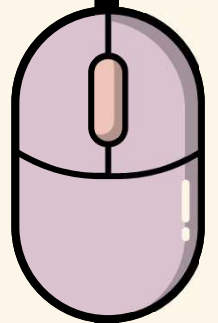


UpLabs

New & Improved Electronics Education Kits

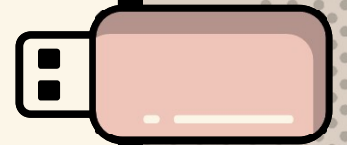


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# Team

Who are the developers of UpLabs?





# Meet the team



**Alex  
Budnik**

3<sup>rd</sup> year  
Electrical  
Engineer

Meet

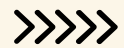


**Anna  
Franchi**

3<sup>rd</sup> year  
Electrical  
Engineer

Meet





# Meet the team



**Katy  
Hildebrant**

3<sup>rd</sup> year  
Electrical  
Engineer

Meet

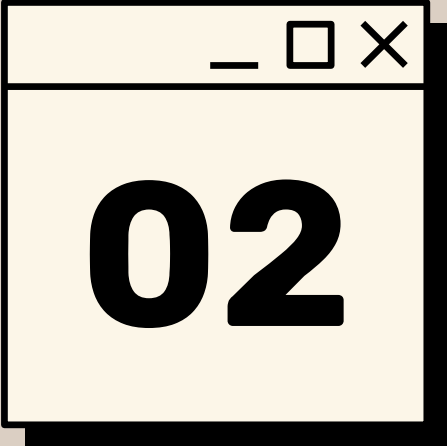


**Neil  
Chapman**

3<sup>rd</sup> year  
Electrical  
Engineer

Meet

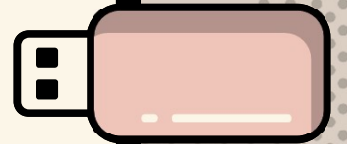




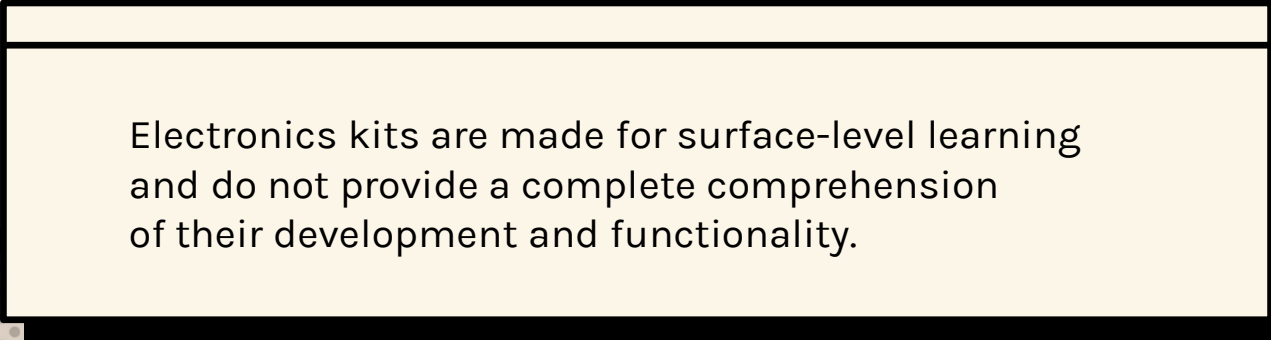
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# Problem



Electronics kits are made for surface-level learning and do not provide a complete comprehension of their development and functionality.





# Problem



## Cause

- Electrical engineering kits don't provide detail behind the content of the kits



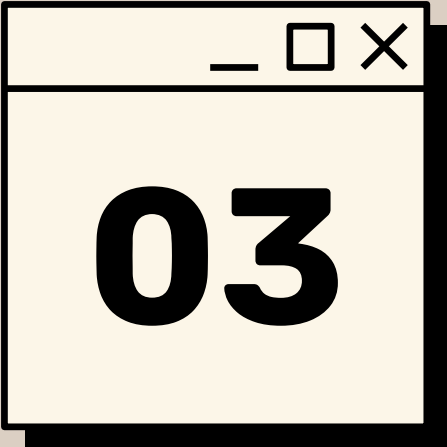
## Effect

- Using kits allows you to build the project, but not understand why and how it works



## Solution

- Provide step-by-step guides that include calculations and explanations to gain practical knowledge



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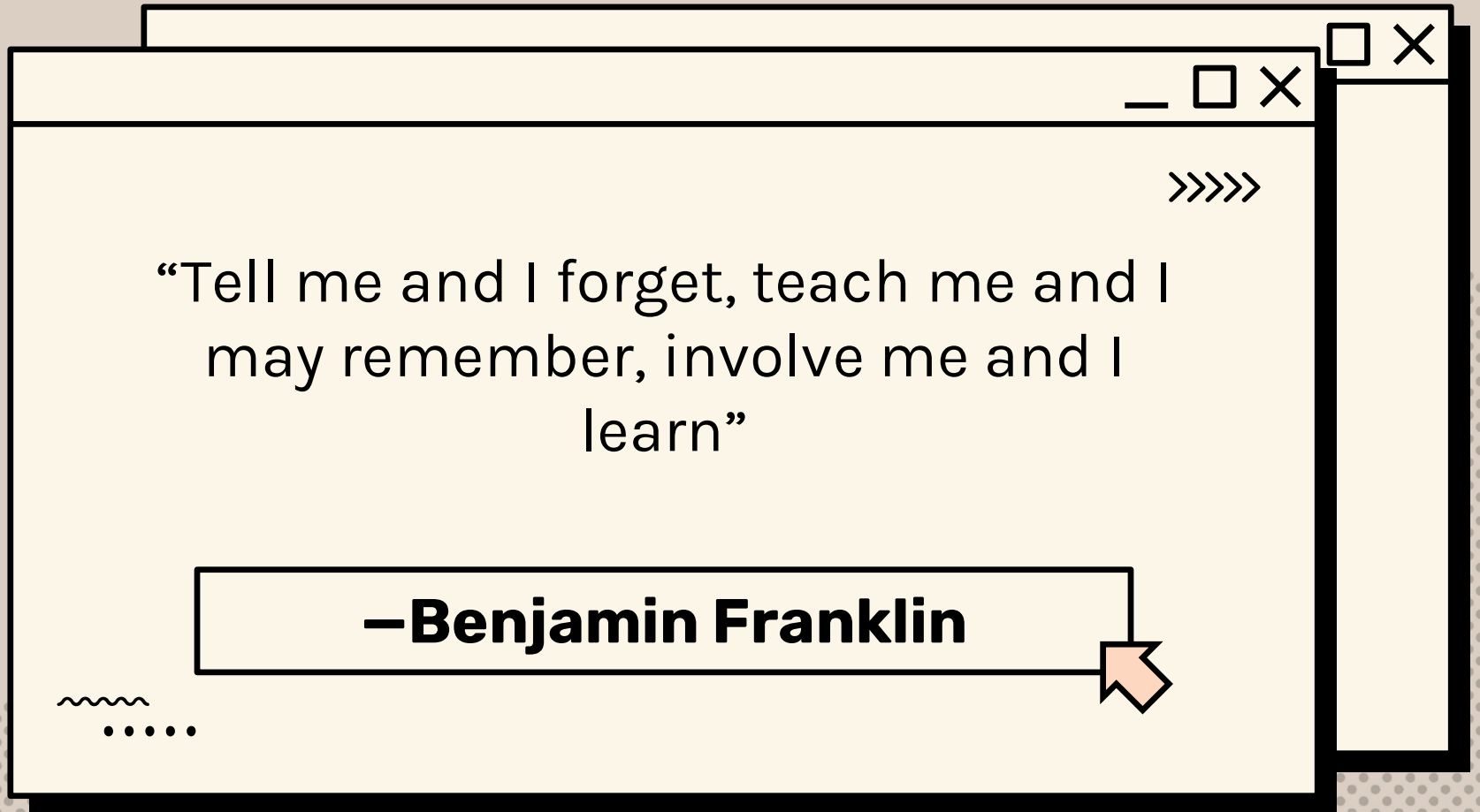
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# Solution

Our intention is to design a lab kit (DIY project) that gives users guidance in gaining a comprehensive understanding of design and engineering.





"Tell me and I forget, teach me and I  
may remember, involve me and I  
learn"

**-Benjamin Franklin**



# Solutions

- Allows buyers to perform/derive calculations on their own
- Explains what each part of the circuit does, why it's important, and how it connects to the other devices within the circuit
- Acts as learning experience, not just build experience
- Fills the gap in the market where kits fail to provide underlying principles and practical knowledge
- Also aims to provide products that can be used after the build process is complete

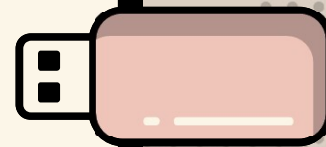


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Product

What will our product look like?





Proposed Kits



Multimeter

Teach basics of Ohm's Law, good measurement-taking practice, and trouble-shooting techniques

Oscilloscope

Teach basics of analog analysis and components, good measurement-taking practice

Transistor Tester

Teach basics of analyzing diodes, MOSFETs, BJTs, resistors, and capacitors

FM Radio

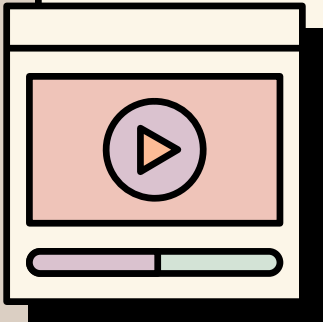
Teach basics of receivers/ transmitters and electromagnetics

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Market Size

Who will be interested in our product?





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281 million

Total Addressable Market – people 12+ in the USA

53 million

Served Available Market – tech hobbyists

12 million

Share of Market – tech hobbyists in 12-24 age range



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06

# Business Model

How will we run UpLabs?





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## **Business Model**

- Primary focus is on students and hobbyists
- Promote products through online advertising and social media channels
- Establish partnerships with schools and other educational institutions, potentially offering custom kits to meet curriculums
- Establish brand deals with electronic manufacturers/ related companies to include their products in our kits for decreased prices
- Collaborate with online marketplaces to expand our customer reach and product availability
- Attend relevant trades shows and events to interact with customers and competitors
- Base price of products on cost of materials, labor, and shipping to cover expenses and maintain affordability



07

# Competition

Are there similar companies and/or products?







# Similar Companies & Products



Makes starter kits with development boards/ loose components for open-ended learning. Also makes DIY build kits with basic instructions.

**ELEGOO**



Makes hobby kits with labelled PCBs and necessary components. Often includes basic background knowledge.

**Elenco Electronics**



Makes various electronics kits for a wide range of experience levels. Provides many great resources for general learning, but does not tailor them to specific kits.

**Adafruit**





# Thank You!

## Questions?

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