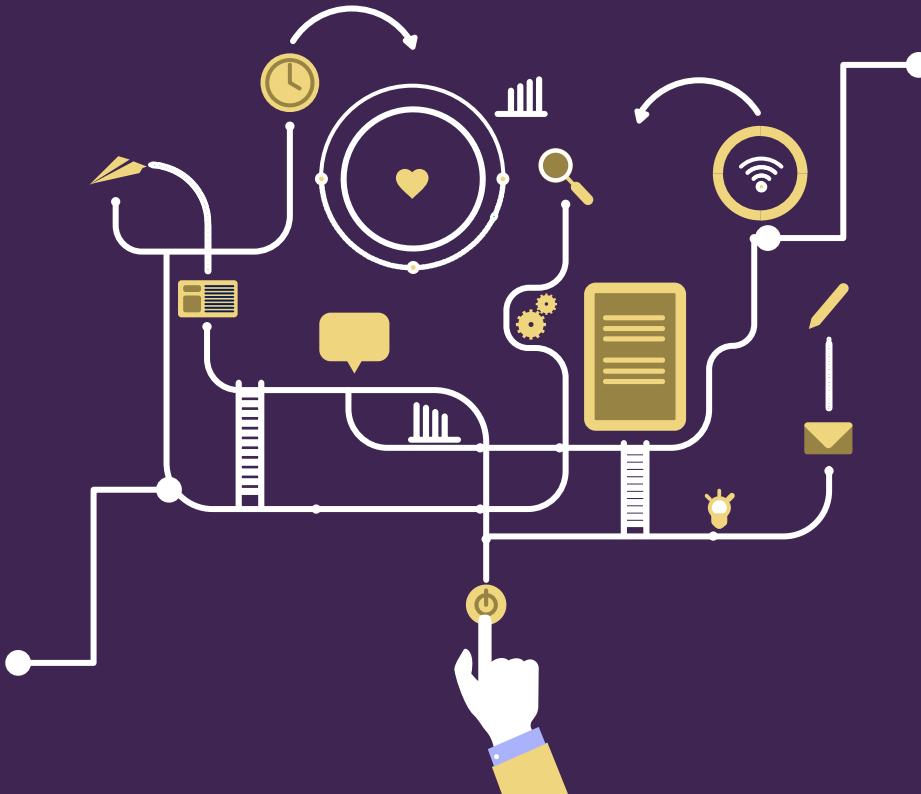




How We Build Digital Tools

at Harvard's Growth Lab

WHO WE ARE



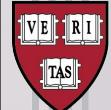
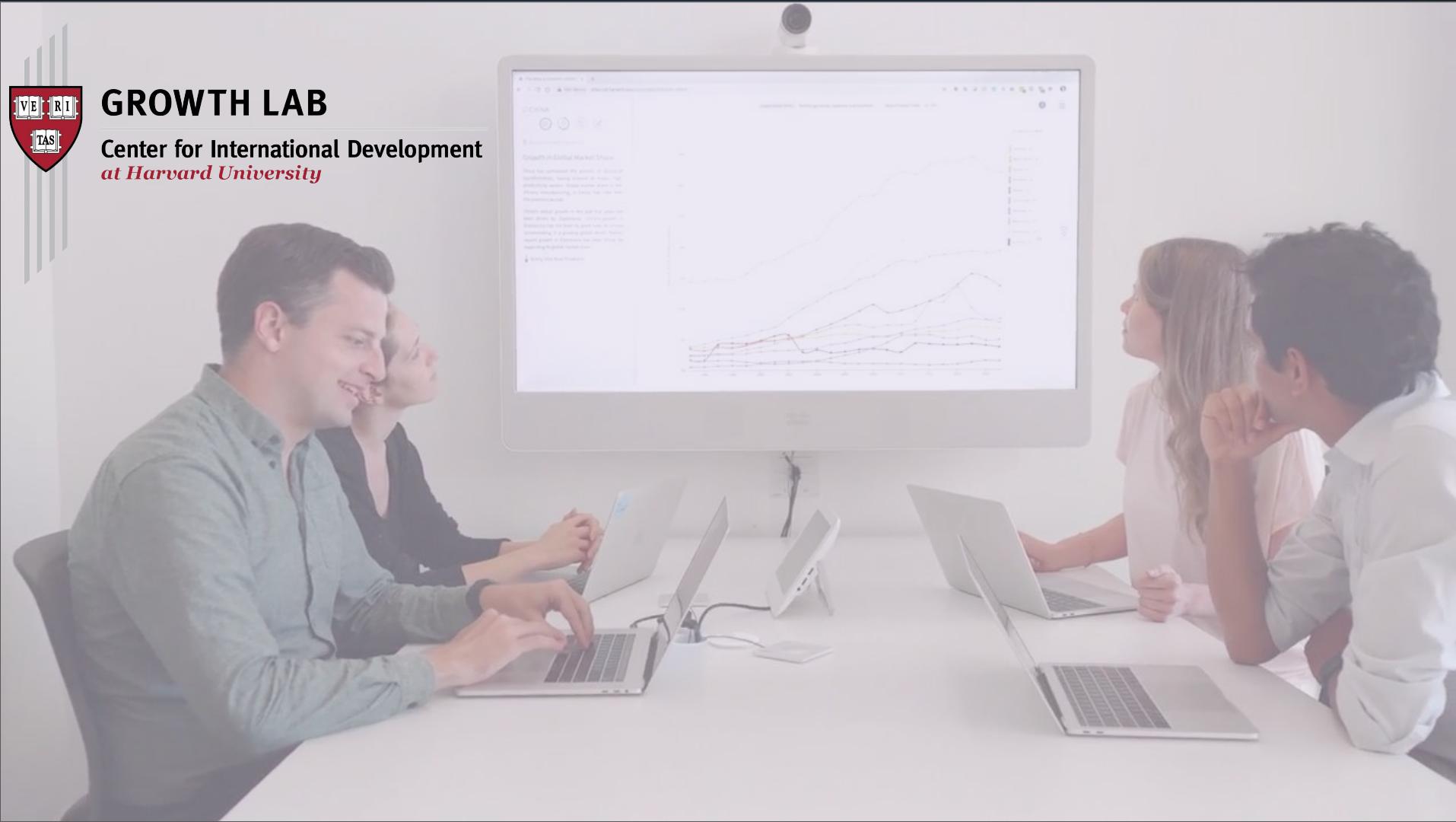


GROWTH LAB

Center for International Development
at Harvard University

At the Growth Lab we ask,
“Why do some cities and
countries grow, while
others do not?”

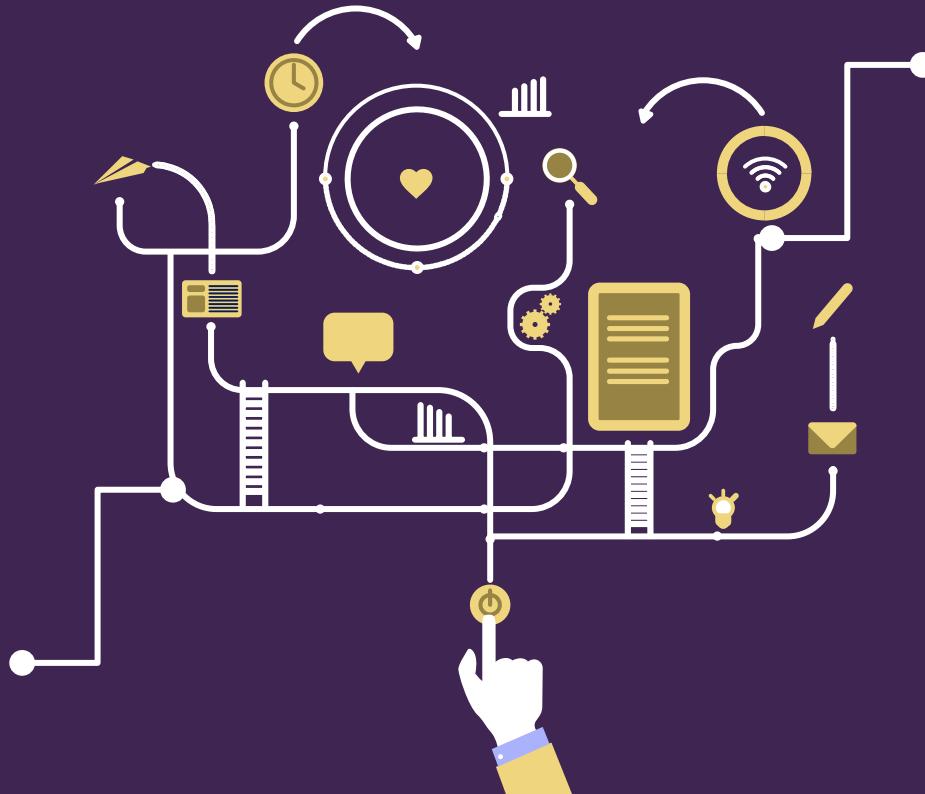




GROWTH LAB

Center for International Development
at Harvard University

WHAT IS AGILE?



A wide-angle, high-angle shot of a massive aircraft fuselage being assembled inside a massive industrial hangar. The fuselage is light blue and white, and it's surrounded by complex steel trusses and scaffolding. Numerous workers in safety vests and hard hats are scattered throughout the scene, some on the floor and some on elevated walkways and platforms. The floor is a light-colored concrete with yellow safety markings. In the background, other parts of the aircraft and more industrial equipment are visible.

THIS
BETTER
WORK

`export-growth-dynamics-text = { SENTENCE_CASE($country-name) } has seen a {`

`$growth-classification ->`

- `[Troubling] troubling`
- `[Static] static`
- `*[Mixed] mixed`
- `[Promising] promising`

`} pattern of export growth, with the largest contribution to export growth coming from {`

`$highest-export-complexity ->`

- `*[high] { $second-export-complexity ->`
- `*[high] high`
- `[moderate] high and moderate`
- `[low] both high and low`

`}`

- `[moderate] { $second-export-complexity ->`
- `*[high] moderate and high`
- `[moderate] moderate`
- `[low] moderate and low`

`}`

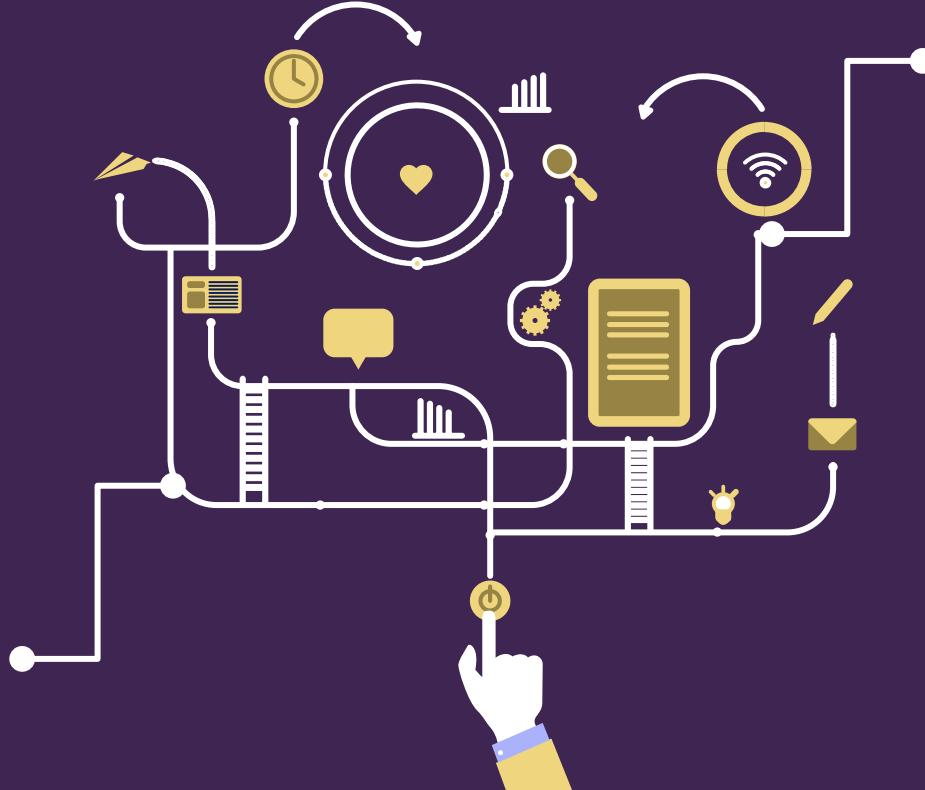
- `[low] { $second-export-complexity ->`

THIS MIGHT WORK

WHAT IS AGILE?

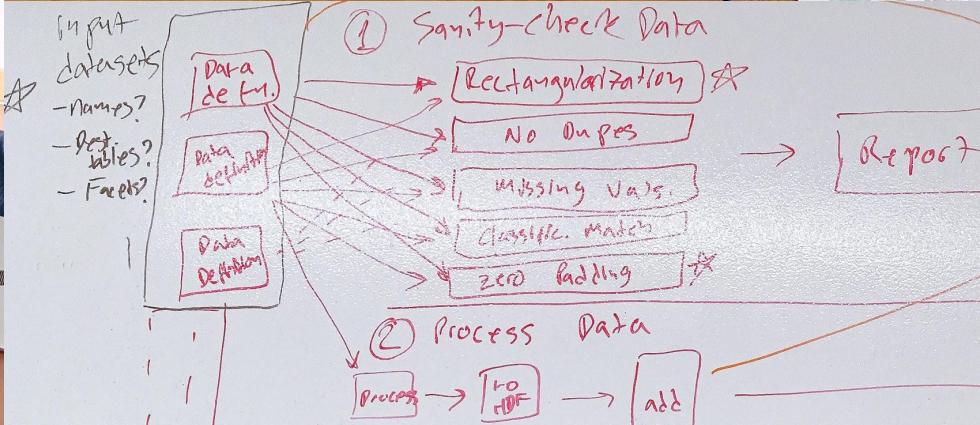
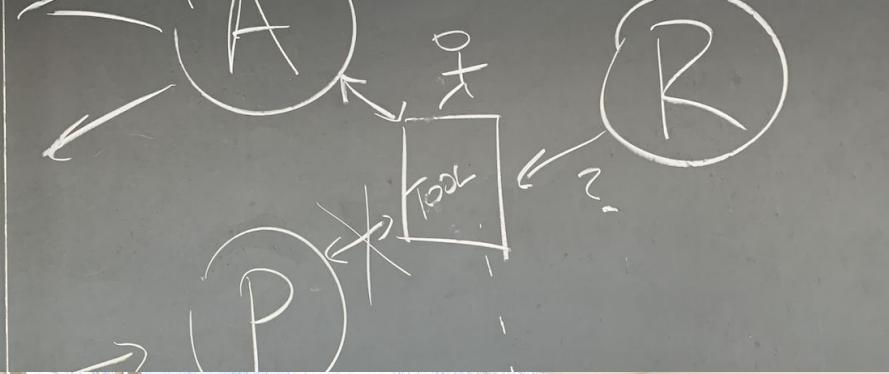
Agile is a product-agnostic framework used to manage complex projects that have **dynamic** and **non-linear** characteristics and where the cost of evolution and **iteration** is relatively low.

AGILE AT THE GROWTH LAB

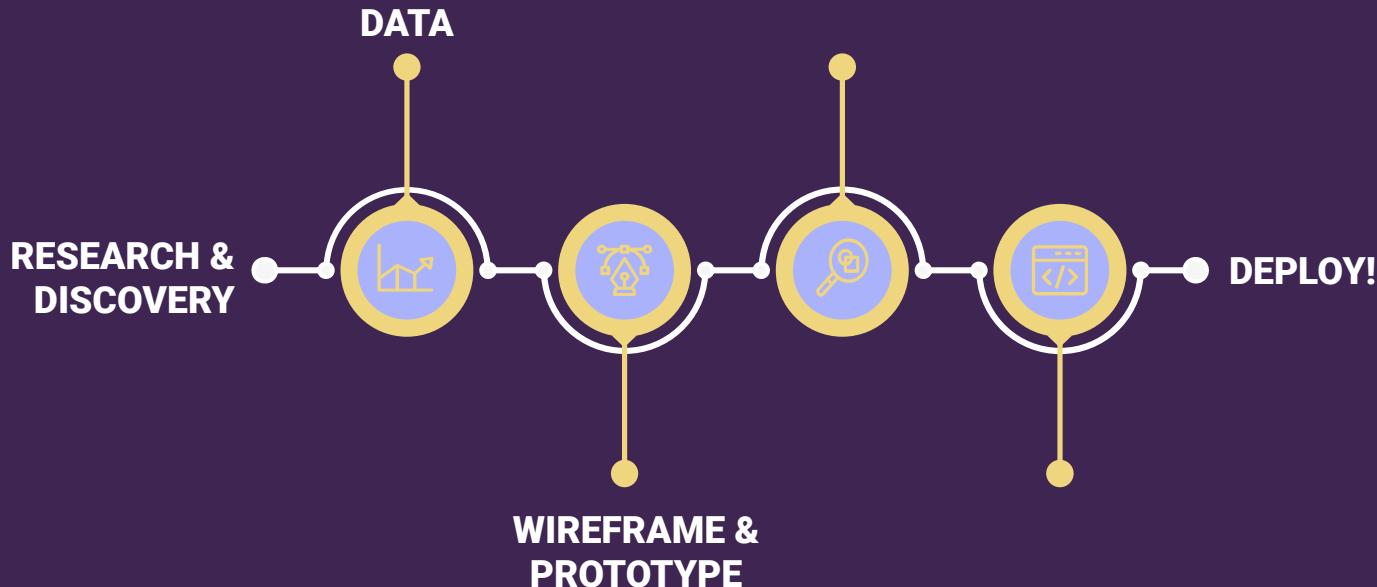


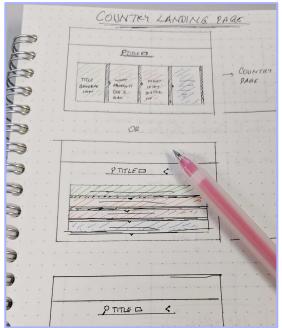
DEVELOPMENT PHASES



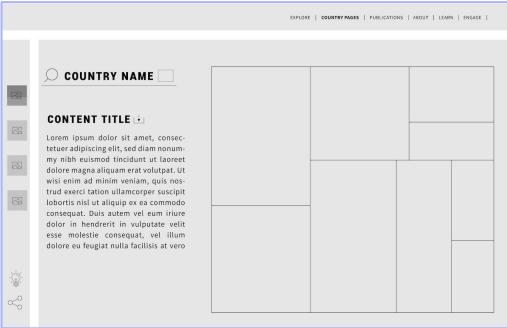


DEVELOPMENT PHASES

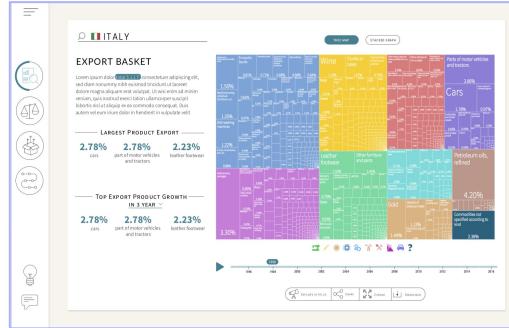




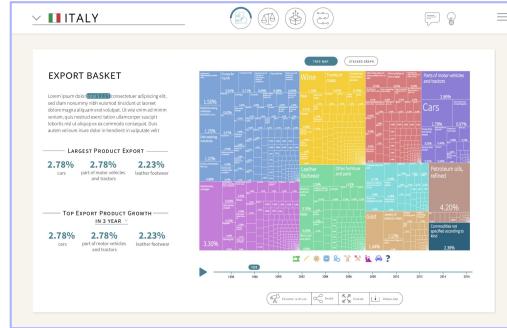
Iteration #1



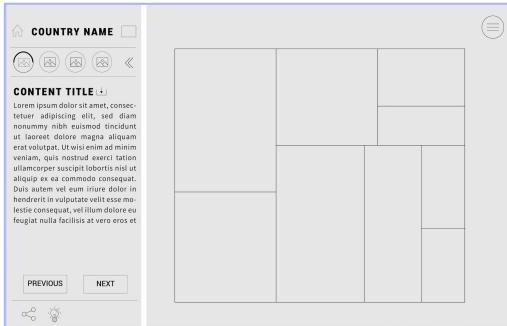
Iteration #2



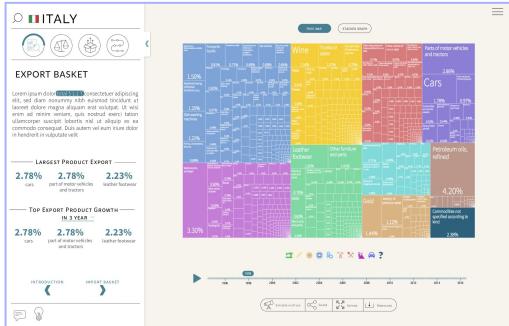
Iteration #3



Iteration #4



Iteration #5

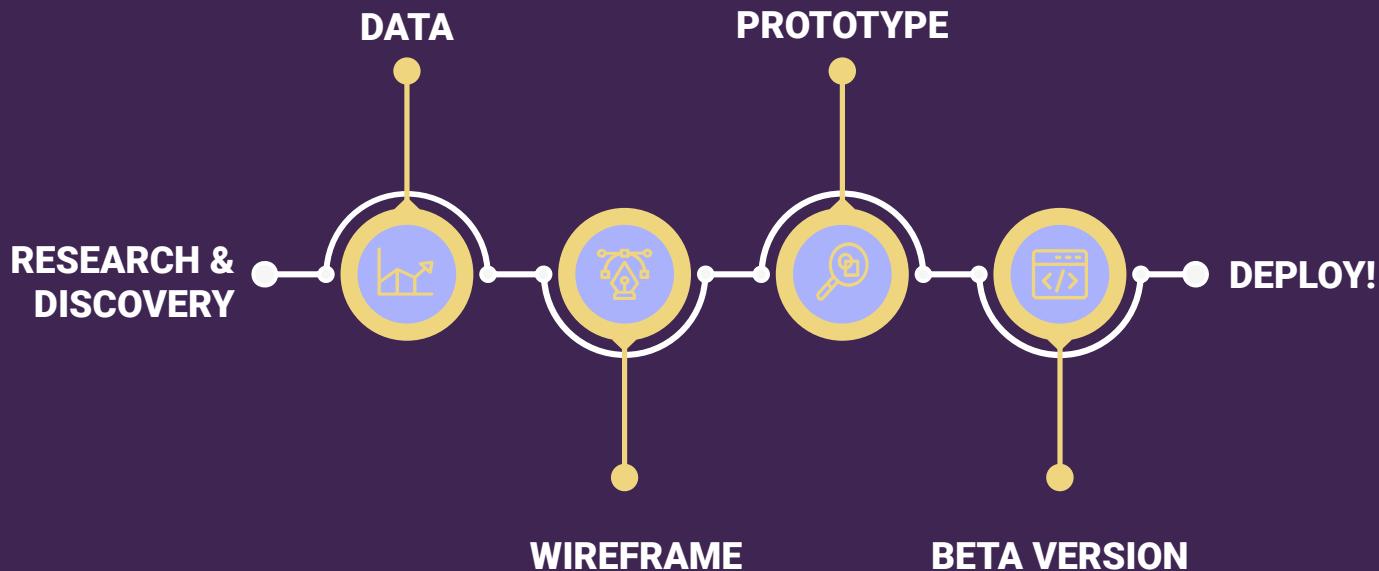


Iteration #6

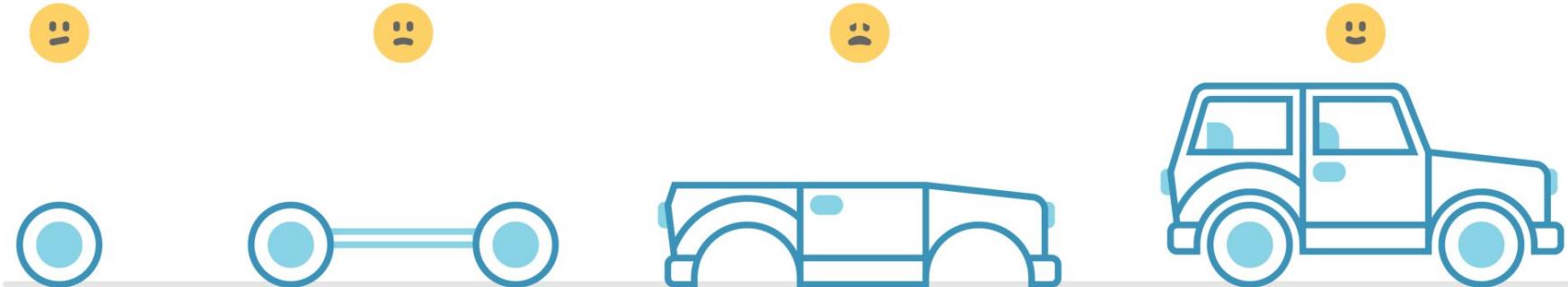


Iteration #7

DEVELOPMENT PHASES



Don't build a product like this. Success or failure is only discovered at the end.

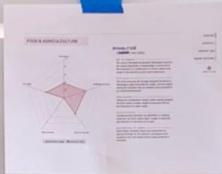
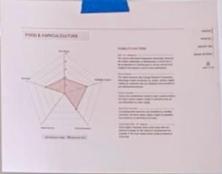
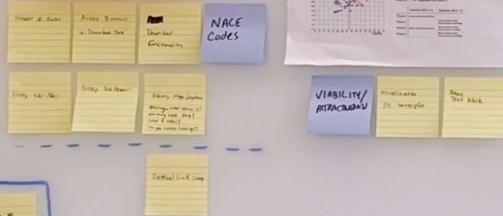


Build a product like this. Deliver small iterations of value based on learning & feedback

- PSWD
 - Basic (Jordan) → Backend auth.
 - Full Page (authoriz'n). pswd.
 ↗ per page pswd.

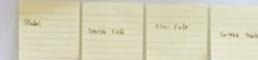
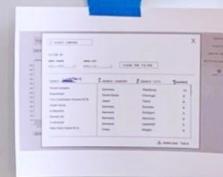
* ATLAS

GLOBAL FEATURES



pswd - blnd. ↗

* ATLAS



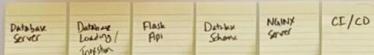
NACE

↳ 21 sections A → Y
ID: 01-99

↳ 88 divisions 01-99
ID: 01-99

↳ 272 groups 01.1-99.0
ID: 01.1-99.0

BACKEND/ARCH COMPONENTS



FDI DATA

- SERVER
- PASSWORD
- DOWNLOADS

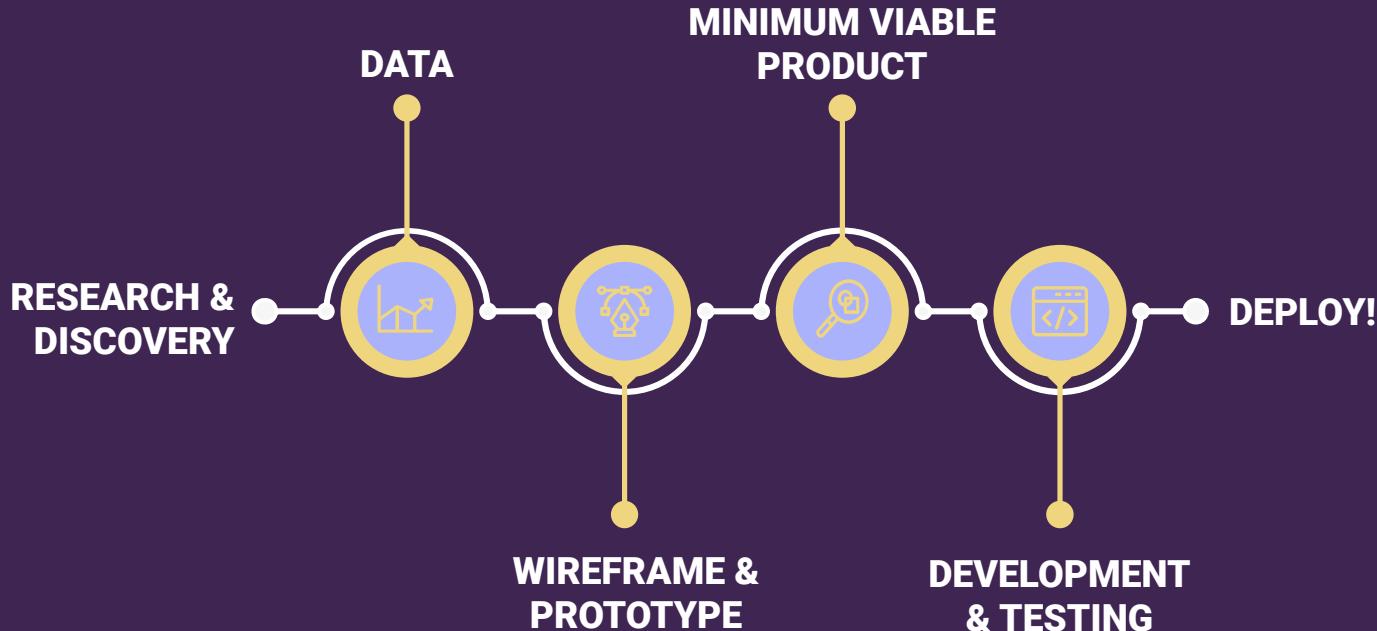
①

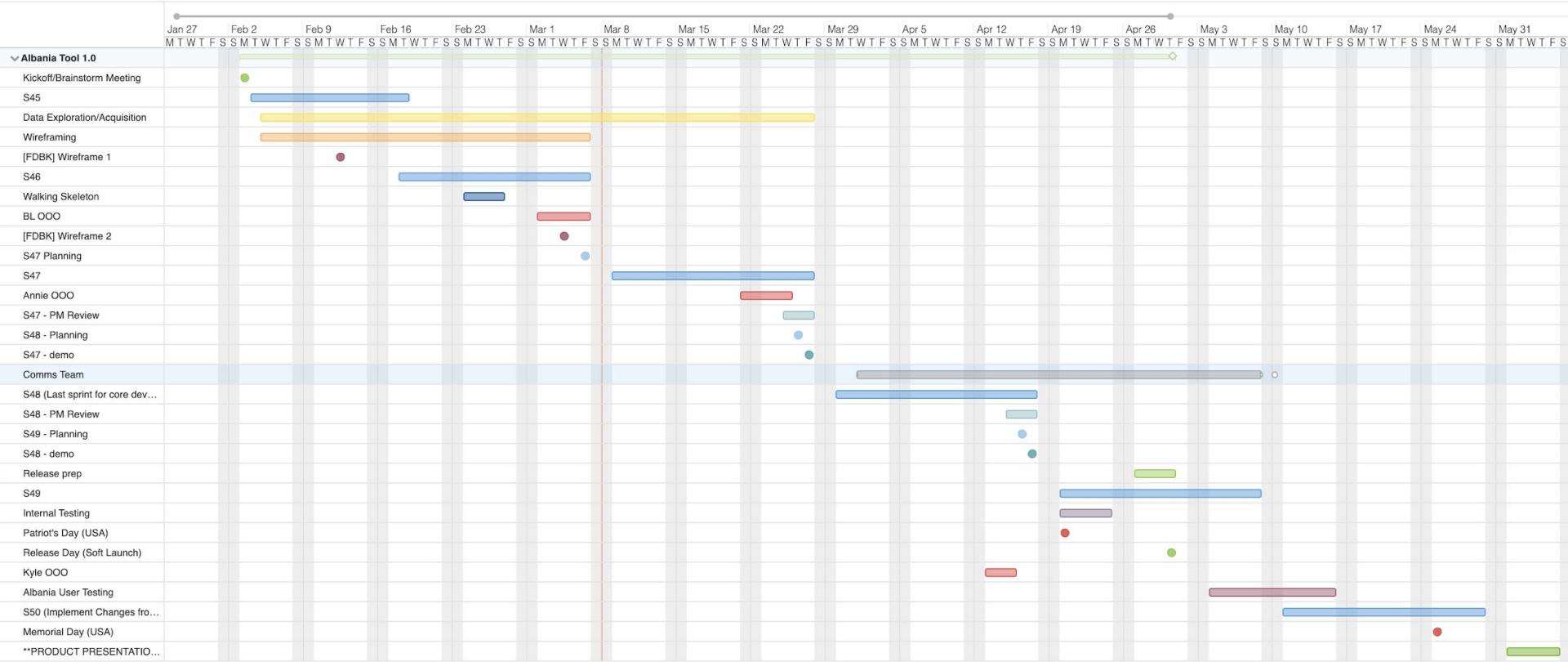


②

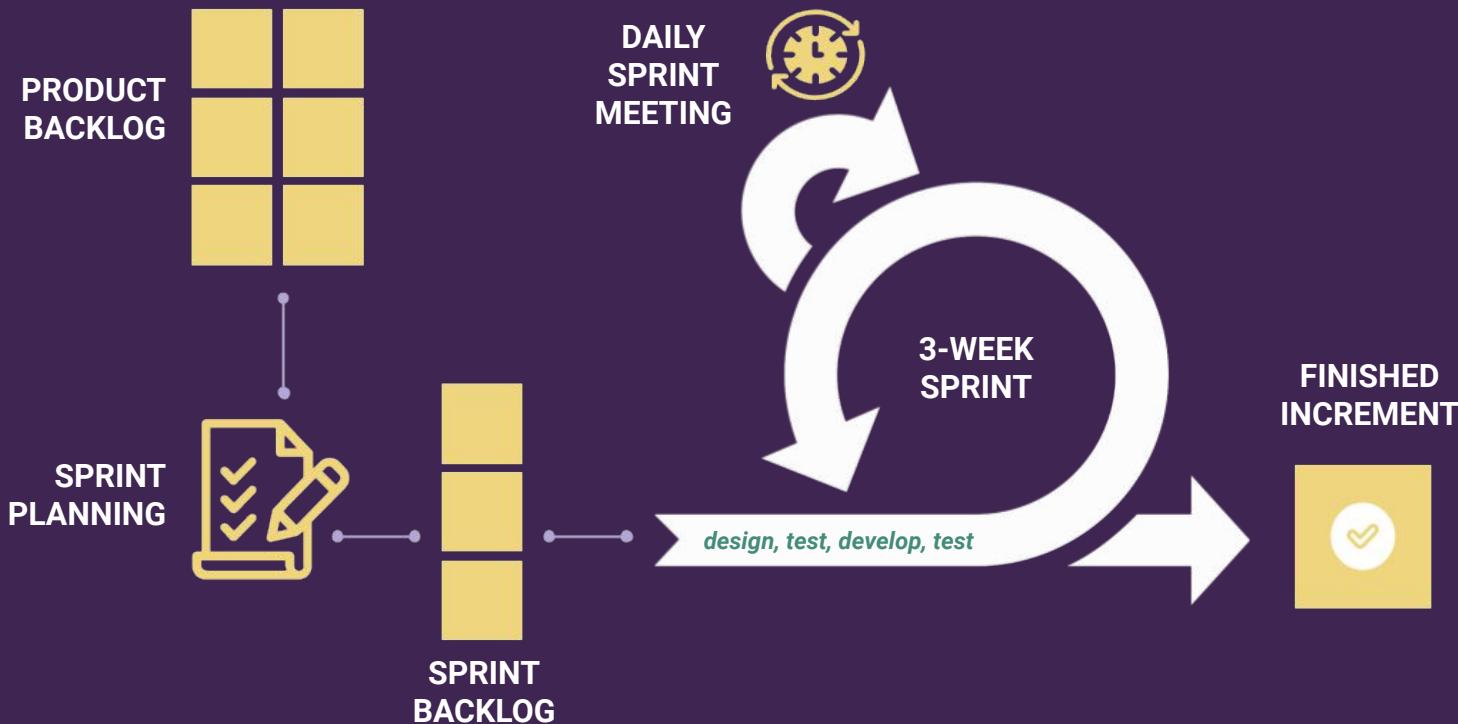


DEVELOPMENT PHASES

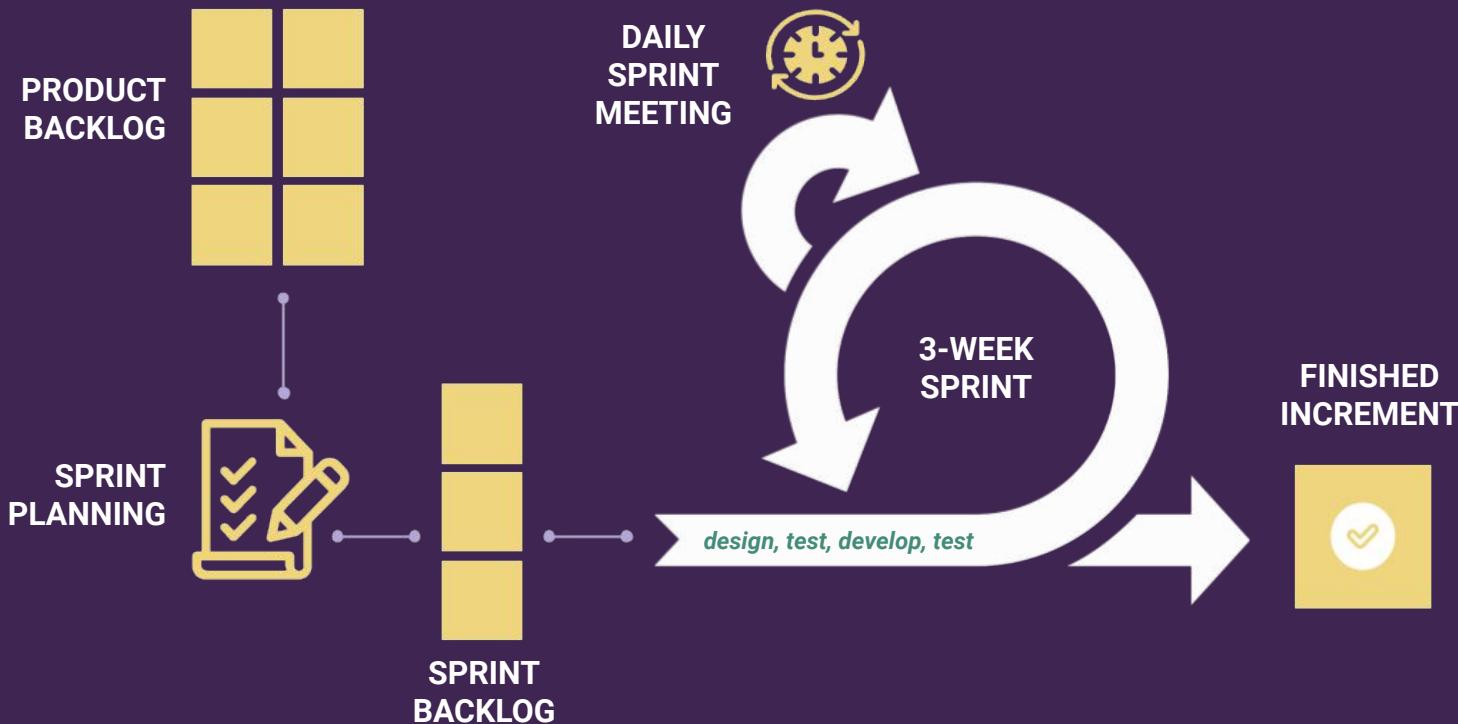




OUR AGILE PROCESS



OUR AGILE PROCESS



A feature (or user story) is part of the product backlog that may go into sprint production.

A feature contains requirements that need to be fulfilled before it is considered "done".

Requirements are assigned time estimations

Feature

IA-514 · Created by Annie White on Nov 5, 2019

New Explore Panel

Status: For PM Review · Release: IA - v4.0 Updated Explore Workflow · Progress: 66% completed

Requirements

Requirement ID	Description	Status
IA-514-17	Adapt 'search in viz' text and icon	Under consideration
IA-514-28	Create document with all logic behind Viz Titles	Under consideration
IA-514-20	[FIX] Change glossary pop-up button to 'close'	In Design
IA-514-4	Implement new tooltips for Explore	In Design
IA-514-26	[FIX] Various responsive/spacing issues	Ready to develop
IA-514-23	[FIX] Make consistent styling for Glossary, Data Notes, Share, DL pop-ups	Ready to develop
IA-514-15	Visualization Title Changes	For PM Review
IA-514-24	[FIX] Feasibility y-axis label shade to grey	For PM Review
IA-514-22	[FIX] Too many shades of grey throughout	For PM Review
IA-514-19	[FIX] Behaviour when country & prod are cleared out	For PM Review
IA-514-27	[FIX] Keep search in viz menu open	Ready to ship
IA-514-12	Various Explore Copy Edits	Ready to ship
IA-514-18	[FIX] "Explore Country's Profile" button open in new tab	Ready to ship
IA-514-21	[FIX] Search in Viz icon needs to be a mag glass for all viz	Ready to ship
IA-514-25	[FIX] In Safari, viz labels are overflowing	Ready to ship
IA-514-6	Implement Country Profile links on Explore Side panel	Ready to ship
IA-514-29	Add 'X' close button to Network and Feasibility tooltips	Ready to ship
IA-514-16	Implement Explore styling revisions Round 2	Shipped
IA-514-13	Implement Explore styling revisions Round 1	Shipped
IA-514-9	[DESIGN] Options for "Other" ? icon	Shipped
IA-514-10	[DESIGN] Revise viz how-to-read element	Shipped
IA-514-8	[DESIGN] 2-tab option for Explore panel	Shipped
IA-514-14	[DESIGN] Explore panel design revisions	Shipped
IA-514-2	Implement new Explore styling	Shipped
IA-514-5	Build out all initial scenarios for Explore Redesign right panel	Shipped
IA-513-2	Implement copy + viz for how-to-read feature	Shipped
IA-514-11	Create how-to-read graphics	Shipped
IA-514-1	Create new grid layout	Shipped
IA-514-3	Determine/implement responsiveness options	Shipped
IA-514-7	Setup second staging for Explore redesign branch	Shipped

These requirements create this feature!

BUILD VISUALIZATION

SETTINGS

Please select one:

COUNTRY

Brazil (BRA)

PRODUCT

TRADE VISUALIZATIONS

Exports Imports

Tree Map Geo Map Over Time Global Share

By Product By Partner

Select a product

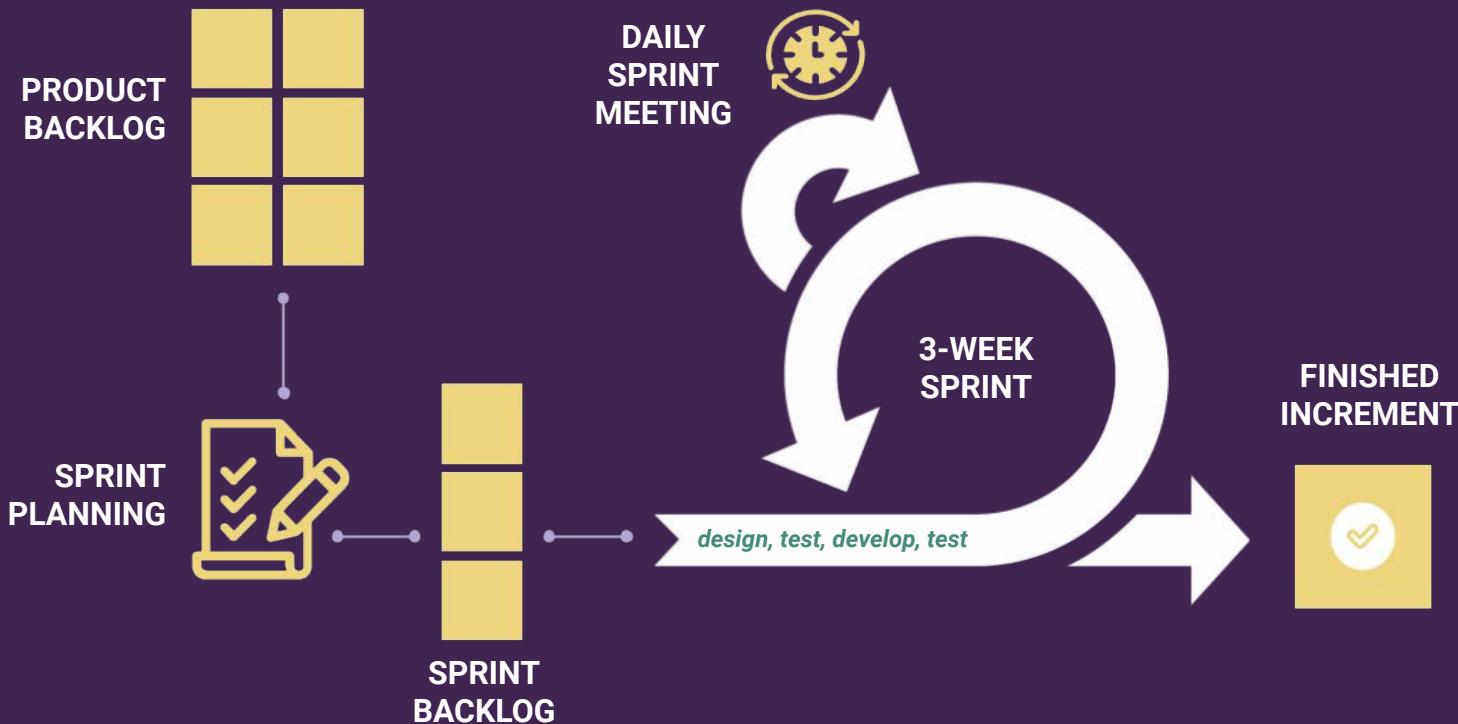
COMPLEXITY VISUALIZATIONS

Product Space Feasible Opportunities Ring Chart

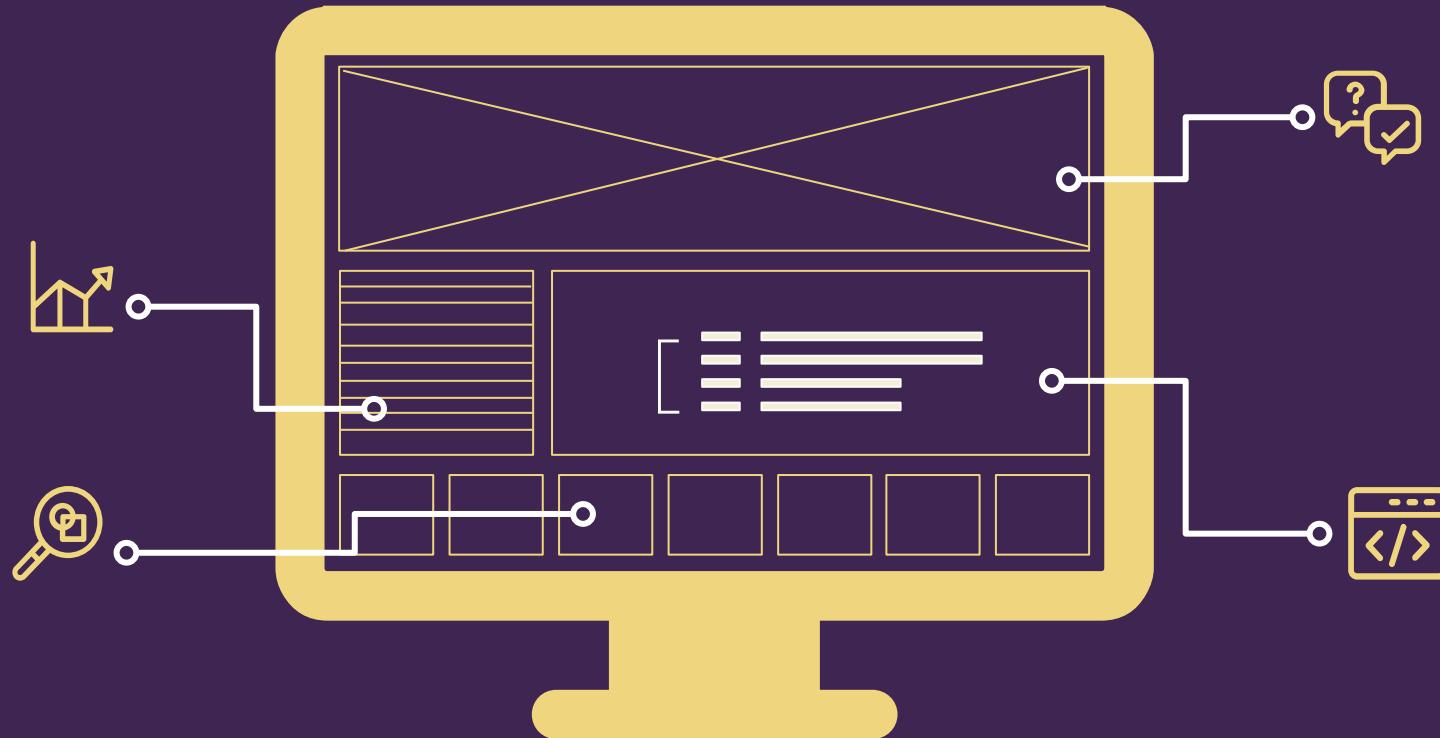
Product Tree Map

The tree map displays the breakdown of exports or imports by country or product, in a given year.

OUR AGILE PROCESS



USER TESTING





I think that I would need the support of a technical person/guide to be able to use this system.

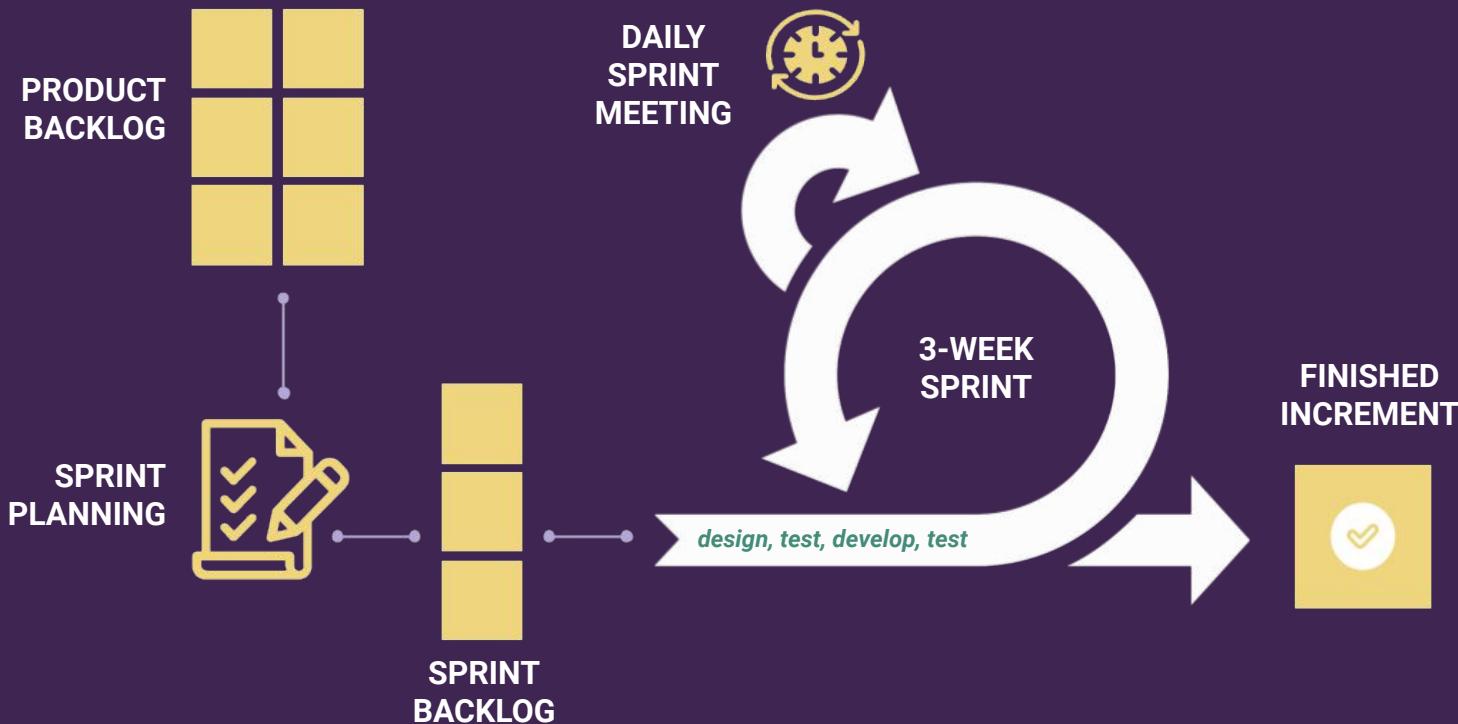
9 out of 9 people answered this question



OLD DESIGN - AVERAGE 3.3 out of 5 NEW DESIGN - AVERAGE 4.1 out of 5



OUR AGILE PROCESS



FINAL REMINDER



“[making software] is nothing like building a house. It’s more like building the first house ever in the history of houses, with a pile of rusty nails and your bare hands, in a non-stop tornado. It’s different every time, and it’s astonishingly complex, non-linear, and unpredictable.”

- *Brent Simmons*



THANKS!

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atlas.cid.harvard.edu