

A collection of various electronic components and tools scattered on a light orange background. The items include resistors, capacitors, integrated circuits, diodes, transistors, and various types of connectors and wires. Some tools like pliers and a screwdriver are also visible.

# MAKER SOURCE

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**Process Book**

*A digital UX project  
for The Source*

The  
Team



→ **Azat Bayandin**  
*the handyman*



↑ **Charlie Chao**  
*the unicorn*



↑ **Daria Ershova**  
*the connoisseur*



→ **Edwy Woo**  
*the visual junkie*



↑ **Solomon Hsu**  
*the Anderson, Wes wannabe*

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# 1.0 ...

## Selecting a Client

- 1.1 Sector explorations
- 1.2 Domain selection
- 1.3 Micro trends
- 1.4 Constraints

# 1.1 Sector Explorations

...

*We originally explored different sector in order to determine direction we wanted to go as a team, as well as evaluate emerging markets and possibilities for intervention.*



## Rejected

- Airlines
- Casinos
- Construction
- DIY culture
- Education
- Fashion
- Fitness



## Taking further

- Auction
- Entertainment & Recreation
- Consumer electronics

# 1.2

## Domain Selection

+

*We decided to create a list of clients by looking at where the opportunity to intervene is in each domain and by exploring what is currently done to satisfy customers.*

### Auction

An interesting format that can be applied across different domains and sectors

Exciting opportunities in creating both digital and in-store experiences

Difficult to find things

No connection between buyers and sellers

### Entertainment & Recreation

No unified database for all the entertainment options in the city

Heterogenous platforms fighting for the same users while in fact they shouldn't be

Everything is online and there is no need to go outside or to theatre/cinema

### Consumer Electronics

The increased amount of products requires more time to study all the options and make a choice

The role of the maker movement in challenging big companies

The increased attention to corporate responsibility and ecological awareness

Digital is overtaking the value of exchanging personalized tangible objects

# 1.0 Micro Trends

...

*We looked at patterns within selected domains (auction, entertainment, and retail) to inform our decision on the client.*

## Communication

Being in the present – instant communication/broadcasting (e.g., Snapchat, Periscope, etc.)

## Gamification

Many experiences are gamified (including the learning)

## General

The increased segmentation of the market into small niche economies and niche products

## Narrative selling

Using photostories and powerful imagery to sell items

## Retail

Customization of everything including experiences

## Interactions

Rise of VR/AR and natural user interface

## Quantification

The quantified self and self as a project in progress, data that generates human stories

## Invisible interface

Wearables

# 1.4

## Constraints



- 01. Opportunity for narrative selling
- 02. Both offline and online experiences
- 03. Targeting niche market
- 04. Opportunity to challenge consumer / customer relationships



# 2.0 ...

## Understanding the Brand

- 2.1 Client introduction
- 2.2 Radioshack
- 2.3 Business problem
- 2.4 Brand perception
- 2.5 Reframing
- 2.6 Opportunity
- 2.7 Opening

# 2.1 Client Introduction

...

*First opened as Radio Shack in 1970 under parent company Radio Shack, then purchased by Circuit City, becoming known as The Source by Circuit City, until 2009, where The Source was purchased by Bell Canada. Right now they have 650 stores open across Canada.*

## — Audience

Tech-savvy & regular joe, homeowners, and we want to bring in a new audience into The Source's demographic: the makers.

## — Brand Promise

To be the best mobile products retailer



→  
A standard The Source store in Canada

“For over 40 Years, The Source has been dedicated to serving our customers and communities by offering great value for great products and backing it up with helpful service that keeps customers coming back.”

- Charles Brown, President, The Source

# 2.2 RadioShack

...

*In a matter of recent years, RadioShack's business went through significant decline due to initial missteps it took while trying to adjust to the market needs year through year. Failing to spot "up-and-coming" competitions, such as Amazon thriving in e-commerce ecosystem, and including poor mix of inventory, Radio Shack's brand perception started to deteriorate.*

*Taking wrong steps to govern its inventory, such as becoming cell phone kiosk, attempting late move towards e-commerce against sector giant like Amazon, and obscure mixture of supplies unsuitable for smaller retail spaces, RadioShack drove itself into hardship further weakening the brand.*

*Lastly, as its former child (The Source), RadioShack walked past the rising market for Maker movement, catching up on it too late and with a poor variety of merchandise to supply with its potential maker customers.*



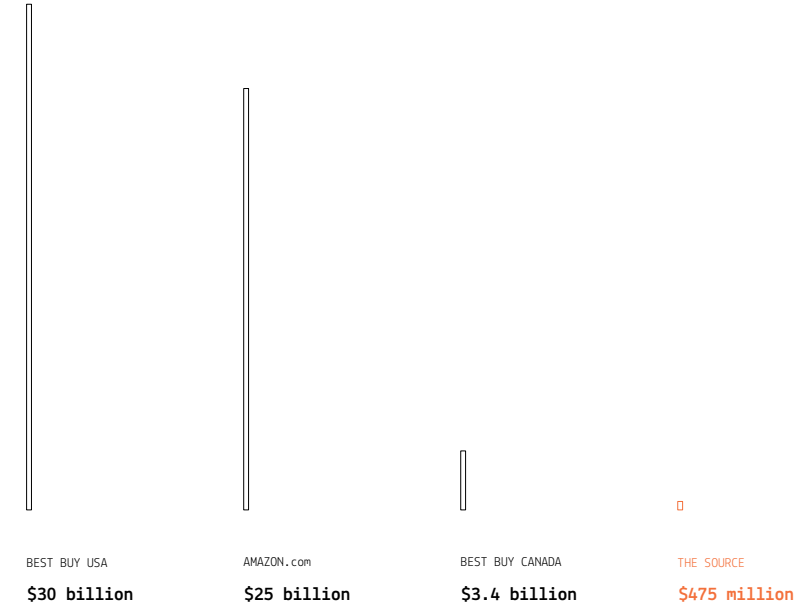
RadioShack is a former parent to its Canadian counterpart The Source.

# 2.0 Business Problem

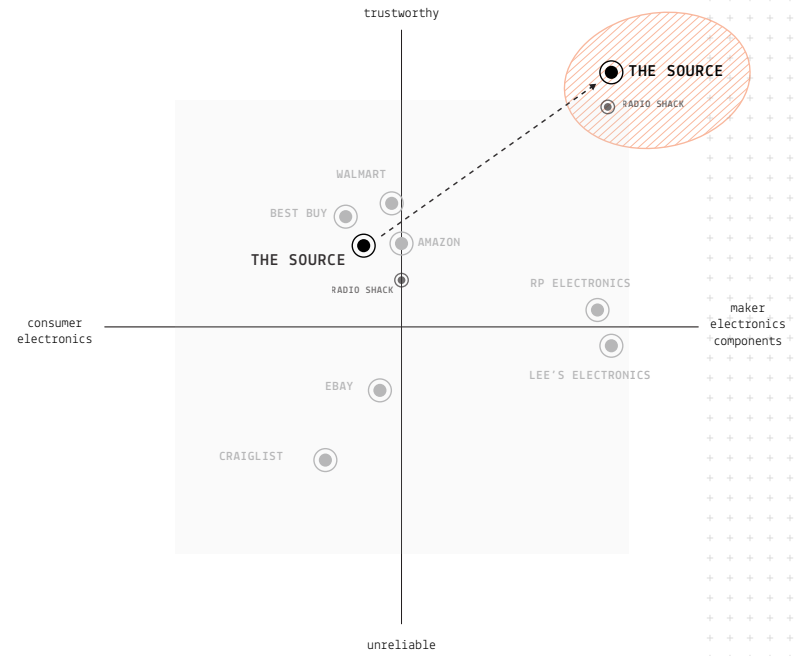
•••

The Source is losing sales in a highly competitive consumer electronics retail space, because of its inability to compete with larger retailers that offer “big box” formats, everyday low pricing, and advanced logistic systems. Hence, it requires a shift into new less concentrated sub-sectors within the electronics market where it can establish its dominance and create a following of loyal customers.

2014 CE Retailers Rankings



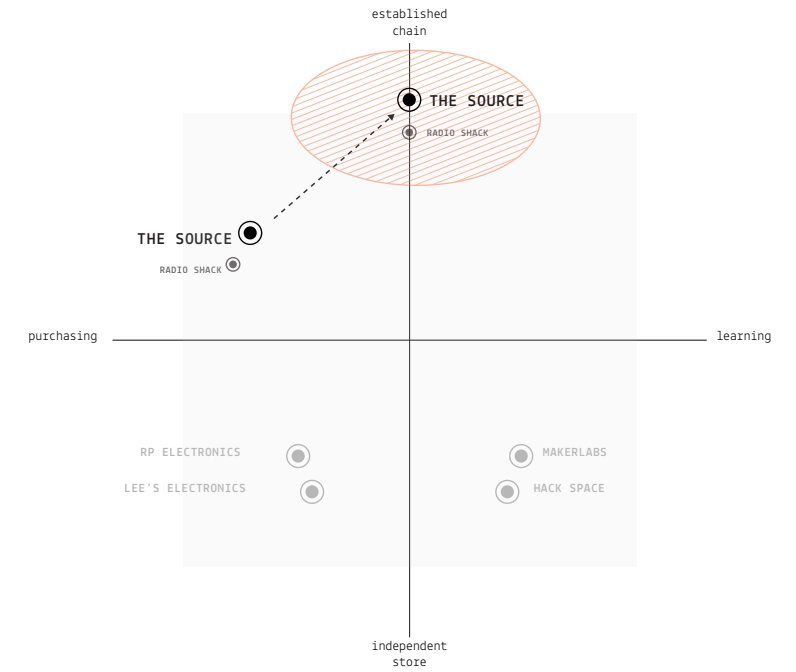
# 2.4 Brand Perception



Currently, The Source is getting outcompeted by consumer electronics retailers in both brick-and-mortar stores like BestBuy and Walmart, and e-commerce platforms like Amazon. However, as we looked into existing businesses for the makers, we realized that The Source can naturally fit into this space as an established brand that already has a strong physical presence across the nation. By shifting its target audience, The Source can enter into a niche and expanding market that is presently occupied by small local independent shops like RP and Lee's Electronics.



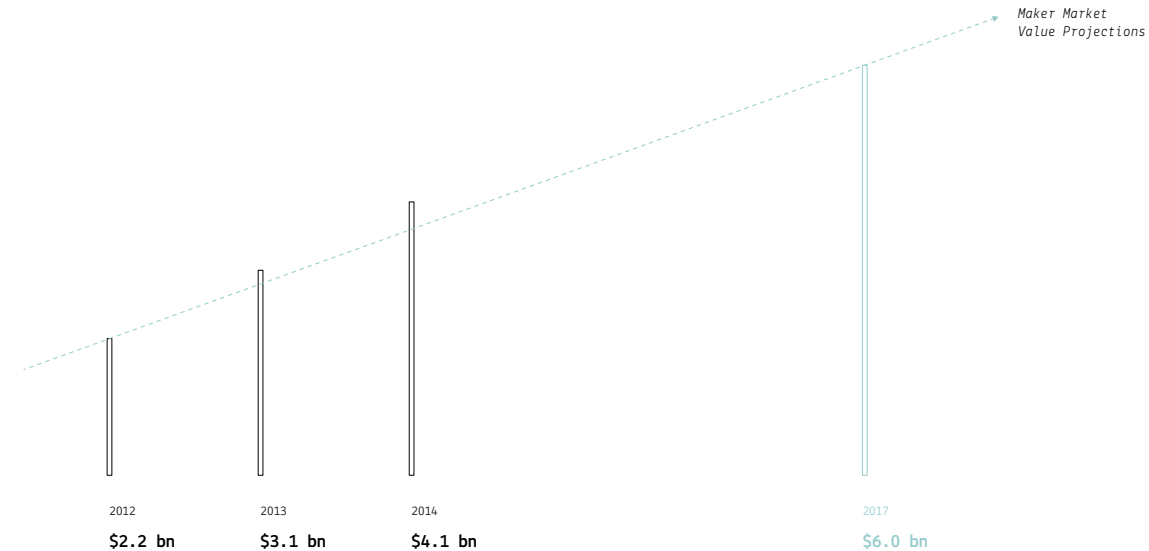
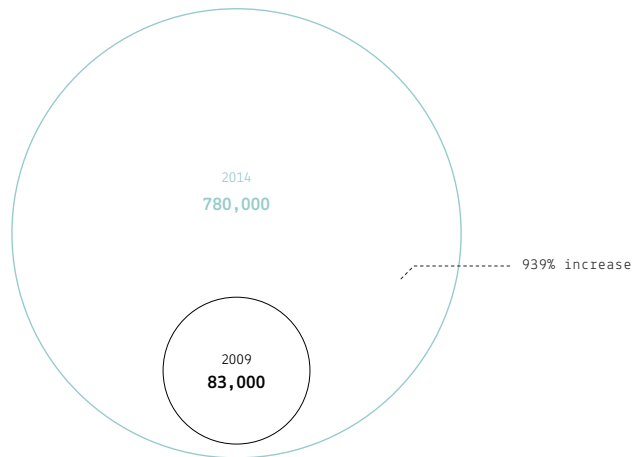
In the maker's area, we saw two factors that empower the Maker Movement: the availability of affordable supplies and the open learning and sharing nature of the community. Right now, they are scattered across many different locations. This presents an opportunity for The Source to create a unified platform that address both factors while leveraging its existing retail infrastructure. By bridging the gap between the retailer and the maker community, The Source can become an established facilitator of open knowledge sharing as well as a reliable provider of maker supplies for a fast-growing market.



# 2.5 Reframing

•••

While The Source is gradually losing its primary audience of general electronics consumers, we've found the opportunity for The Source to reframe their audience to the fast-growing market of makers, which is to be estimated at \$6 billion by 2017.



# 2.0

## Opportunity

+ *The Source must become more than just a consumer retailer. It must create and build relationship with its new audience by resonating with their values. Only then can The Source differentiate itself from the competitors and position itself as a leader in a booming niche market.*

**By tapping into fast-growing market for makers, The Source can:**

- + Establish relationship with contemporary technology hobbyists
- + Become established chain supplier of components to drive sale and build brand presence

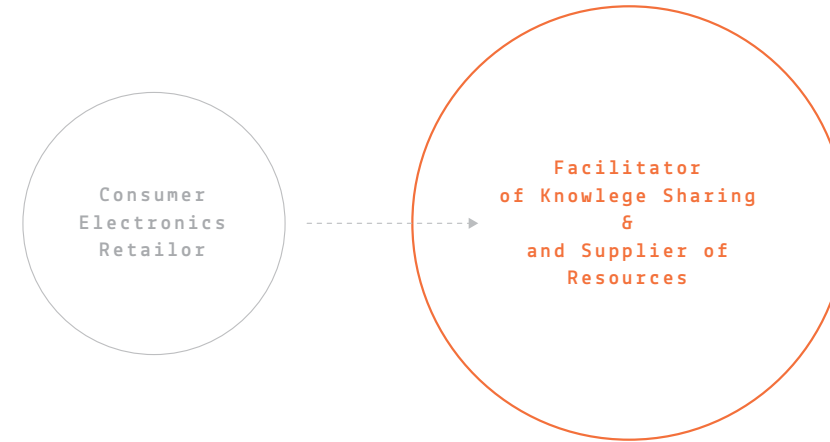


# 2.7 Opening

•••

*This is a problem worth solving because there is a gap between the community of makers and the suppliers of resources and materials required to build projects.*

- 01. The places to purchase suppliers of components is scattered – ranging from online retailers (Amazon, Craigslist, eBay) to physical locations that specialize in selling electronics parts (Lee’s Electronics, RP).
- 02. There is no central hub for the maker community to learn and share ideas (knowledge)



# 3.0

...

## Understanding the Market

- 3.1 Maker Culture
- 3.2 Maker Values
- 3.3 Maker Numbers
- 3.4 Trends in Maker Culture
- 3.5 Maker Segmentation

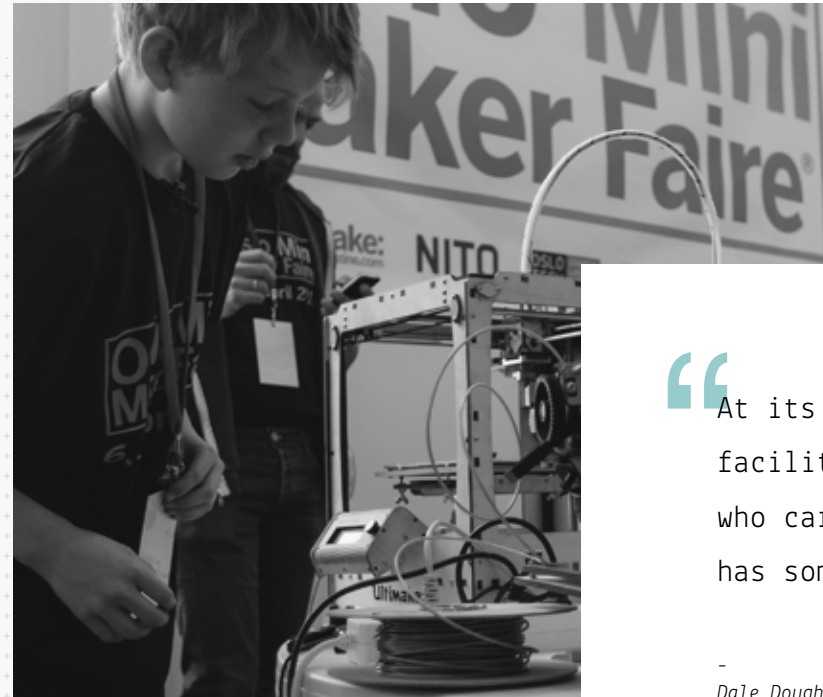
# 3.1

## Maker Culture



*The maker culture is a contemporary culture or subculture representing a technology-based extension of DIY culture that intersects with hacker culture which is less concerned with physical objects (opposed to software) and the creation of new devices (opposed to tinkering with existing ones).*

*- Maker Culture, Wikipedia*



At its core, its purpose was to facilitate a conversation with a maker who cares a lot about what they do and has something physical to share."

-

*Dale Dougherty  
Founder of MAKE magazine, Creator of Maker Faire*

# 3.2

## Maker Values

...

*Learning emphasizes learning-through-doing in a social environment. Maker culture emphasizes informal, networked, peer-led, and shared learning motivated by fun and self-fulfillment*

### Core values of the maker movement:

- + Learning through doing
- + Open-source and open-design
- + Social environment
- + Embracing imperfection
- + Focus on the process

# 3.3

## Maker Numbers

“The key driver is that the cost of the tools such as 3D printers, CNC Mills and things like Arduino and Raspberry PI mother boards and other core tech products have come down and are in reach of normal consumers.”

- TIME Magazine

Impact of Maker Movement  
(Deloitte Report)

- + Average **35,000+ people** attended each of the 8 maker faire events last year
- + Participants joining in Maker Faires grew from 83,000 to about 780,000 globally—a **939% increase**
- + **135 million US adults** are part of the maker movement
- + Maker market to reach **\$6 billion dollars** in 2017 and **\$8.4 billion** dollars in 2020
- + The size of the 3D printing market amounted to **\$2.5 billion** in 2013 is expected to reach **\$16.2 billion** in 2018
- + This influx of new makers is partly influenced by the drastic drop in prices of maker parts in the past years

# 3.4

## Trends in Maker Culture

Impact of Maker Movement  
Deloitte Report)

- + Democratization of making due to the growing number of maker labs and hackspaces
- + Democratization of creativity via open source and open design nature of the projects
- + Empowered demand drives supply, and manufacturing and retail follow the customer
- + Maker culture as a way to engage learning and make topics on STEM (science, technology, engineering and mathematics) more interesting to students
- + Fragmentation of the market transforming the social idea about identity and social capital
- + Kickstarters and fundraiser allow small businesses to arise around individuals' creative activity

“A combination of values-based movements (the makers), new professional institutions (the FabLabs), open tools (3D printers) and open source protocols are turning manufacturing into a participatory process in which the agents share risks and benefits and increase the value of production”.

- Deloitte report for EU, 2013

# 3.5 Maker Segmentation

...

Dale Dougherty of Maker Media, Inc. Identified three segments or stages of makers:

## ZERO -TO- MAKER

*Consumers who are inspired to invent by learning the requisite skills and having access to the necessary means of production.*

## MAKER -TO- MAKER

*Makers who desire to collaborate and access the expertise of others through workshops and digital communities.*

## MAKER -TO- MARKET

*Makers who invent for the broader audience and pursue market opportunities.*

# 4.0 ...

## Defining the Goal

- 4.1 Maker Needs
- 4.2 Refined Maker Needs
- 4.3 Barriers to Joining
- 4.4 Competitors analysis

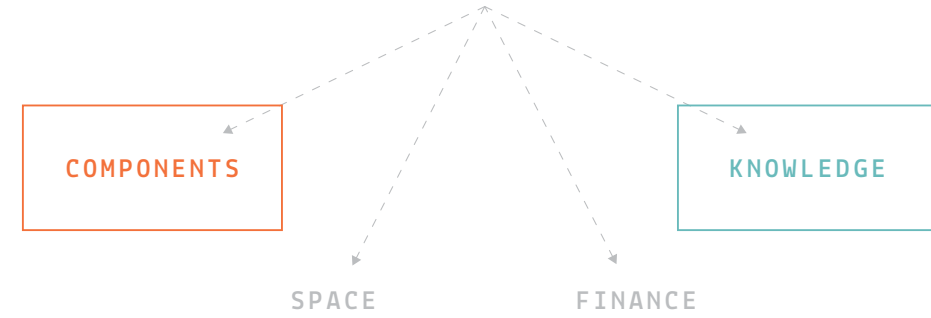




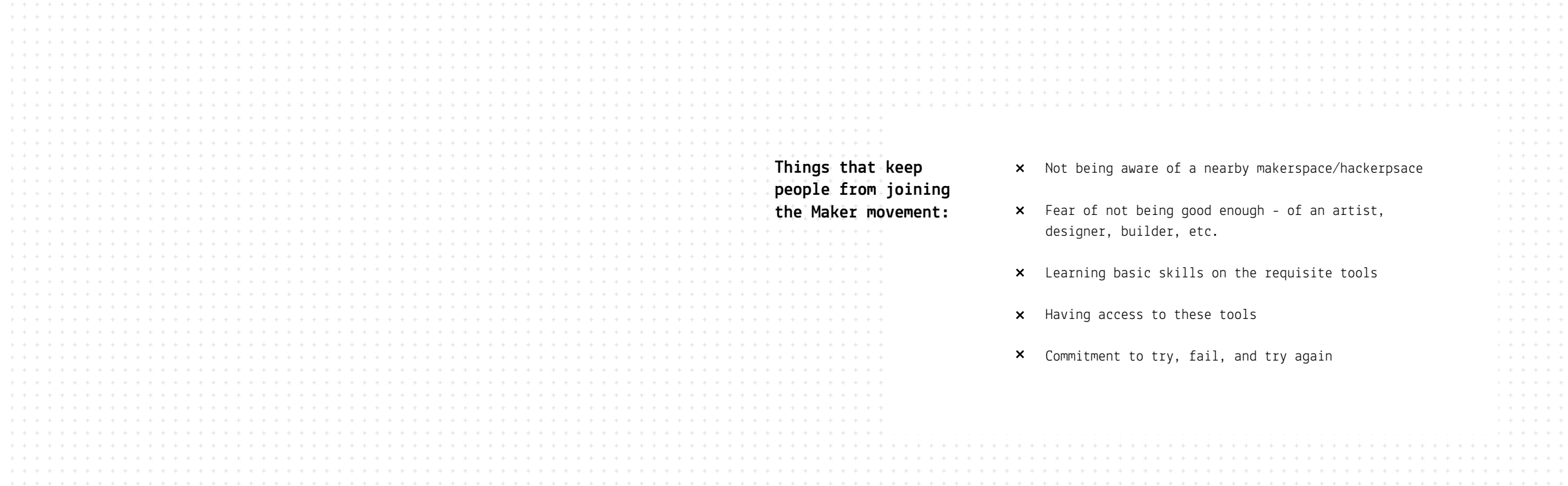
# 4.2 Refined Maker Needs

- + Access to tools, workspace and storage space
- + Quality instruction from a knowledgeable, skilled teacher at a non-prohibitive cost
- + Community of like-minded makers, including role models.

## THE MAKERS' NEEDS



# 4.8 Barriers to Joining



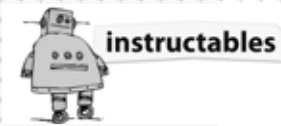
## Things that keep people from joining the Maker movement:

- × Not being aware of a nearby makerspace/hackerspace
- × Fear of not being good enough - of an artist, designer, builder, etc.
- × Learning basic skills on the requisite tools
- × Having access to these tools
- × Commitment to try, fail, and try again

# 4.4

## Competitors Analysis

What make our platform more desirable than sites like Instructables and Makezine?



**Make:**  
We are all Makers

- + Our platform puts emphasis on making the project instructions easy to digest. Instructables and Makezine present the instructions in an article format with a lot of clutters on the screen like the sidebar and widget elements. Our instruction view only shows the video and one step at a time, which reduces the cognitive overhead for learning.
- + Maker Source also offers a tighter integration with the supplier by having the purchase process a key part of the learning and building flow. This reduces the friction of finding the required materials, whereas Instructables and Makezine don't link the supplies on their site, forcing the reader to do additional research before purchasing.

# 5.0 ...

## Generating Ideas

- 5.1 Analysis to Insight
- 5.2 Project Constraints
- 5.3 Idea Explorations
- 5.4 Idea Progression
- 5.5 Function Requirements
- 5.6 Transformational Metaphor
- 5.7 Proposal
- 5.8 Removing the Frictions
- 5.9 Actions Flow
- 5.10 Sector-wide Implications

# 5.1 Analysis to Insight



A central ethos of the maker culture is open-source, which is to allow universal access to knowledge and ideas, as well as being able to freely create derived works.

We want *The Source* to be an embodiment of this aspect by transforming them into a facilitator of learning and sharing within the maker community. Although *The Source* will promote components from their own inventory, people are welcomed to buy them from other channels as well.

OPEN SOURCE

UNIVERSAL ACCESS  
free information

UNIVERSAL DISTRIBUTION  
derived works

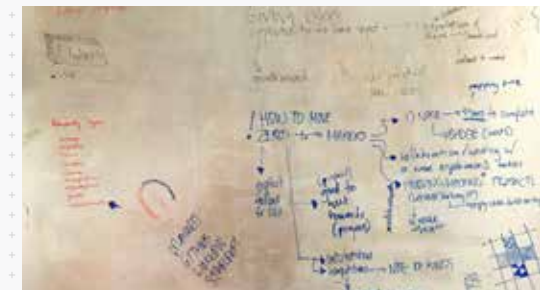
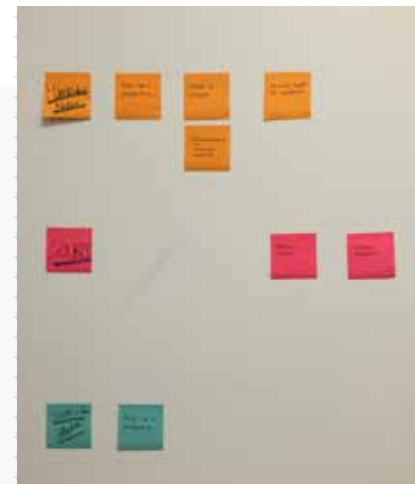
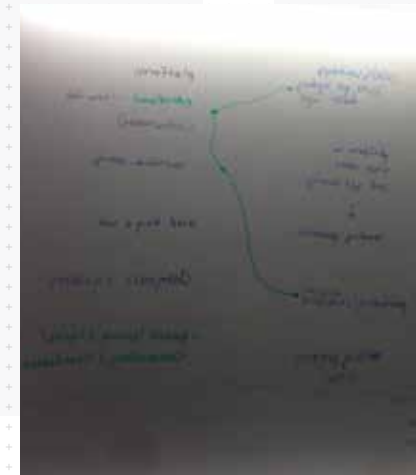
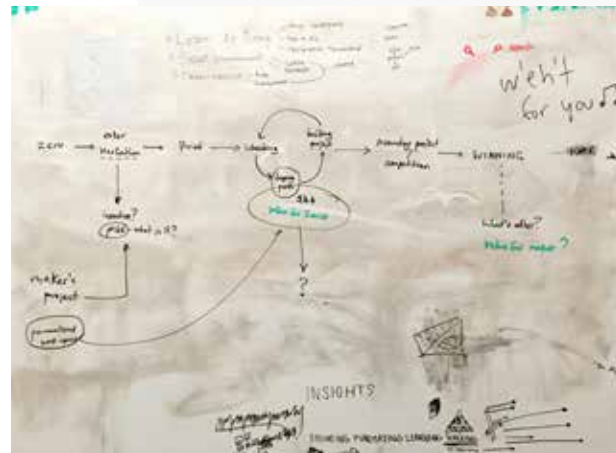
THE SOURCE  
via *Maker Source*

# 5.2

## Project Constraints

01. ——— Build around open-source and open-design nature of the maker culture
02. ——— Not a direct e-commerce website
03. ——— Must remove frictions for zero-to-maker and maker-to-maker
04. ——— Employs narrative selling
05. ——— Validates learning and provides a transparent path to growth
06. ——— Focus on local but embracing global
07. ——— Inspire curiosity and discovery
08. ——— Embrace “Everyone’s a maker” principle

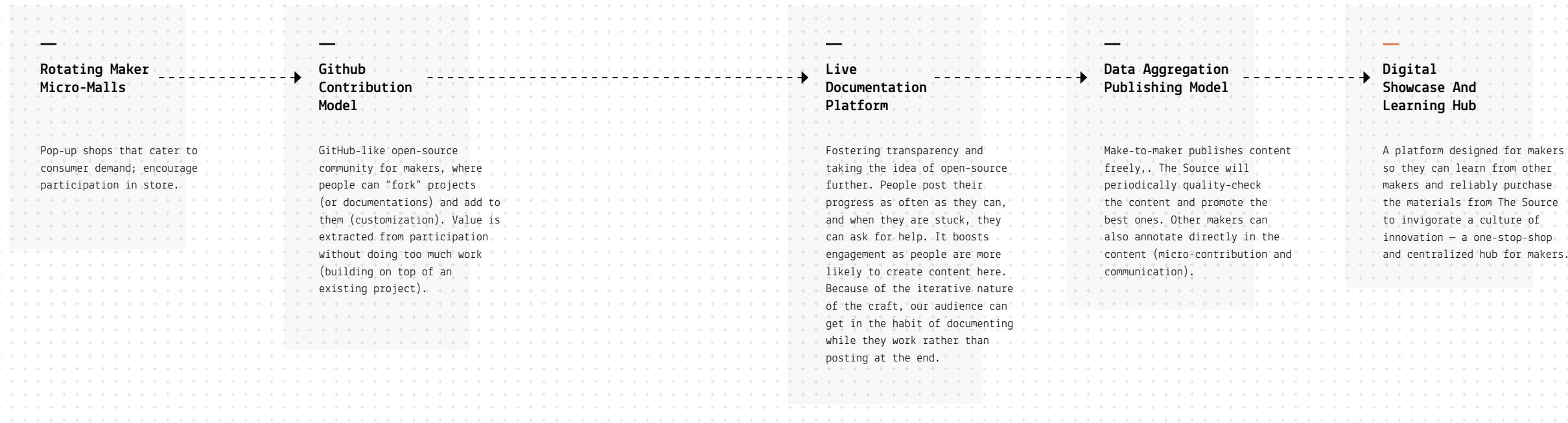
# 5.3 Idea Explorations





# 5.4

## Idea Progression

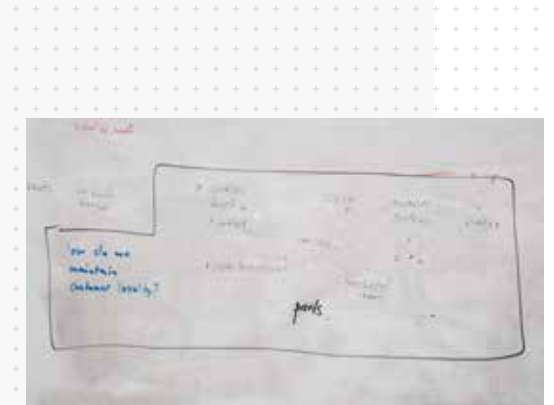


# 5.5

## Functional Requirements

*Addressing three main points:*

- + How do we make new makers feel that they are progressing toward becoming maker-to-makers?
- + How do we persuade people to buy directly from The Source rather than from others?
- + How do we maintain customer loyalty?

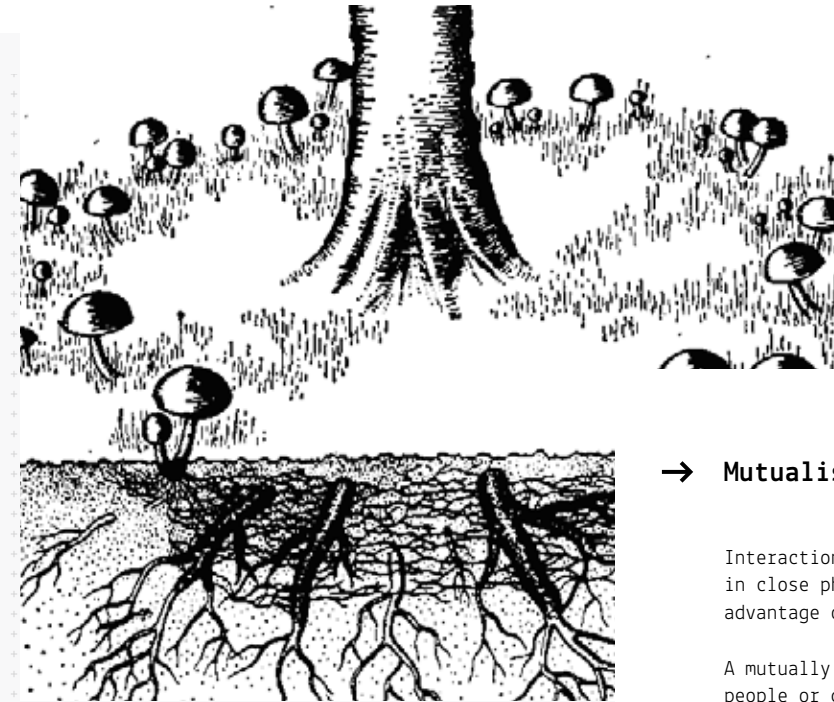


# 5.0

## Transformational Metaphor

“Makers and the Maker Movement also represent a slice of broader trends in today’s world. Makers come together on platforms, in the real world and in virtual space. They come together for support and resources and access to tools. They share and learn from each other while also pursuing their individual projects. Each platform is an invitation to the community to participate in creating and recreating, setting the stage for an infinite game.”

—  
*Impact of the maker movement,*  
*Deloitte report, 2013*



### → Mutualistic Symbiosis

Interaction between two different organisms living in close physical association, typically to the advantage of both.

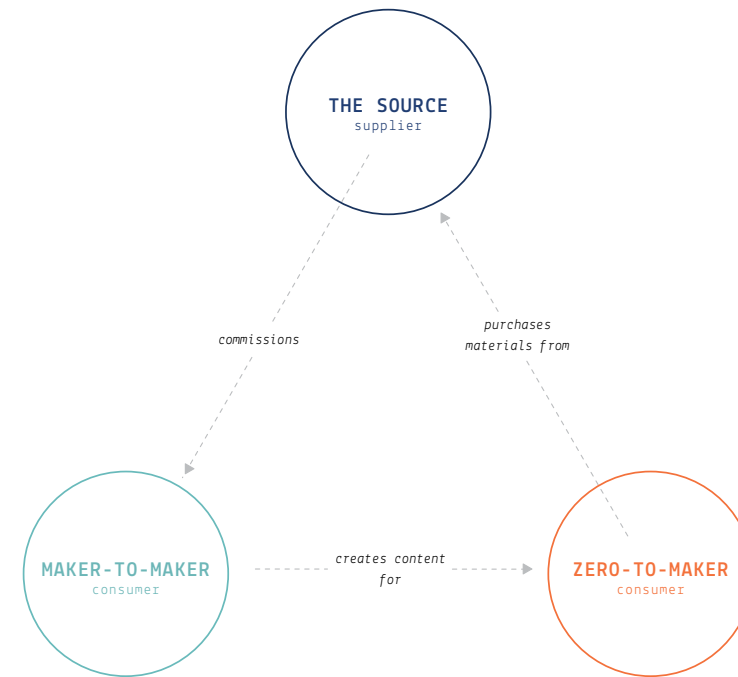
A mutually beneficial relationship between different people or groups.

# 5.7 Proposal



A digital platform that provides a holistic experience for prospective and experienced makers by facilitating open knowledge sharing and acquisition of supplies (electronic components).

## Symbiotic Relationship



# 5.8

## Removing Frictions

...

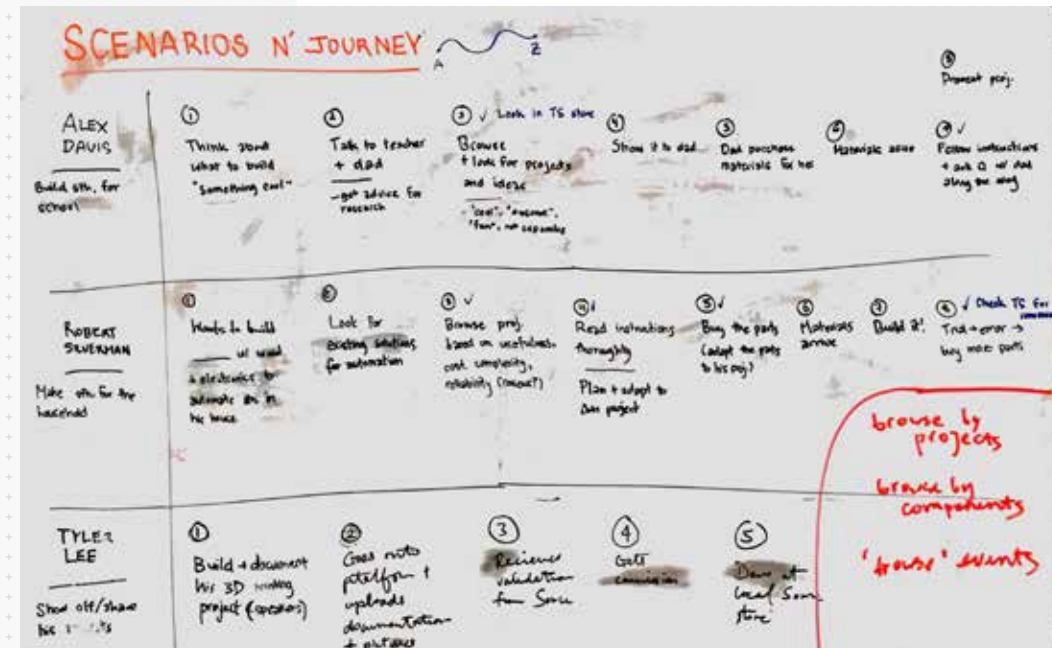
*The Source can tackle the maker's need for supplies and knowledge by leveraging their supply chain and by creating a high-quality learning hub for them to draw prospective makers in.*

**We feel The Source can tackle the need for supplies and knowledge because they present the most immediate frictions for zero-to-makers:**

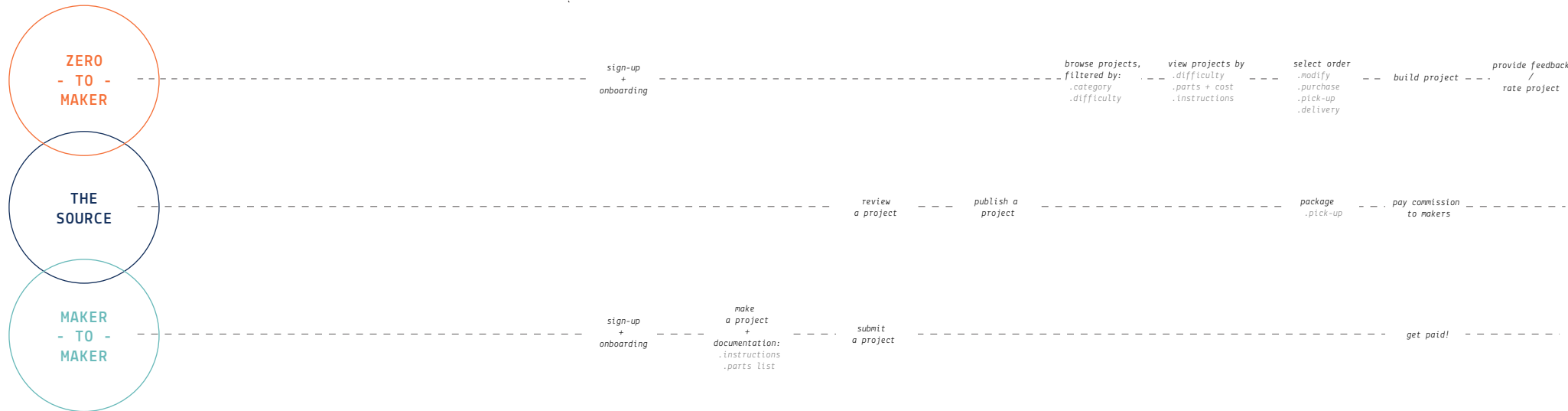
01. — Suppliers of components is scattered  
*From online (Amazon, Craigslist, ebay)  
From specialized stores (Lee's, RP)*
02. — No central hub for learning and sharing ideas
03. — Lack of centralized community and lack of movement visibility

# 5.0 Actions Flow

01. — Experienced maker-to-makers submit their project instructions to the platform; The Source will quality-check the content before publishing it.
02. — Zero-to-makers discover and read about the projects, then they buy the supplies from The Source when they decide to build it.
03. — The Source commissions the maker-to-makers for purchases made from their submitted projects.



# 5.0 Actions Flow



# 5.10

## Sector-wide Implications



Our proposal can serve as a model for retailers to embrace the open and growing ecosystem of makers. Instead of just selling items and marketing them, retailers can look to provide direct value for customers by being a facilitator of knowledge and learning. This creates a push/pull relationship where the brand can understand the curiosity of the audience while empowering them through their creative process through a platform for sharing ideas.



The Maker movement will emerge as the dominant source of livelihood as individuals find ways to build small businesses around their creative activity and large companies increasingly automate their operations."

-

*Dale Dougherty*

*Founder of MAKE magazine, Creator of Maker Faire*



# 6.0 ...

## Understanding the User

- 6.1 Personas
- 6.2 Touchpoints
- 6.3 Identifying the User Goals
- 6.4 Addressing Systemic Pain Points
- 6.5 Value

# 6.1

## Personas



### Alex Davis

Zero-to-Maker

#### Background

Alex Davis is a 10-year-old girl. She lives with her parents and 2 older siblings in Burnaby, B.C., and attends Brentwood Park Elementary School.

#### Goals

She doesn't enjoy studying but she enjoys knowing. She knows she is smart and she wants to take the most of what her school can give her.

#### Values

She likes exploring things and in her process she is guided by her natural curiosity in how things work and what makes them tick.

#### Pain Points

She might be annoyed by the amount of technical information that is provided: specs, datasheets, and the description of how electronics work don't make full sense to her yet.

#### Interests

Soccer, space, animals, and LEGO are her top interests and she likes exploring information from any medium that relates to them.

#### Frustrations

She can never get through long and boring instructions and doesn't understand why someone would even go through a pain of creating them.

# 6.1

## Personas



### Robert Silverman

Zero-to-Maker

#### Background

Robert Silverman is a 65 year-old retired carpenter and a proud grandfather. He lives with his wife in Abbotsford in a house that they bought shortly after getting married.

#### Goals

Automation systems is what he is looking for. He also wants to build smaller projects that would engage his grandchildren and would help him stay relevant to younger generation.

#### Values

Weekends feel like holidays to him because his kids and grandchildren come to visit. Apart from that he enjoys fishing, reading, planning, and woodworking.

#### Pain Points

Robert doesn't have access to certain software and thus he is frustrated when he can't repeat someone's design because of that.

#### Interests

He has always led an active lifestyle, and he wants to keep it that way even after retirement. Nothing makes him feel better than working on improvement for his family house or creating some toys for his grandkids.

#### Frustrations

He is passionate about his craft and feels sad when people prefer mass produced items over handmade. He doesn't mind technology but he hates when it alienates people.

# 6.1

## Personas



### Tyler Lee

Maker-to-Maker

#### Background

Tyler Lee is a 26-year-old senior engineer at General Fusion. He rents a house in Burnaby and enjoys biking to his work.

#### Goals

3D printing opened new frontiers for him. He is excited to share what he can do and showcase his skills. He find it interesting how technology change lives and appreciates sustainable solutions.

#### Values

He enjoys hacking gadgets and regularly challenges himself with learning the new technology and skills. Apart from cutting-edge technology that he enjoys mountain biking, kayaking, and hiking.

#### Pain Points

He is frustrated when steps are uncertain and the platform can't communicate directions clearly. He wants his purchase and building process as efficient as possible.

#### Interests

He has always been interested in technology and being up-to-date on it is his hobby. He enjoys sharing what he's created and collaborating with others on creating a feasible and viable technological solutions together.

#### Frustrations

He doesn't enjoy long wait time at anything. He doesn't like it when the end goal is unknown to him. He can't stand ambiguity in communication.

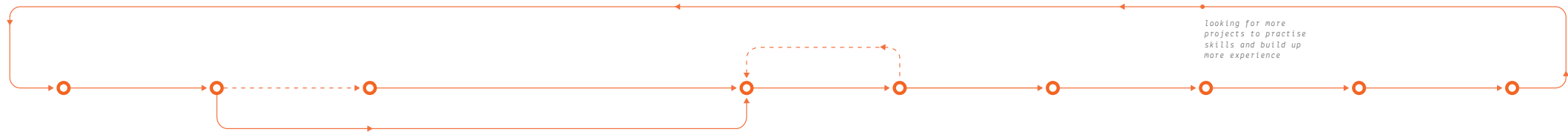
# 6.2 Touchpoints

↓  
**Alex Davis**  
Zero-to-Maker

Interactions

Alex's Needs

Maker Source



DISCOVERY

CONSIDERATION

PURCHASE

INSTRUCTIONS

RECREATION

VALIDATION

PARTICIPATION

FOLLOWING

EMPOWERMENT

browsing the discovery page

viewing a particular project finds interesting

buys components directly available from The Source

follows maker's video/photo/text instructions

starts building the project

re-creates the project and gets skills validated

provides feedback on steps she had more trouble with

follows makers

sees projects in relationship to her newly acquired skills

finding projects she's interested in

evaluating projects, gauging level of difficulty

acquiring the parts required to get started

being guided as a first time maker

hands-on learning

affirmation of learning

understanding process and seeking guidance

learning a specific skill offered by maker

validation of learning

attracts zeroes by displaying projects tailored to their interests via 'magnetizing'

providing quick glanceable information about each project

offering a smooth transaction within the same online ecosystem

offers detailed instructions in a highly visual format

promotes maker culture

recognizes their learning and commitment by creating a personal journey in their profile

making commenting available for each step, providing opportunities for feedback from both the creators and the recreators

allows expanding network and establishing social connections

provides engagement by showing projects in accordance to skills and interests

# 6.2 Touchpoints

↓  
**Tyler Lee**  
Maker-to-Maker



DISCOVERY

REGISTRATION

CREATION

AUTHORING

FEEDBACK

Interactions

browsing the discovery page

sign-up

gathers supplies and creates a project he's been planning

uploads a video with instructions, adding details, tools, and supplies needed

replies to questions and/or compliments on the project

Tyler's Needs

finding inspiration for his next project

connect with more makers on the platform

challenging himself to create something different

project documentation

engaging other makers in the community

Maker Source

attracting makers by showcasing trending projects

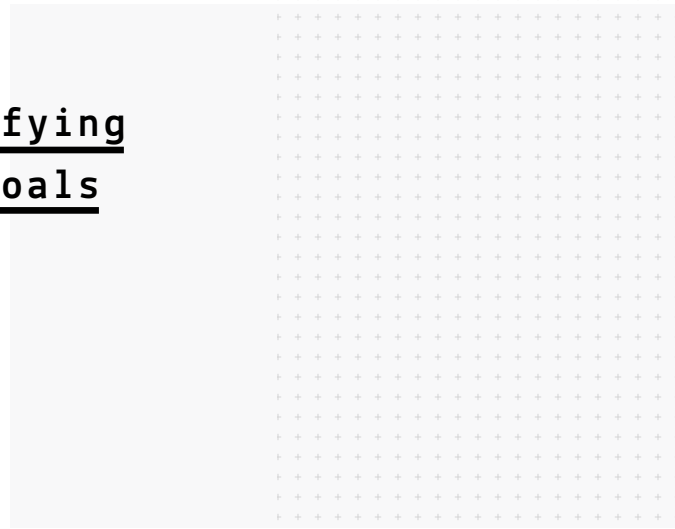
expanding of the online maker community

offering a platform to showcase makers' projects and progress

approval, publication, and monetization of Tyler's project

engages makers in conversations through the platform

# 6.3 Identifying User Goals



## Advanced Makers

### End Goals:

- Upload original projects
- Discover and match resources

### Experience goals:

- Establish a network of connections
- Create an efficient workflow
- Get validation in sharing

## New and Prospective Makers:

### End Goals:

- Discover and build projects
- Purchase components and parts directly

### Experience goals:

- Learn through doing
- Get validation of skills
- Explore and discover interests

# 6.4

## Systemic Pain Points



### Facilitating the sharing and validating the contributions

Besides identifying individual goals and maker culture needs, we also determined systemic pain points that our platform could address: the friction between marginalized communities of makers and mainstream markets and the resulting lack of validation and support systems for edge makers.

By emphasizing the value of everyone's participation and offering validation of achievements via sharing we could help makers to move from the extreme margins to mainstream and challenge the visibility of the movement.



It's sharing what you do, and there's such validation in sharing with other people something that is otherwise private. For many people these are things they do off on their own – their families don't even understand why they do it. When they meet other people who appreciate it, it's a big win."

-

*Dale Dougherty*

*Founder of MAKE magazine, Creator of Maker Faire*



# 6.5

## Value

### Business Value

#### — Increase Profit (tangible)

Access to a fast-growing market that has a demand for a centralized supplier of materials

#### — Focused Brand (intangible)

Differentiate itself from other retailers by appealing to those who invent rather than just those who consume

#### — Build Community (intangible/aspirational)

Leverage the content produced by makers to rein in customers and facilitate the dialogue between them

#### — Corporate Responsibility (aspirational)

Achieve positive social and environmental impact by encouraging edge makers and empowering marginalized communities

### Customer Value

#### — Reliable Source of Supplies (tangible)

Access to materials and tools available at their nearest The Source store, and the online platform provides an efficient way to discover and match resources

#### — Validation in Sharing (intangible/aspirational)

Share projects with a community of like wise individuals and get support, help and feedback from them

#### — Educational resources (intangible)

Learn from quality instructions and specifications created by other makers

#### — Open Source & Open Design (aspirational)

Easy access to knowledge and encouragement to create, co-create, and re-create projects

# 7.0 ...

## Designing User Experience

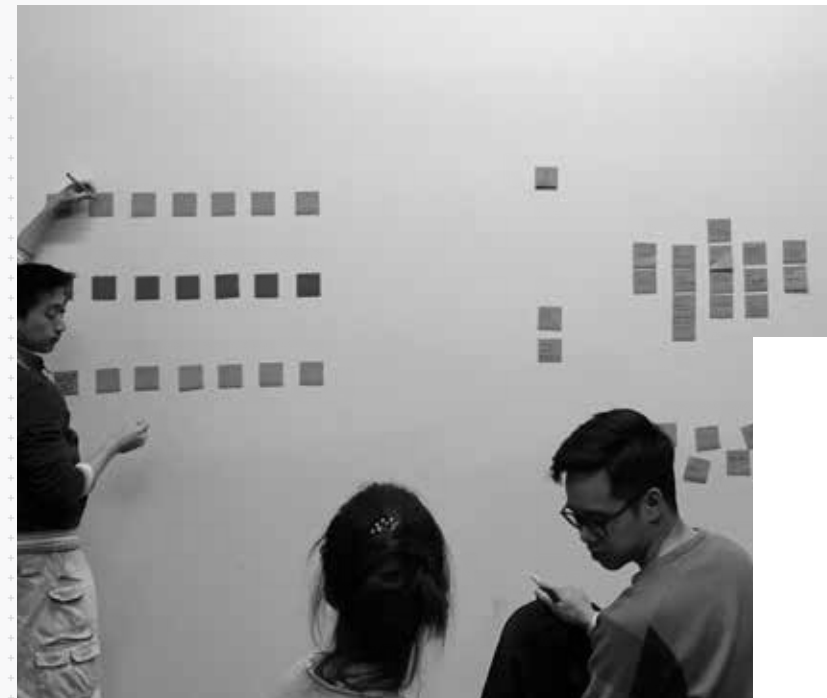
- 7.1 Points Of Interventions
- 7.2 Discovery. Explorations
- 7.3 Discovery. Magnetizing
- 7.4 Discovery. Categories
- 7.5 Profile. Skill System
- 7.6 Profile. Project & Skills
- 7.7 Discovery. Smart System
- 7.8 Project View
- 7.9 Authoring

# 7.1

## Points of Intervention



*After interviews and research we looked deeper into the journey framework to define our points of intervention - the specific issues and places where a targeted action can effectively interrupt the functioning of a system and open the way to change. We proceeded with identifying different possible points to target to help design specific actions and functions that would connect our users to maker movement core values and personal goals.*



*We identified the following points:*

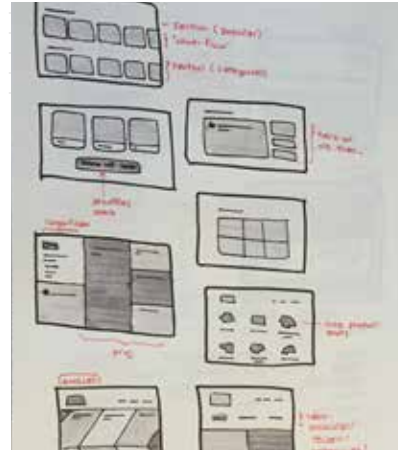
- + Discovery
- + Authoring
- + Profile Page
- + Project View

# 7.2

## Discovery. Explorations

...

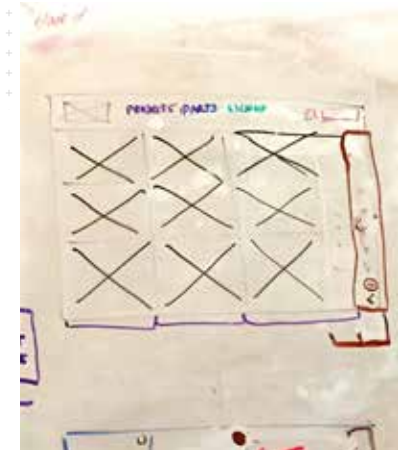
Exploring different ways of clustering, exploring and presenting projects to make it easier for new and experienced makers to become engaged and find interesting projects to build.



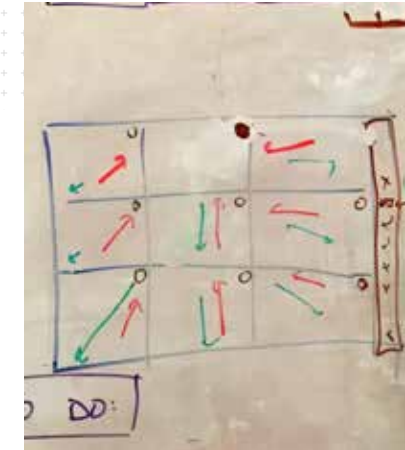
**"Tiles"**. Projects are displayed as titles with onboarding text at the top of the page.



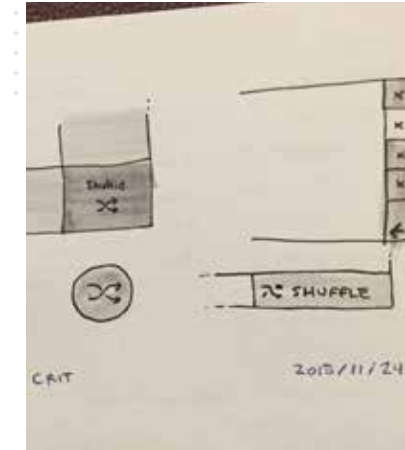
**"Decks"**. Thematically related projects are grouped together and shown as "decks" ("collections"). New decks are added via plus sign.



**"3x3 grid"**. Projects are clustered according to difficulty and interests levels in 3x3 grids.



**"Magnetizing option"**. We introduced the metaphor of attraction/repellence to cluster related project together.



**"Shuffle button"**. To shuffle the project visible on the screen and let users see other 8/9 projects related to the magnetized one.

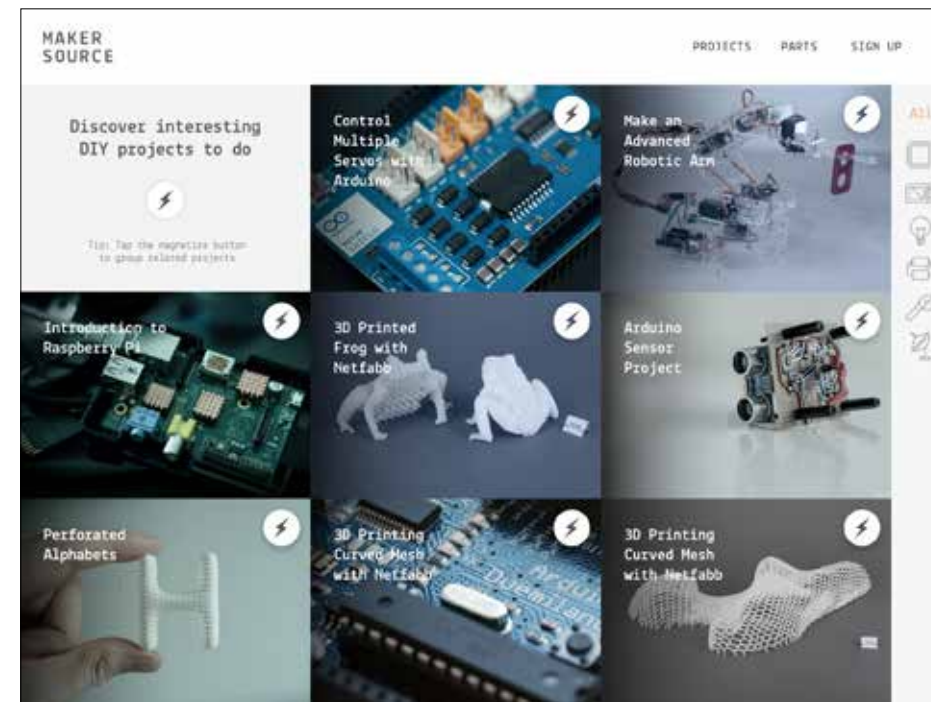
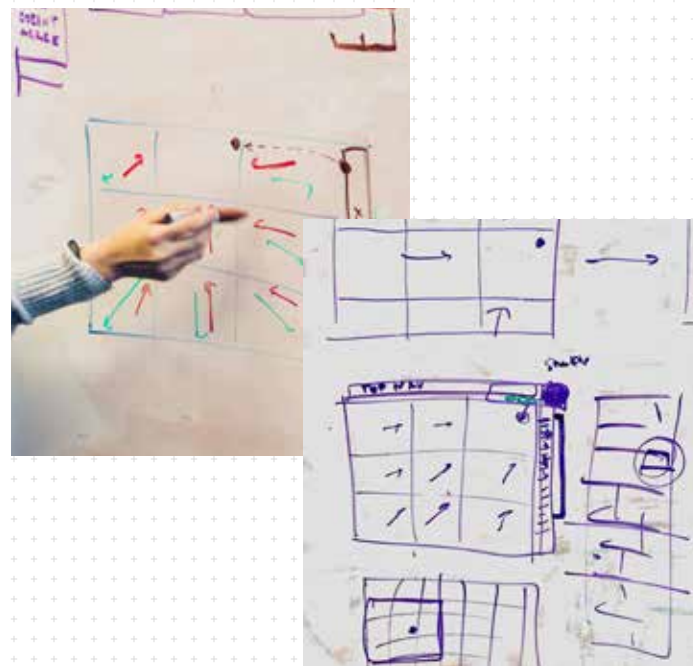
# 7.3

## Discovery. Magnetizing

...

The insights from our personas led us to create a digital experience based on the magnet metaphor and its forces of attraction and repulsion.

Initially, we envisioned the user to drag a "magnet token" from the category menu on the right, and drop it on the project they like. However, this interaction required learning, which introduced unnecessary cognitive overhead for the user.



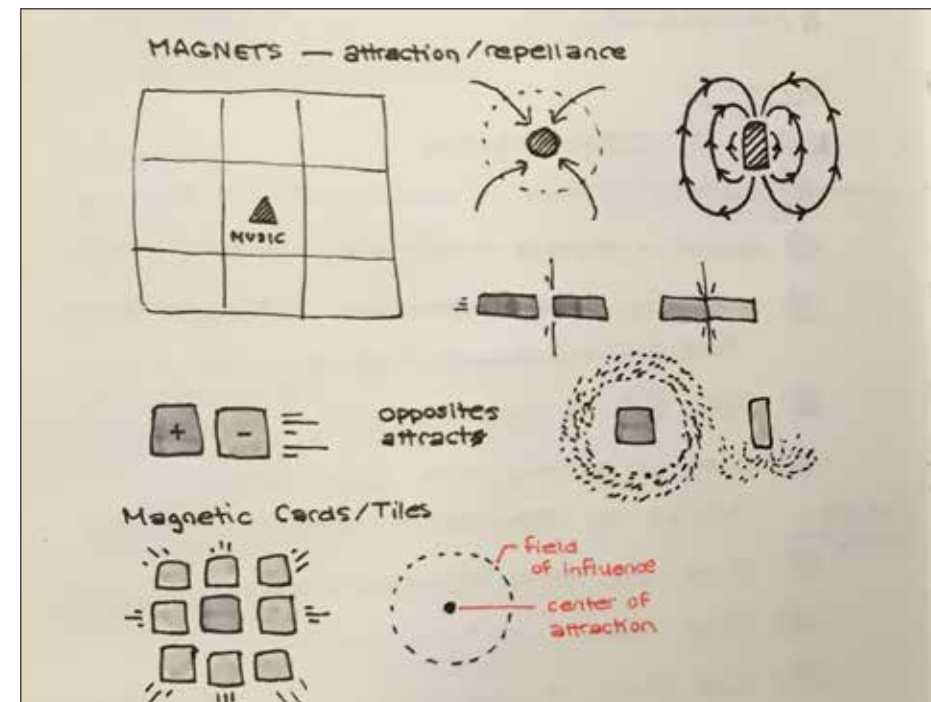
# 7.3

## Discovery. Magnetizing

...

Our second iteration had magnetizing buttons located at the top right corner of each project tile instead. By pressing the lightning icon (called "explore similar" in the final version) on a project box, it repels all the irrelevant projects on the screen, then attracts the related ones while mimicking the "snap in" movement of an actual magnet.

We used this microinteraction as a means for new makers to overcome anxiety caused by the lack of technical knowledge, and to make the project exploration experience delightful, engaging, and spontaneous. This makes it more natural to find interesting projects based on their own intuition and curiosity.

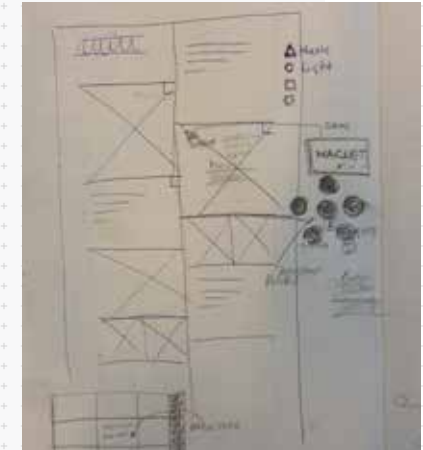
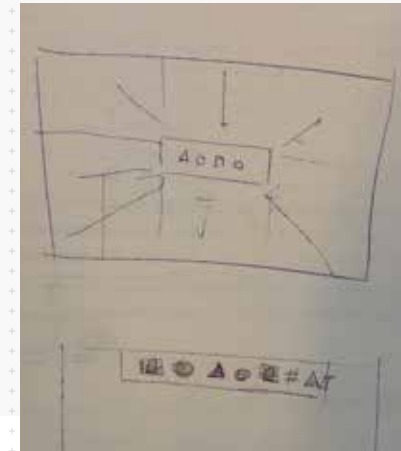
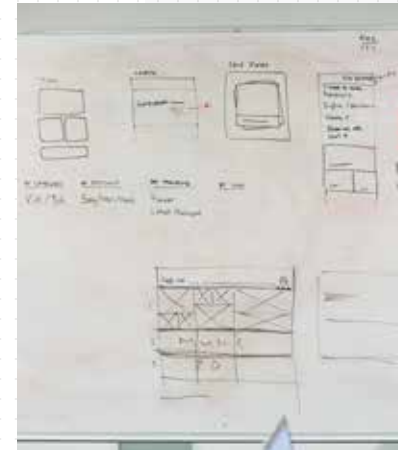


# 7.4

## Discovery. Categories

...

To address the systematic discovery of projects, we decided to show categories based on features rather than the specific technology (e.g., soldering), specific products (e.g., Arduino), or broad segments (e.g., electronics). This way of organization lowers the cognitive overhead for beginners to browse projects as no technical knowledge of the makers domain is required to get a sense of what's in the platform.

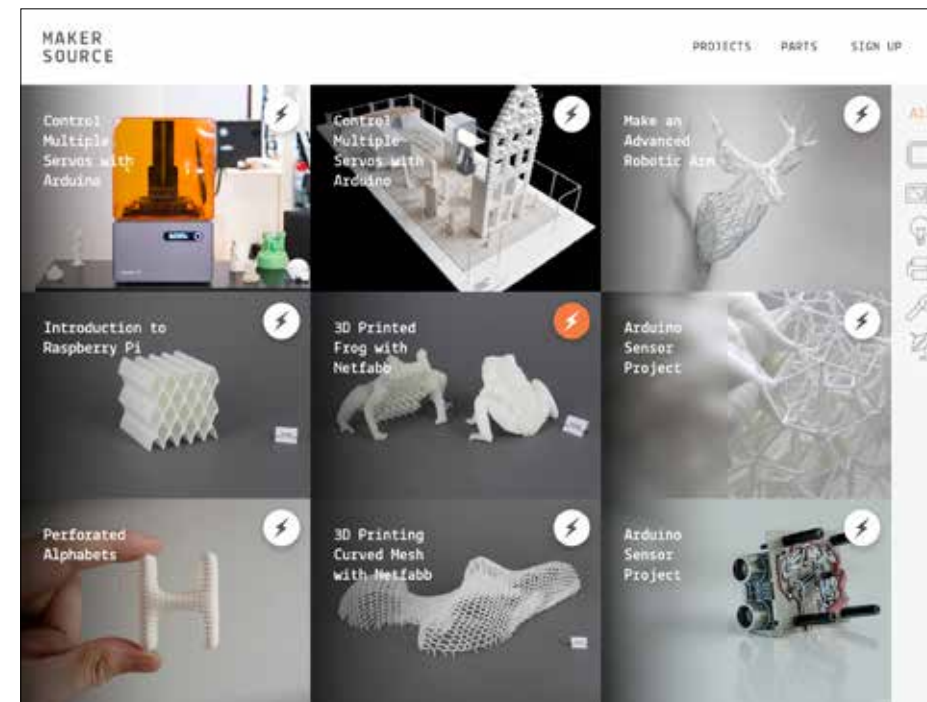


# 7.4 Discovery. Categories

...

Furthermore, if the user follows someone in the community, he/she can find their submitted projects under the Following category.

- Popular
- Following
- Skills
- 3D Printing
- Light
- Music
- Motion
- Sensors



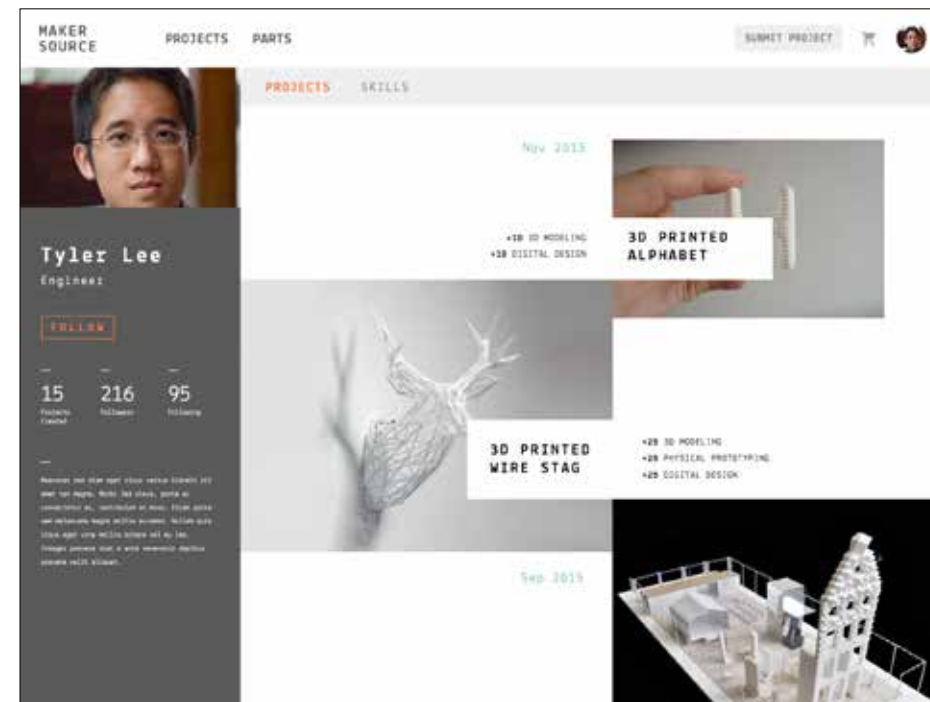


# 7.5

## Profile. Skill System

...

Embracing "Everyone's a maker" principle allowed us to come up with a skill - project reference system that rewards contribution and systematic participation. The platform is all inclusive and all makers regardless their levels are considered to be makers. In regards to building projects the only differentiation that happens is whether or not the project was created (original idea) or re-created (build on someone's idea). In order to provide further validation of skills and encourage makers to build their skills systematically, we created a skill level system that awards skills points based on a type of a project and specific skills used in it.



Whenever a maker creates or a project and uploads it to the platform, The Source awards the maker with skills points that would be then displayed in his/her profile page. When a new maker re-creates a project and clicks "complete project" button, the project is also added to his/her profile and skills points are awarded. Their value is predefined by the creator of the original projects during the authoring stage. Thus, the systems reflects the symbiotic nature of the relationship between new makers, advanced makers and The Source.

# 70 Profile. Projects & Skills

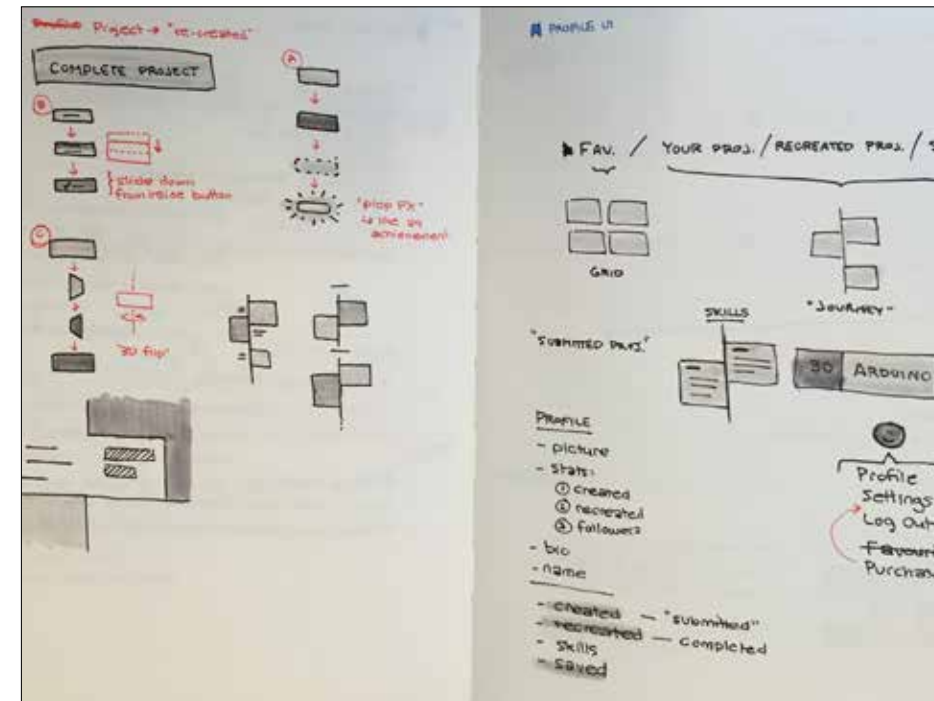
...

In order to make learning visible and create a clear skills validation system, we designed a profile page that offers a clear and transparent picture of personal growth as well as allows investigating further opportunities for engagement. Completed and uploaded projects are displayed in a form of a timeline along vertical axis, thus reflecting maker's journey and skills that he/she acquired along the way.

We started with 2 modes to display someone's journey: project view and skills view. Project mode shows projects as separate units with skill that one acquired from building this project

displayed on the side. The Skills mode displays the summary of skill levels and provides a list all the projects that went into building this specific skill. Later we split Project view into Recreated projects and Created projects, so we can make the distinction between different engagement and contribution levels more visible to others.

Thus, someone's profile page becomes the visible representation of learning through doing principle. Learning, participation, and contribution are transparent and creates further engagement for new makers.

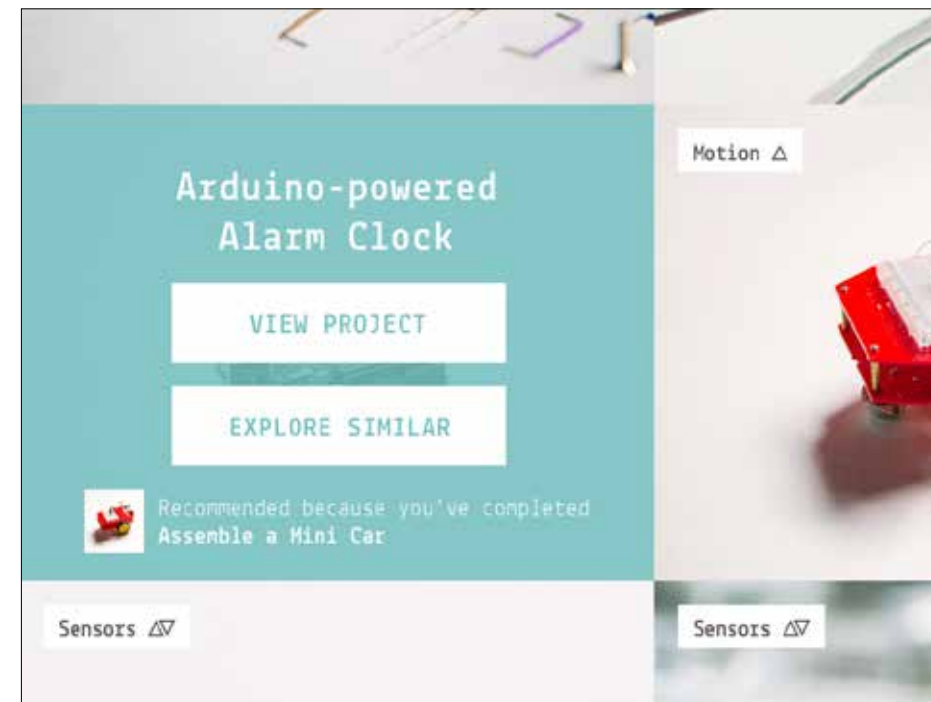


# 7.7

## Discovery. Smart System

...

*The discovery experience becomes personalized to the audience as they save, purchase, and complete projects on the platform. We wanted a smart system that suggests content based on their interests, skills and usage behaviour. To show a sense of this underlying mechanism in place, an additional message appears when hovering over a project, which tells the maker why the content was recommended.*

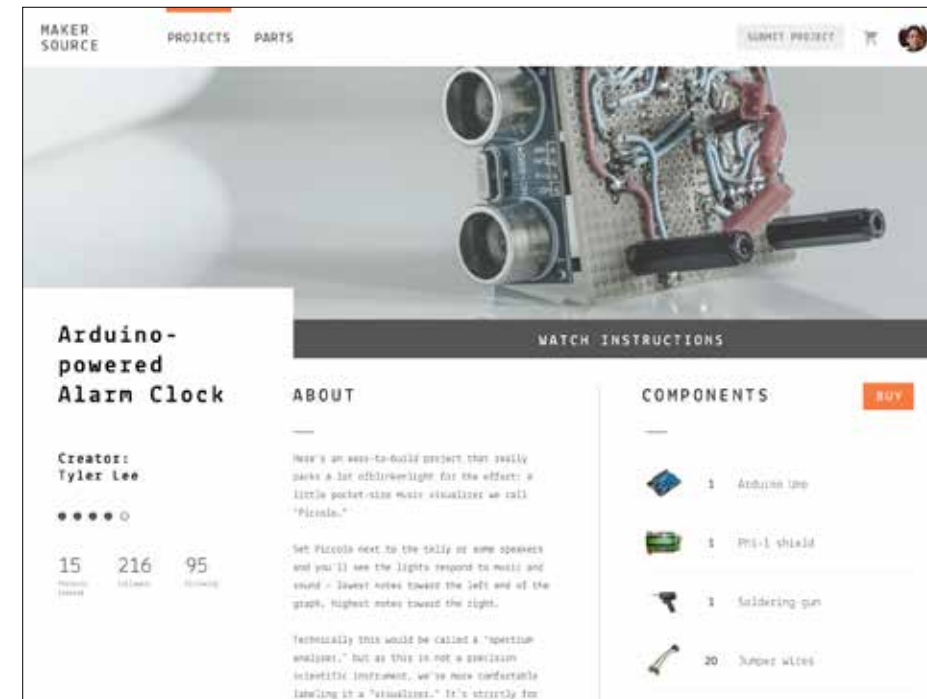
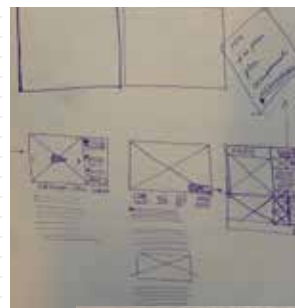


# 7.8 Project View

...

We mapped out the way users would move through instructions in various situations. The key goal was to create a system that is accessible to everyone and is easy to follow - a list of components is formed in relationship to the project and can be modified before being added to the cart. Purchase process is incorporated seamlessly, thus enabling new makers to focus on the building process and to not waste their time by looking for the right components somewhere else.

We also considered different layouts for instructions and annotations/feedback messages. We wanted to make sure that building steps are clear and the user can choose from different ways of following instructions based on personal preferences. The video have pins that map to text instructions, thus enabling every user to follow the instructions at his own pace and rhythm.

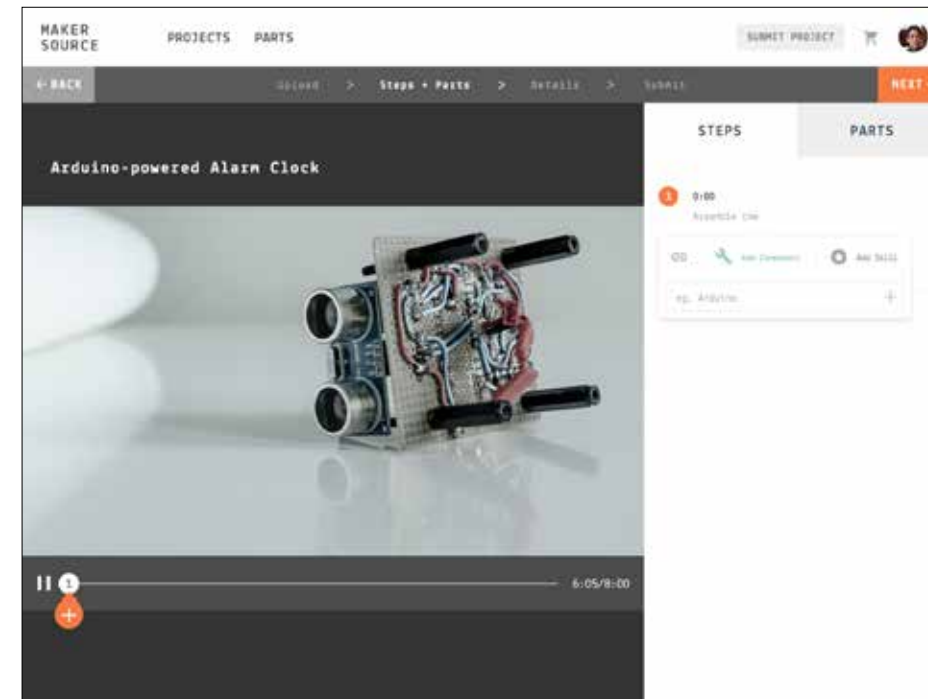


# 7.9

## Authoring

...

*Because makers are the primary content creator for our platform, we designed an authoring tool that lets them effortlessly upload and contribute the instructions for their projects to the community. This experience resonates with their value of focusing on the process by showing them a layout for creating digestible step-by-step instructions instead of asking them to write a freeform article. In addition, they can upload a video, insert images for each step, and link to external resources like PDFs and source codes. This rich media flexibility enables them to create visual and informational content that caters well to the zero-to-makers.*



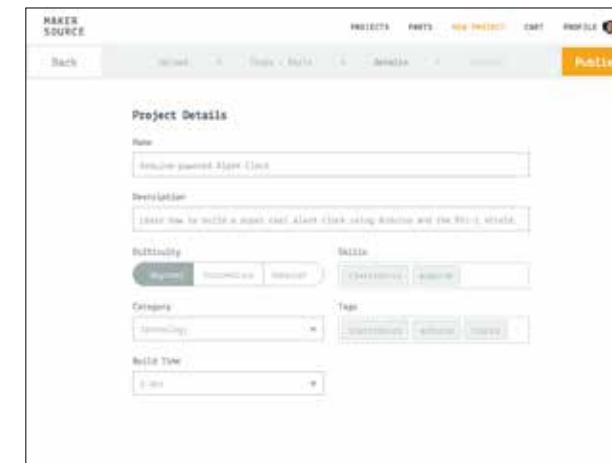
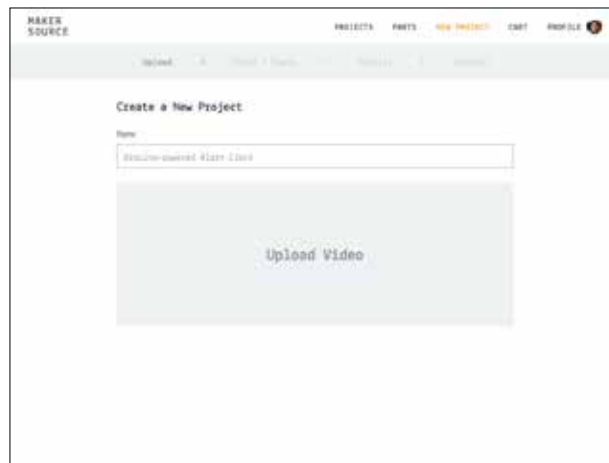
An earlier iteration showing ability to add links and parts while editing a step.

# 7.9

## Authoring

...

*In early iterations, we wanted the author to upload video-based content only so that prospective makers are more inclined to view them. However, realizing that producing a video is an expensive process in itself, we've made it an optional step so they can create text and image-based content as well.*

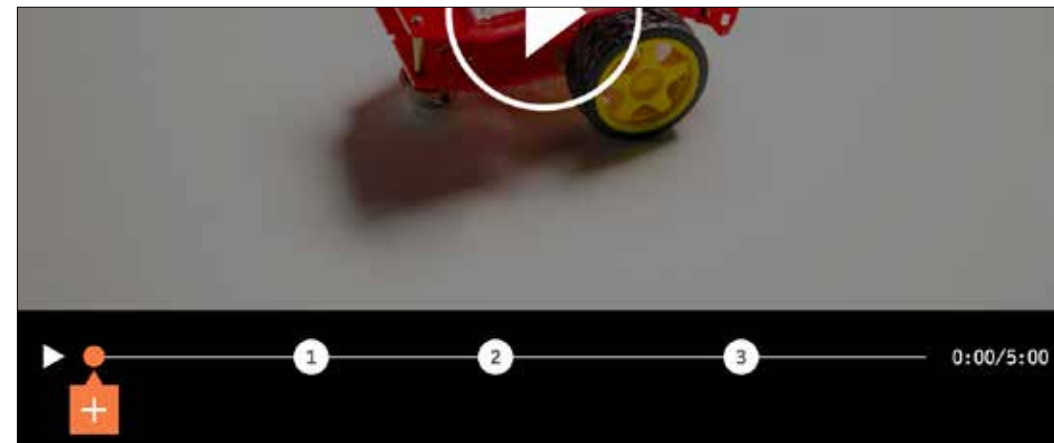


# 7.9

## Authoring

...

*For makers who do upload a video can add step markers right into video timeline by pressing the add button below the video seek knob.*

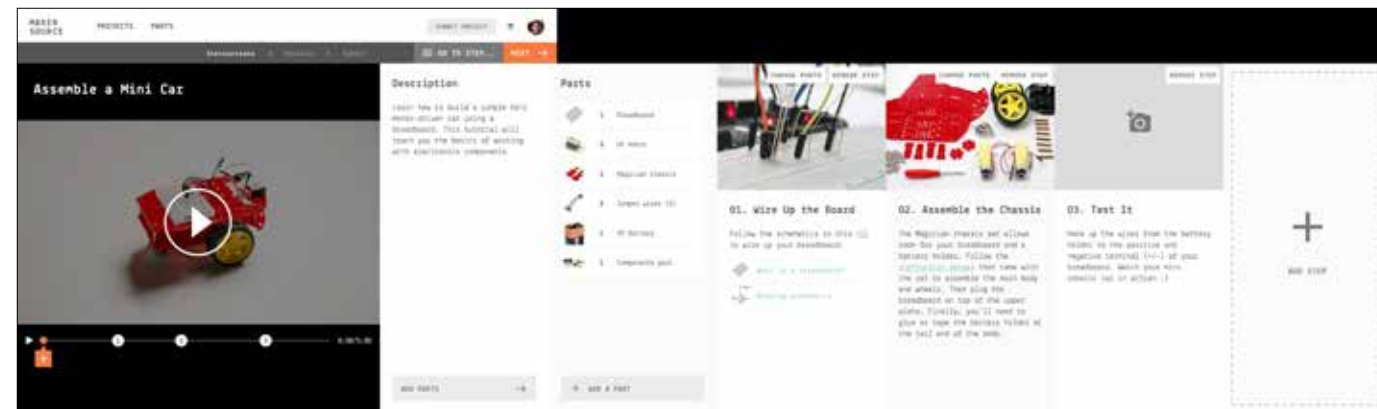


# 7.9

## Authoring

...

*After we decided to revamp the project viewing experience with horizontal scrolling, we redid the authoring experience to match it. This allows the audience to use a familiar interface for both learning and creation.*





# 8.0

...

## Creating a Style Guide

- 8.1 Typography
- 8.2 Colour Palette
- 8.3 Visual Style

# 8.1

## Typography

...

We used Lekton as our primary and only typeface because of its distinct aesthetic take on a monospace font and its legibility for body text. We felt that a monospaced font is appropriate for our users because of its common usage in programming environments, which gives a sense of “work in progress” and connects with the maker’s value of embracing imperfection.

**Lekton Bold**

## Titles and Headers

Lekton Regular

This is the body font. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Donec id elit non mi porta gravida at eget metus. Nullam quis risus eget urna mollis ornare vel eu leo. Duis mollis, est non commodo luctus, nisi erat porttitor ligula.

*Numbering*

01.  
02.  
03.

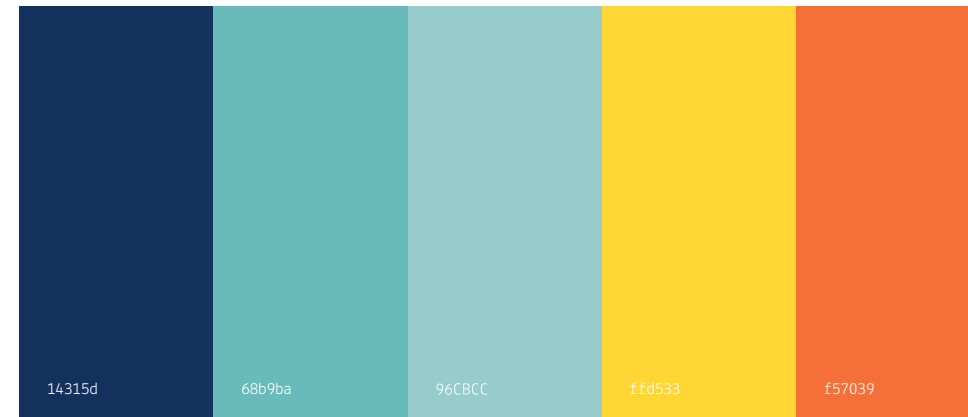
*Lekton Italics*

*This is for annotations. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Donec id elit non mi porta gravida at eget metus. Nullam quis risus eget urna mollis ornare vel eu leo. Duis mollis, est non commodo luctus, nisi erat porttitor ligula.*

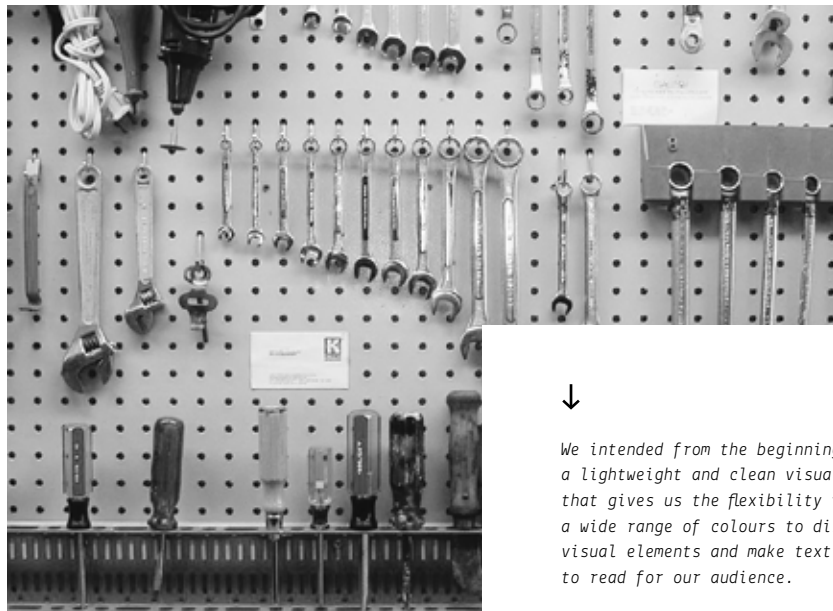
# 02 Colour Palette

...

*We want the brand colors of our platform to be inviting and inclusive to everyone in the maker community. We chose bright teal and bright orange as our accent colors to appeal to the younger audience and to invoke a sense of fun and friendliness. In our user interface, we also use a range of gray shades to make each element distinguishable on the screen.*

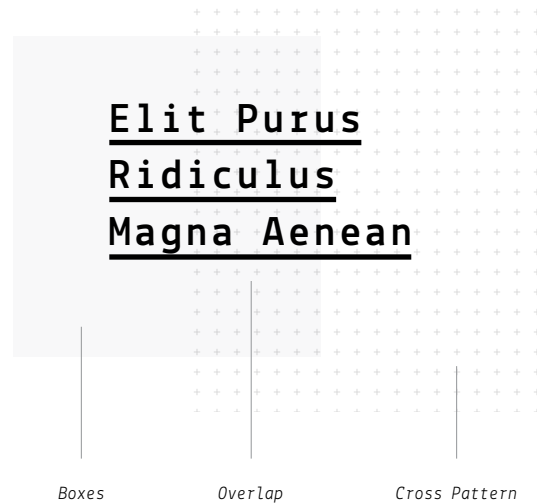


# 8.0 Visual Style



We intended from the beginning to have a lightweight and clean visual system that gives us the flexibility to work with a wide range of colours to distinguish visual elements and make text comfortable to read for our audience.

The cross-dotted pattern is inspired by pegboards that is commonly used in workshops to hold tools. We want to invoke the feeling of a workshop environment familiar with our maker audience to help them resonate with the brand.



Rectilinear Shapes



Graphic Flourishes

# 9.0

...

## Refining the User Interface

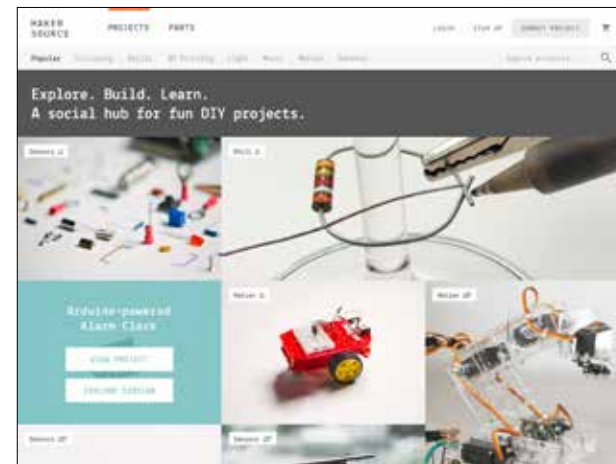
- 9.1 Discovery
- 9.2 Project
- 9.3 Authoring
- 9.4 Profile

# 9.1

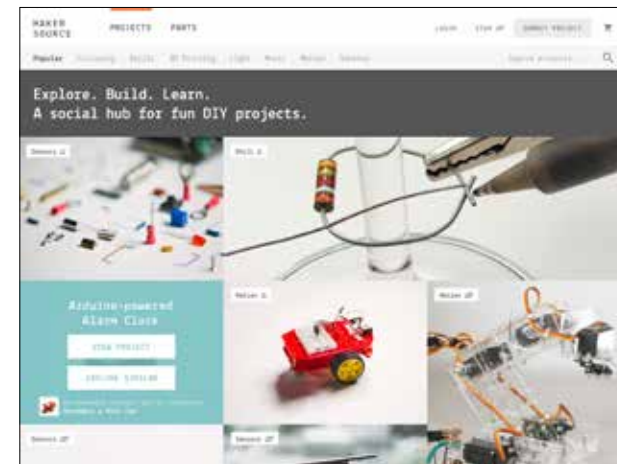
## Discovery



Home Overview

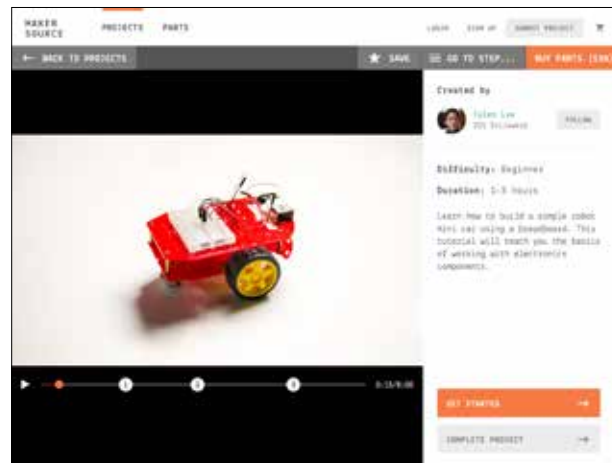


Hover State

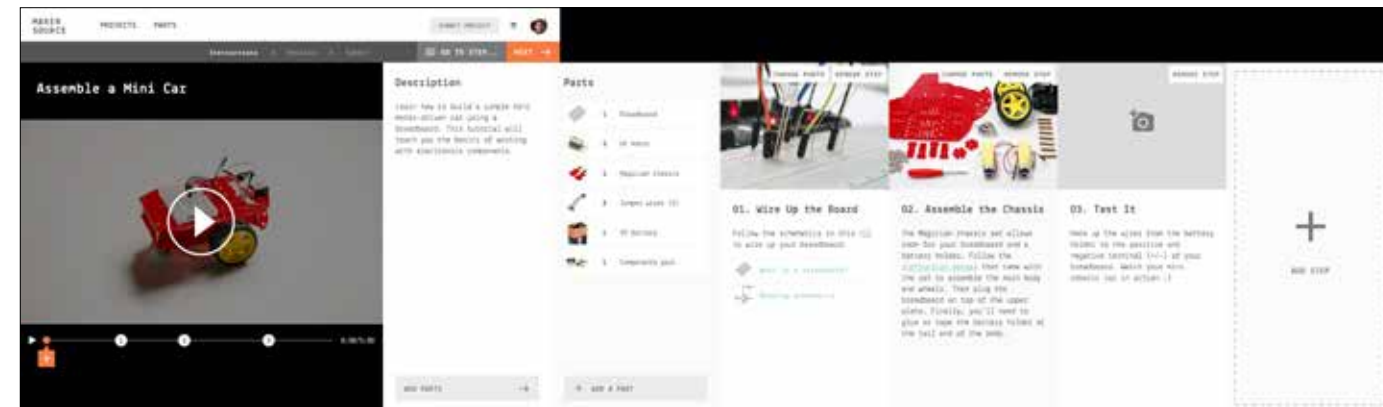


Smart System Recommendation

# 9.2 Project



Video Instructions



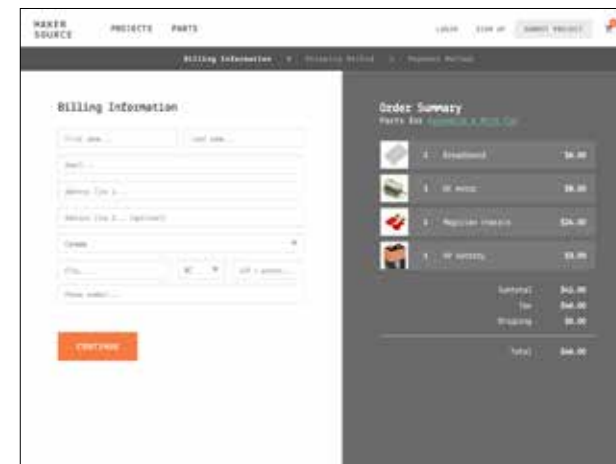
Project Overview

# 9.2

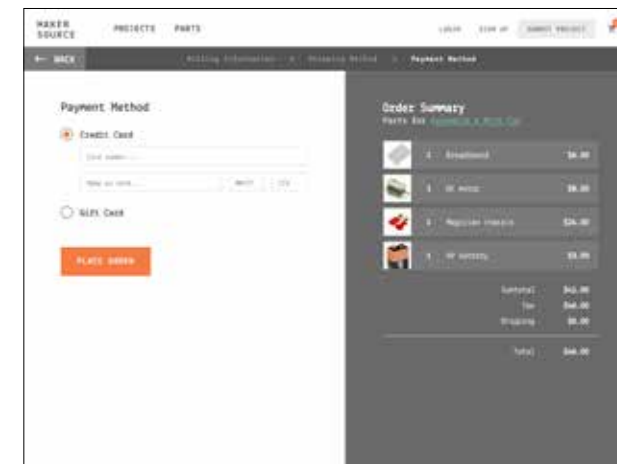
## Project



Purchase



Billing



Payment

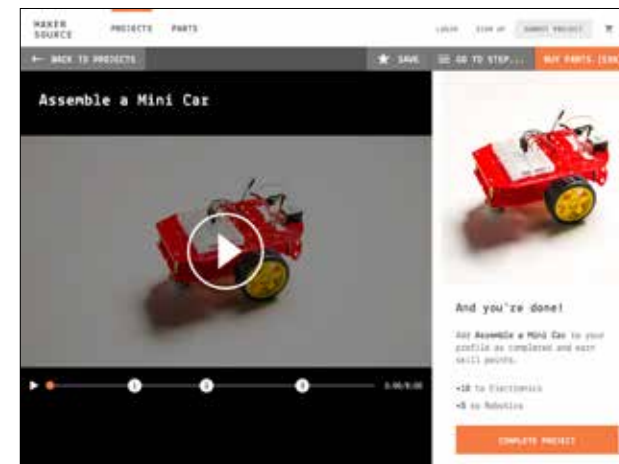


# 9.2

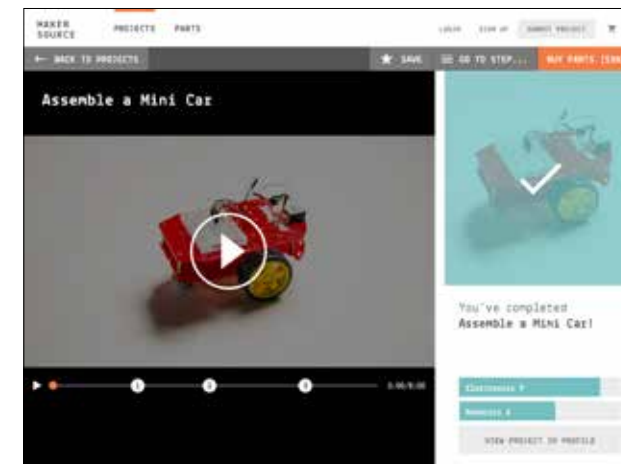
## Project



Thank you

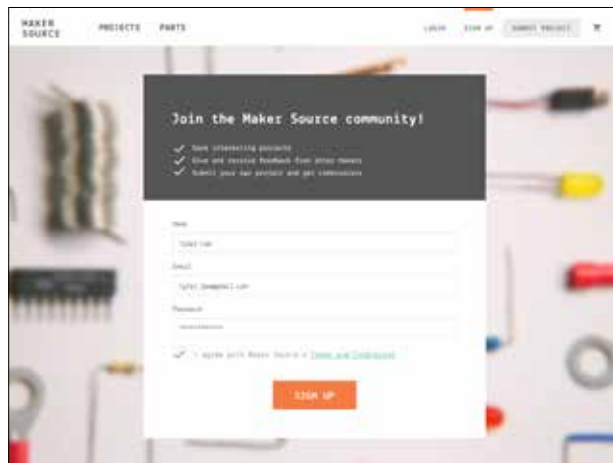


Complete Project

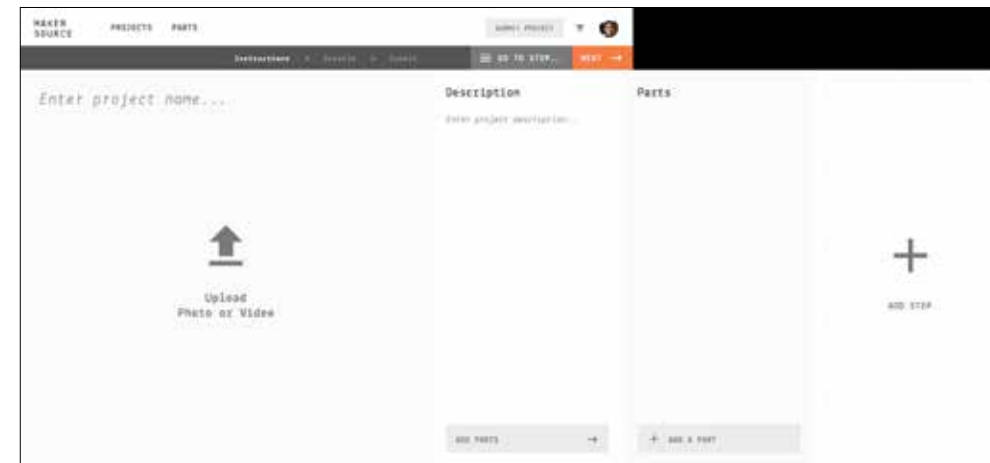


Completed Project

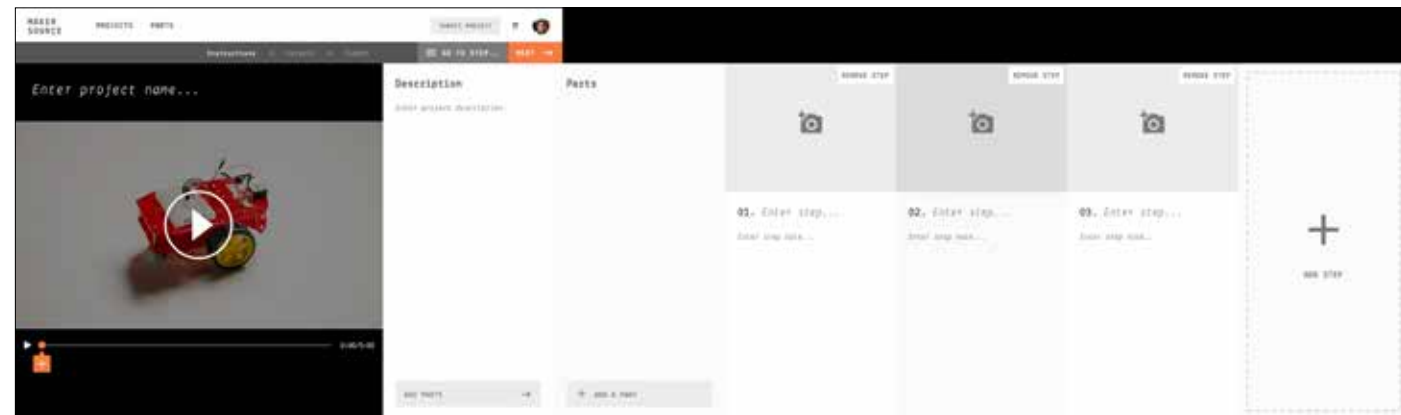
# 9.3 Authoring



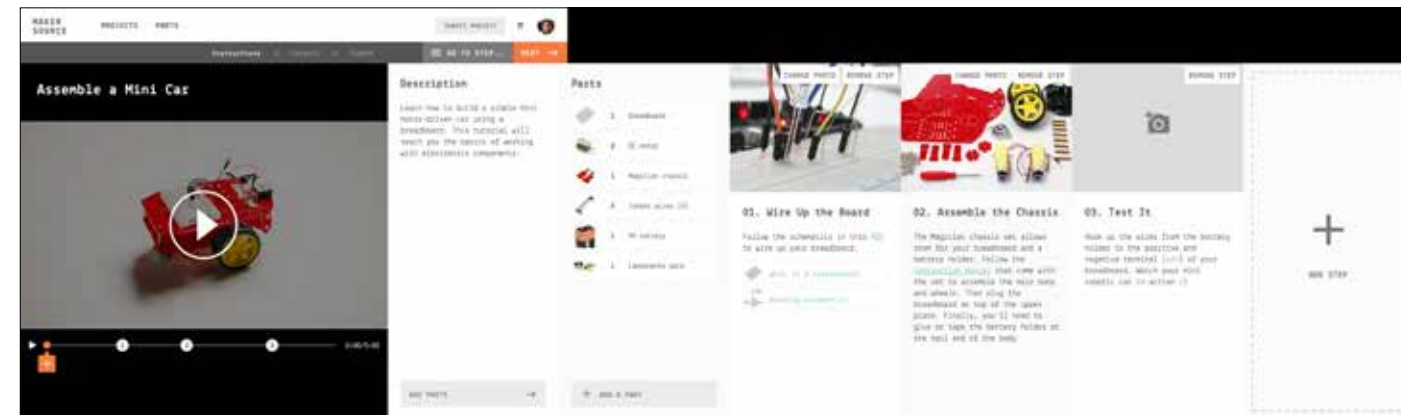
Sign Up



Upload Content



Upload Content



Uploaded Content

MAKER SOURCE PROJECTS PARTS SUBMIT PROJECT

← BACK INSTRUCTIONS Details SUBMIT

### Project Details

Almost there! Just a few more information to fill in to make your project discoverable.

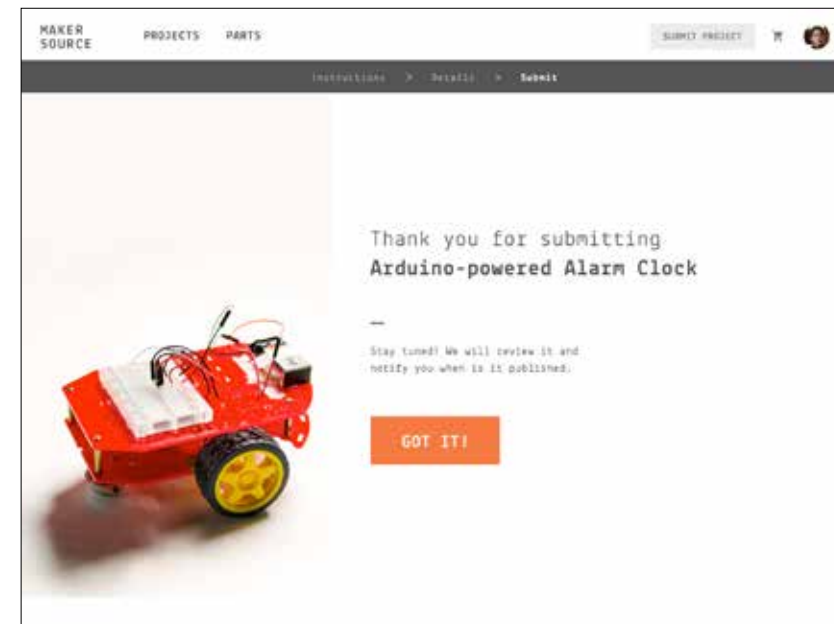
Name  
Recharge-powered Alarm Clock

Subcategory Electronics Category Arduino

Delays Seconds Type Classical Backup Theme

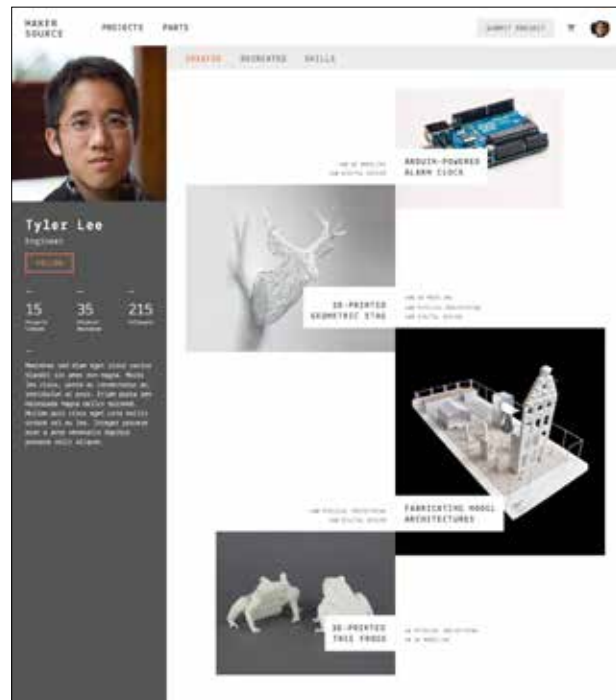
Build Time 0-30

Project De

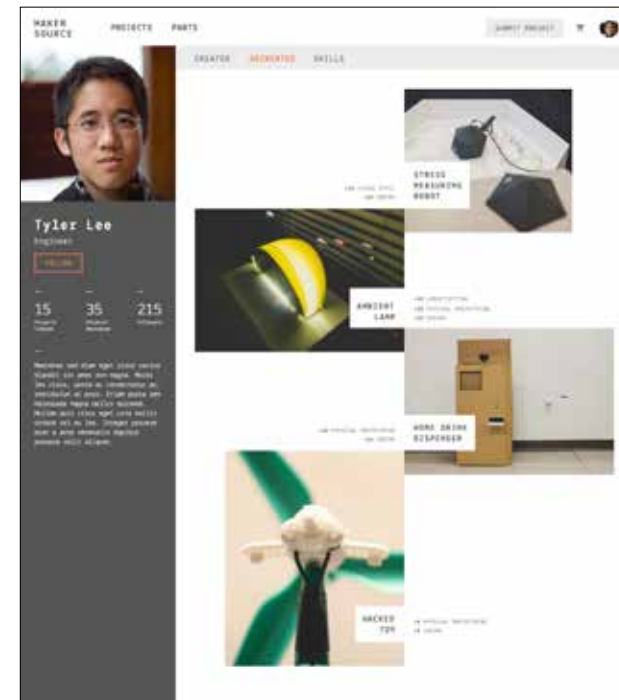


Thank you

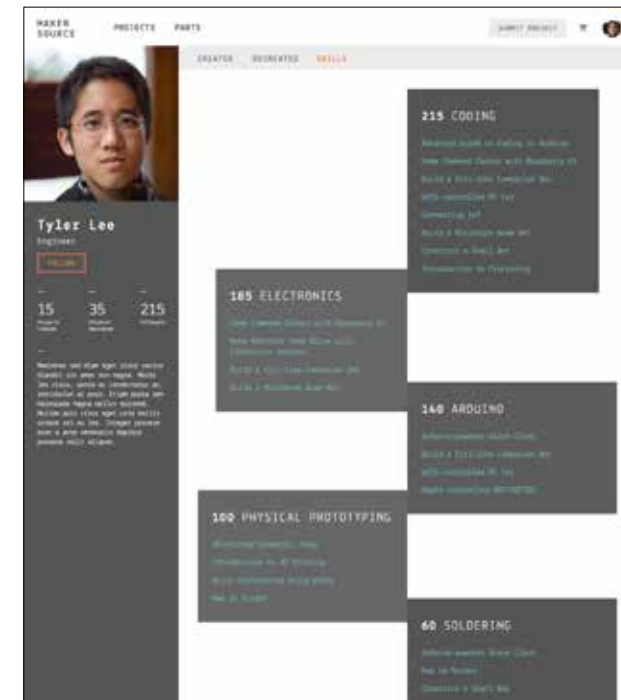
# 9.3 Profile



Created Projects



Recrated Projects



Skills

# 10.0 ...

## Creating a Video

# 10 Behind the Scenes

...

*The video is our way of showing the vision we have for The Source's shift into the maker movement space. Making the videos you've hopefully seen was over three different shoots, each with a different goal in mind, that we tied together to tell the story of our platform. Much of it was a good exercise in being flexible in filming, as we visited locations, and tinkered with things we don't have the greatest expertise in. Hopefully you enjoy it as much as we slaved over it.*

*Disregard the second half of that last sentence. Enjoying it that much is actually unfeasible, unviable, and undesirable.*



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