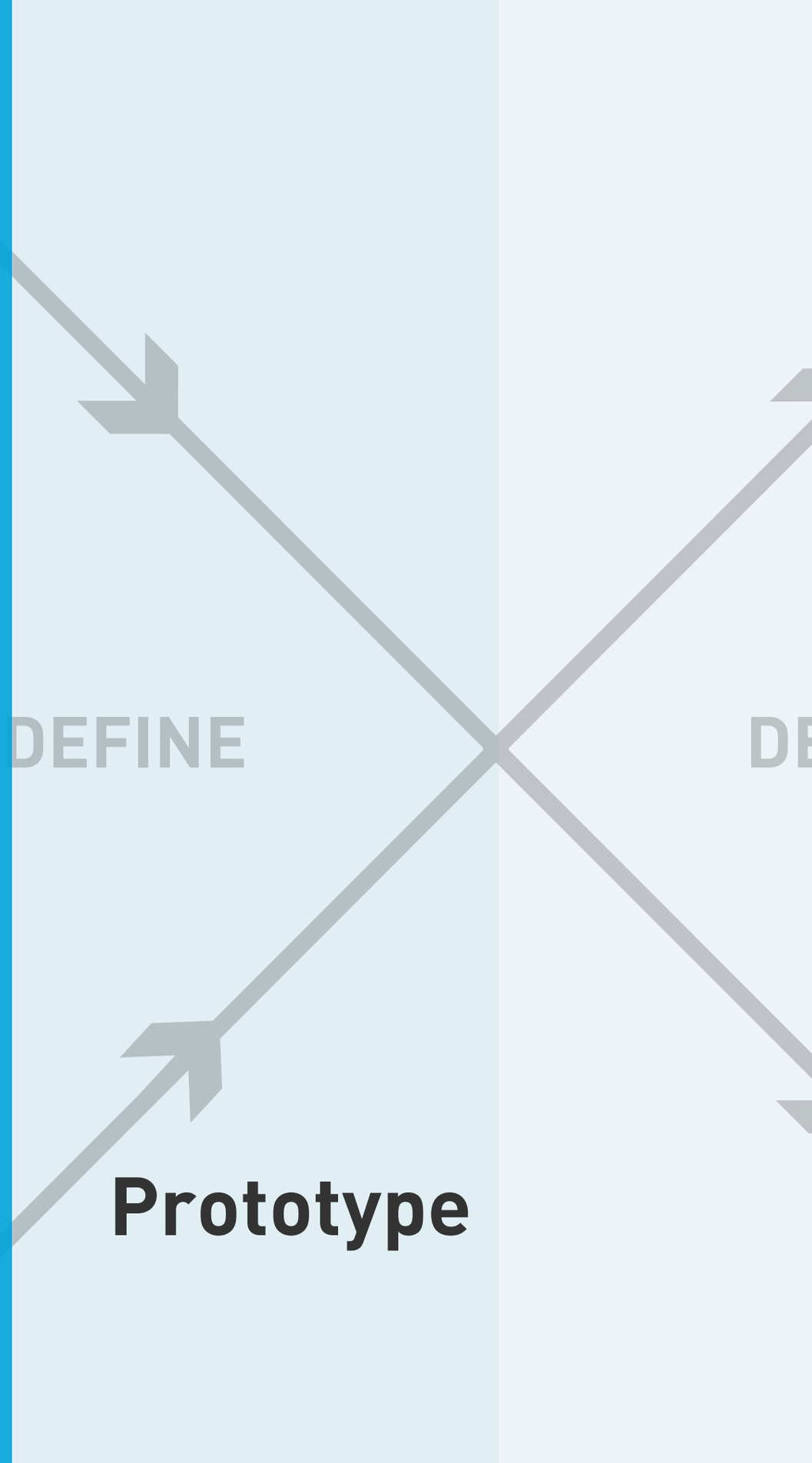
Overview

Tell a story

Make it tangible



Why Prototype ?

Prototypes help to validate the value of new ideas and test initial assumptions.
Prototypes can also help to convince others and yourself.

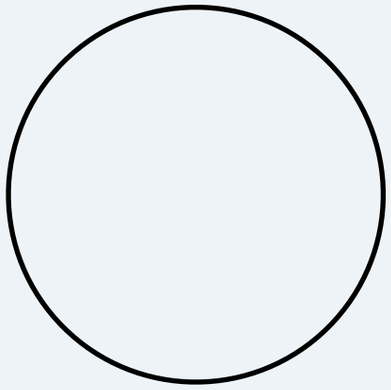
Benefits:

Low resource and time investment

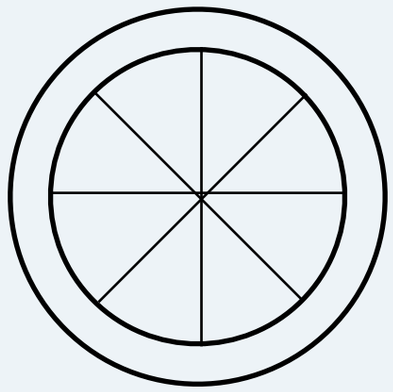
Faster feedback and a participatory approach

Early Validation in the development life-cycle

Fidelity v. Resolution



low resolution
low fidelity



high resolution
low fidelity

high resolution
high fidelity

source: [5]

Low Fidelity

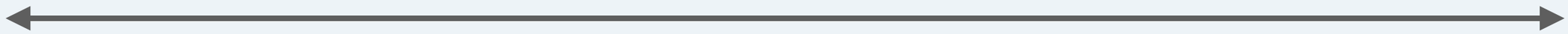
High Fidelity

Open Discussion	Sharp Opinions
Prompting Required	Self Explanatory
Quick and Dirty	Deliberate and Refined
Early Validation	Concrete Ideas

source: [5]

Low Resolution

High Resolution



Less Details	**More Details**
Focus on core interactions	**Focus on the whole**
Quick and Dirty	Deliberate and Refined
Early Validation	Concrete Ideas

source: [5]

"Just Enough Prototyping"

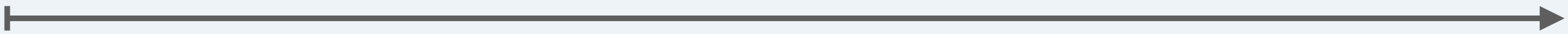
Understand your audience and choose the right level of resolution and fidelity.

Judge the time and resources available.

Go for the easiest and simplest track, don't overdo you prototype for a given context.

Selected Concept

Equipment ? Experience



Time Investment ?

Technical Skills ?

Cost ?

Simplicity ?

Core Function ?

Intro & Pre-Knowledge ?

Industrial Design ?

Interaction Design ?

Tutorials

Physical Computing Intro
https://itp.nyu.edu/physcomp/

Arduino Tutorials
https://www.arduino.cc/en/Tutorial/HomePage

Physical Computing w. Raspberry PI
https://www.raspberrypi.org/learning/physical-computing-with-python/

Adafruit Hacking Tutorials
https://learn.adafruit.com/

Keyboard Hacking Tutorials
http://www.instructables.com/id/Hacking-a-USB-Keyboard/

References:

[1] Buxton, W. Sketching User Experiences, Morgan Kaufmann 2007.
[2] Blom, J & Chipchase, J : Contextual and cultural challenges for user mobility research, ACM Press 2005.
[3] CHI´10 Panel Discussion on User Research, 2010.
[4] Copenhagen Institute of Interaction Design, User Research Workshop 2008.
[5] Jonas, W. A Scenario for Design, MIT Press 2001.
[6] Norman, D. The Psychology of Everyday Things, Basic Books 1988.
[7] Moggridge, B. Designing Interactions, MIT Press, 2006.
[8] Rogers, Y., Preece, J. & Sharp, H. Interaction Design, Wiley & Sons 2011.
[9] Saffer, D. Designing for Interaction, New Riders 2009.
[10] Walonick, D. Survival Statistics, 2004.

source: [3]