Oshman Engineering Design Kitchen

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What is the

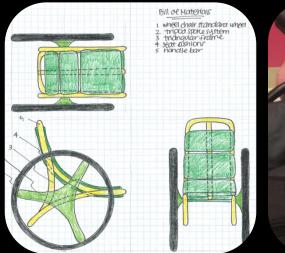


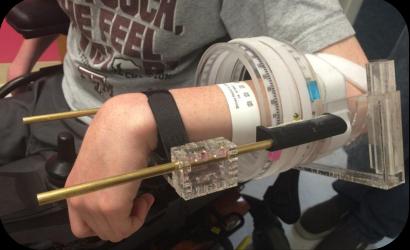


Prototyping is solving problems by creating physical objects.



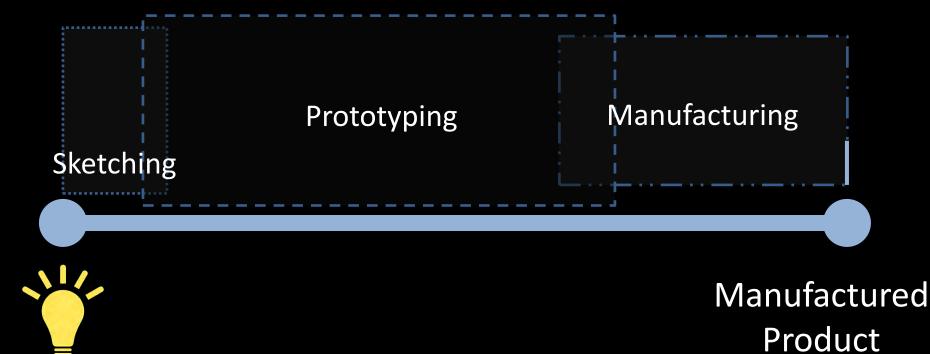


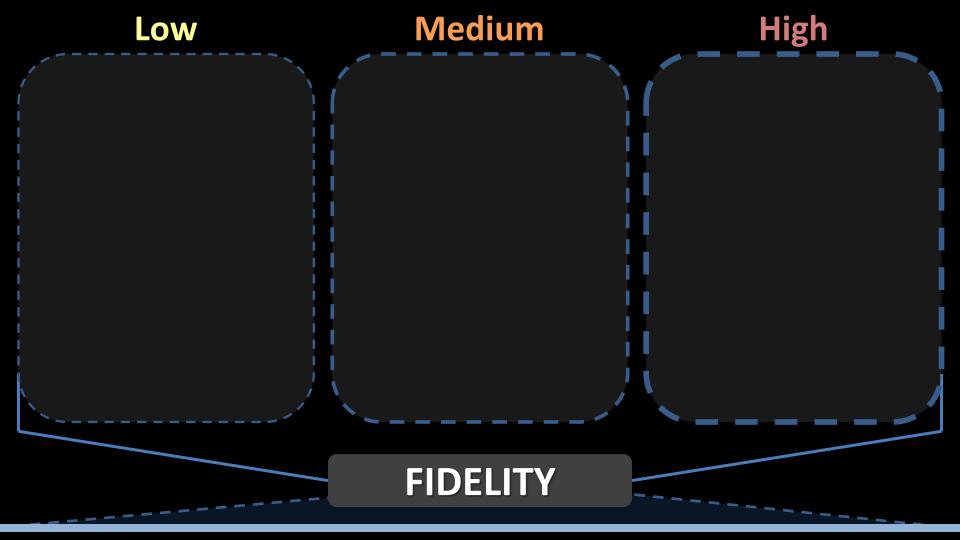






Prototypes, like great ideas, evolve over time.













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Etsy





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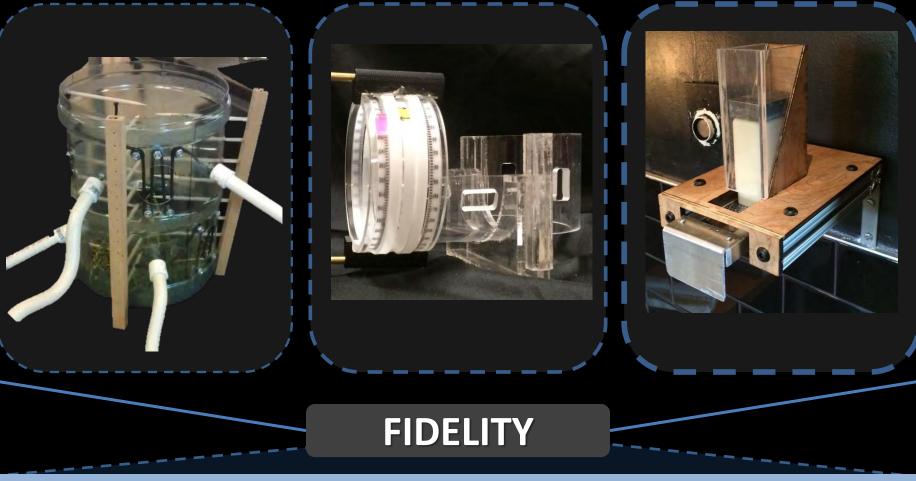












Low

Medium

High

Scissors Tape Glue Hand tools Laser cutters 3D printers Hand tools Power tools Drill press

FIDELITY

3 or 4 Axis CNC Mills Lathes Sheet metal benders Plasma cutters Injection molding Excelling in Medium and High Fidelity Prototyping is heavily dependent upon access to materials and specialized training

Medium

Laser cutters 3D printers Hand tools Power tools Drill press

FIDELITY

3 or 4 Axis CNC Mills Lathes Sheet metal benders Plasma cutters Injection molding







Low

Scissors Tape Glue Hand tools

Excelling in Low Fidelity Prototyping is heavily dependent upon *practical ingenuity* and *creative solutions*











Everyone can use practical ingenuity and creativity to solve problems. It is in us all.

Raw materials empower prototyping.

What are some Raw Materials?





























LOW FIDELITY PROTOTYPING WORKSHOP

- Complete the challenges at each table (in groups or alone)
- You might not get to do everything (this is ok)
- Have fun

Prototyping Maxims

- Prototype quickly
- Prototype to learn
- Always start with rough, or, low fidelity prototype
- "Freely dive into prototyping"
 - When it makes sense
 - When you can't say it in words
 - When there are several options to evaluate
- "If a picture is worth 10,000 words, a prototype is worth 10,000 pictures" David Kelly of IDEO