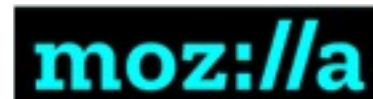


Project Lighthouse and stuff we learnt along the way

David Teller



Connected Devices

About us

- We're Mozilla Connected Devices.
- Internal non-profit startups.
- We care about users.
- ... and we're trying to ship products.



Step 1.

Idea to prototype

Sometimes, a solution...

- Cheap Cameras + CPU + ? = cool
- Cheap Cameras + CPU + surveillance \neq cool

...meets a problem

- ~285 million visually impaired people (source: WHO);
- many need help to shop/ recognise household items;
- need a device to help you live independently? rake \$2,000+.
- can we do something cheap, open source, open hardware?



Let's help vision-impaired people recognise household items



Ingredients



+



+



+



+



x2

Ingredients (2)



Full disclosure: These are not our real users.

If it hasn't been tested by users,
it doesn't work!

Results of step 1

- This device will definitely fill a need
- ...if it remains cheap;
- ...and simple;
- ...and has a good form factor.

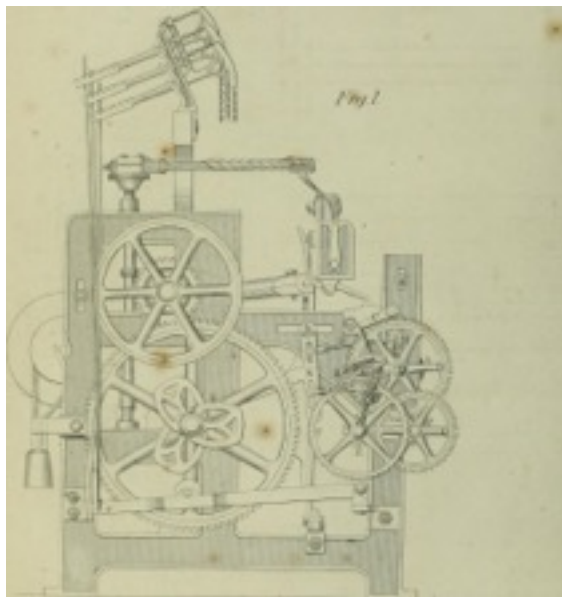


Step 2.

Prototype to product

It can't be hard, can it?

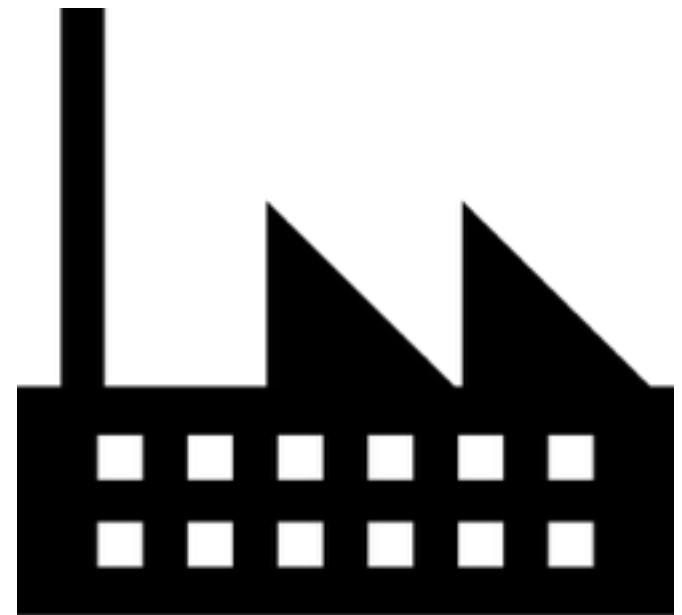
Ingredients



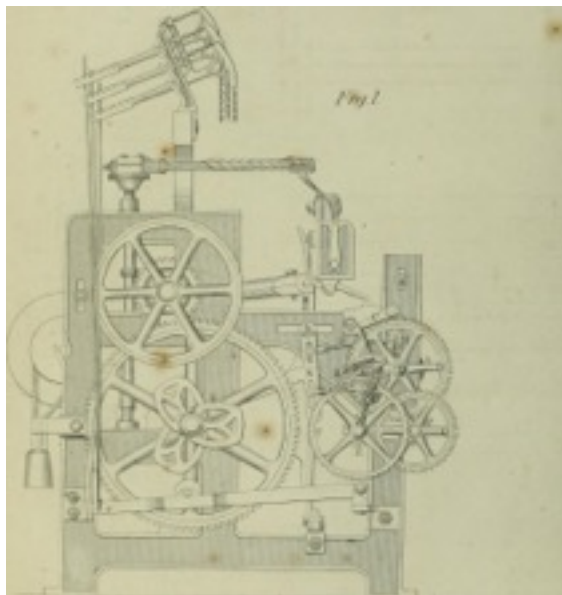
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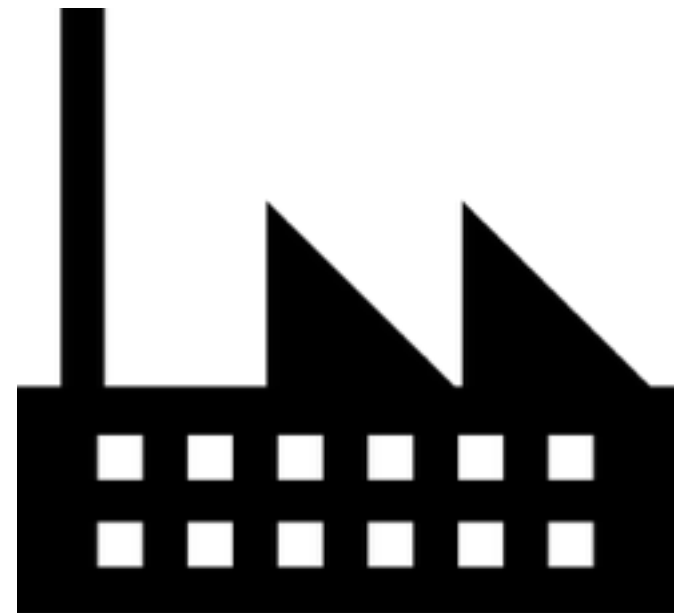
Ingredients



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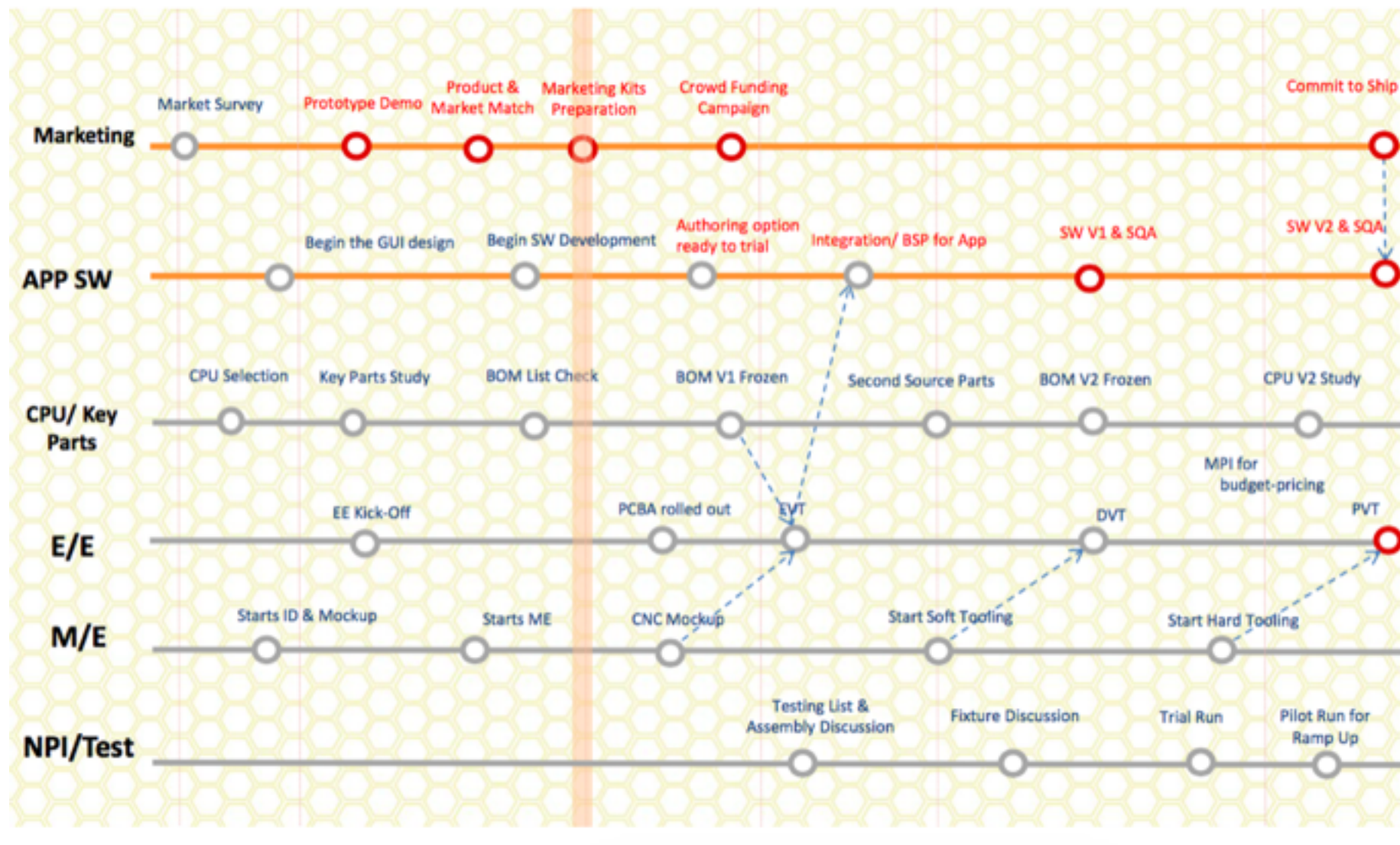


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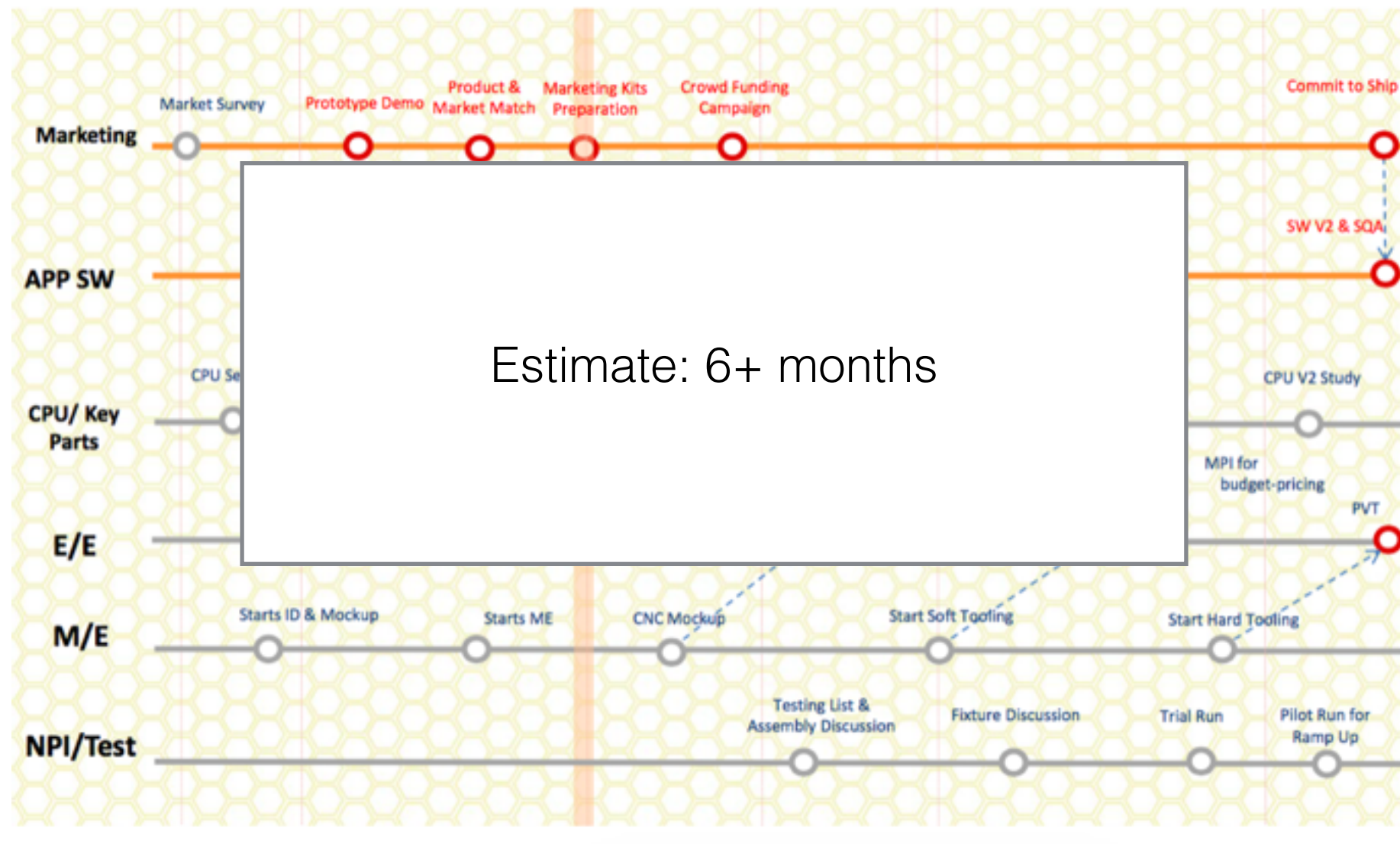
Process!

YES, MUCH HARDER AND MORE COMPLEX



Process!

YES, MUCH HARDER AND MORE COMPLEX

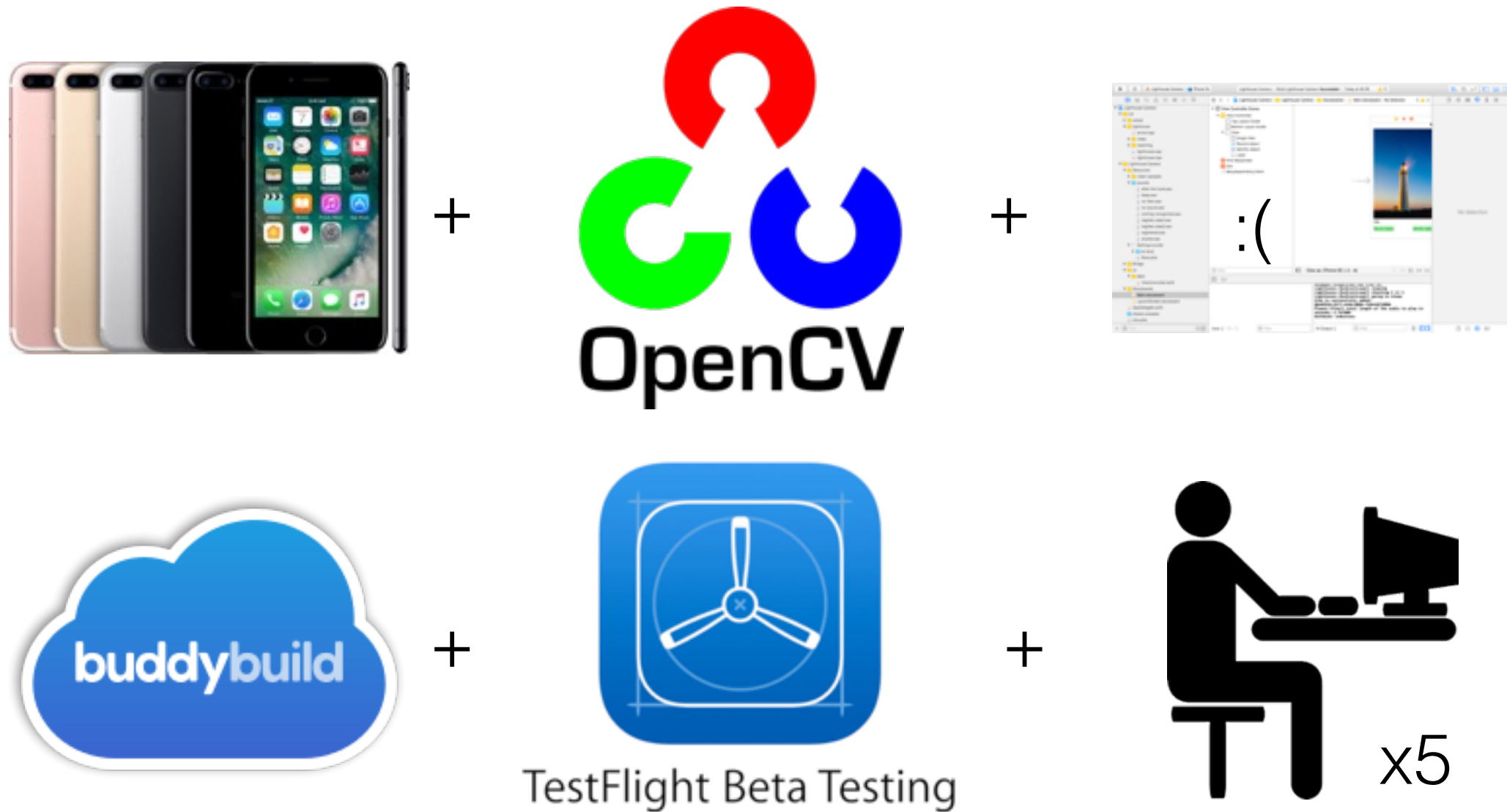


How do you iterate without devices?

- Use hardware *that people already own* (smartphone, tablet, tv, ...).
- Find out which hardware *your users have*!



Ingredients



Our next steps

Soft prototype

- Iterate on Computer Vision, with real use cases.
- Iterate on Usability/Accessibility, with real users.
- Iterate on Features, with real users.
- Make it social: Connected Device doesn't need to be Big Brother-only!

Hard prototype

- Custom devices are expensive, avoid bankruptcy!
- Iterate on form factors with “fake” devices.
- Negotiate prices down.

And lots more!

- Insurances.
- Lawyers.
- Non-profit associations.
- Kickstarter?

To be continued

Maybe at FOSDEM 2018

<https://github.com/project-lighthouse>

[https://discourse.mozilla-community.org/c/connected-devices/
project-lighthouse](https://discourse.mozilla-community.org/c/connected-devices/project-lighthouse)