GAME
TEXT BUBBLES
FOR CHARACTERS

CAT
VIEW

CAT-TOOL
VIEW #2
☺

STICKERS
ON
GAPS

VISITKA
☺

PILTIE
DRAINED
LIVED ☺

GAME
User profile screen
design

Game
kiki's board screen
design

WFB
CHARACTER
LIST

WFB
VISITKA

WFB
PILTIE
DRAINED
LIVED ☺

WFB
RESPONSIVE
WEB

10.11
Martin

WFB
CAT TOOL - SHOW
TARGET VIEW
MOBILE VIEW - STEP
OF CAT GAME

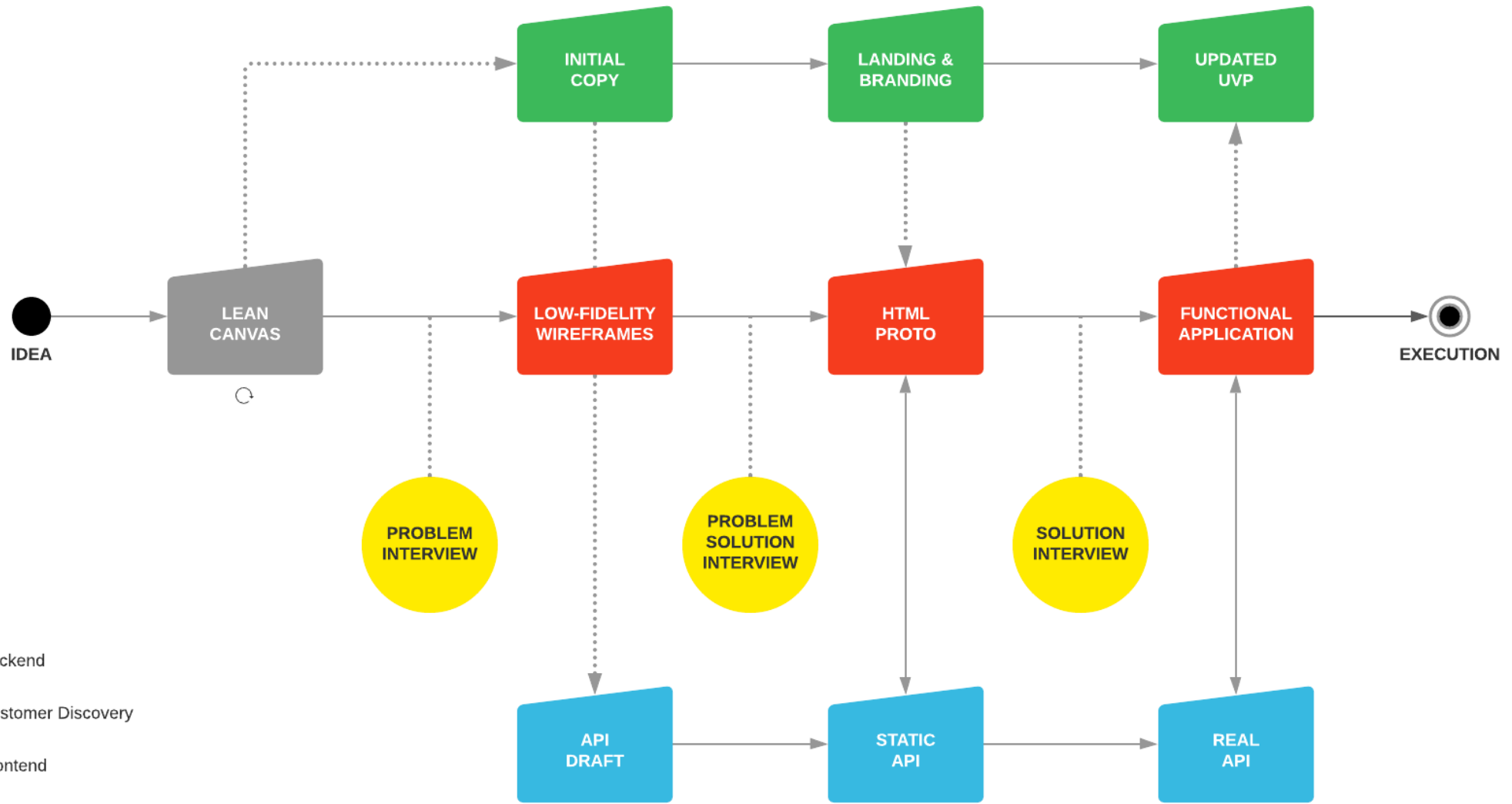
WFB
LANGUAGE PAIRS C
INSTEAD OF COLLECT

KEEP

HOW IT
WORKS
(WIM?)
FIX ☺

WFB
THAT'S IT
DESIGN

WFB
LANGUAGE PAIRS
PAIRS
☺
james
Paul



- Backend
- Customer Discovery
- Frontend
- Marketing
- Single Source of Truth

References

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Thank you!