

A close-up photograph of a wooden board with a painted map of the United States. The map is rendered in various shades of green and blue, with the colors blending into each other. The board is held by two hands, one at the top left and one at the bottom right. The background is a blurred wooden surface.

# *Kitchen Canvas*

ETHAN CARLSON  
KRITISHA JAIN  
CORY VENTRES-PAKE



# Opportunity Areas



Kitchen Decorations



Inspiring Gratefulness



Spice Storage



# User Research

## ROUND 1: Gift Giving

*"I want to give a gift that is really thoughtful, where I can imagine it bringing joy into the person's life"*

*"The last thing I need is more stuff.  
My favorite gifts are ones that I use every day."*





# User Research

## ROUND 2: Cutting Board Needs

### Key Needs Categories:

SIZE | CLEANLINESS | DUAL  
FUNCTIONALITY | STORAGE

*"I don't want food or juices to  
slip inside the hole"*

*"I use my cutting board a lot as a  
cheese board"*





# Concept Generation

## TOP 5 RANKINGS:

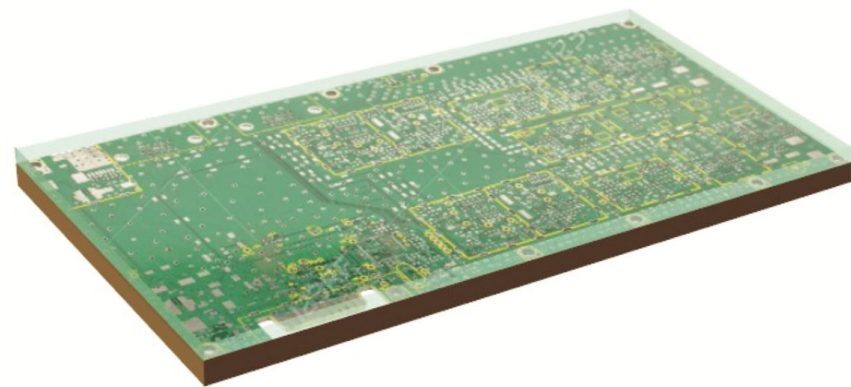
- 1) Indian Grandma
- 2) Cross Section
- 3) Bathymetric
- 4) Modular Magnets
- 5) PCB





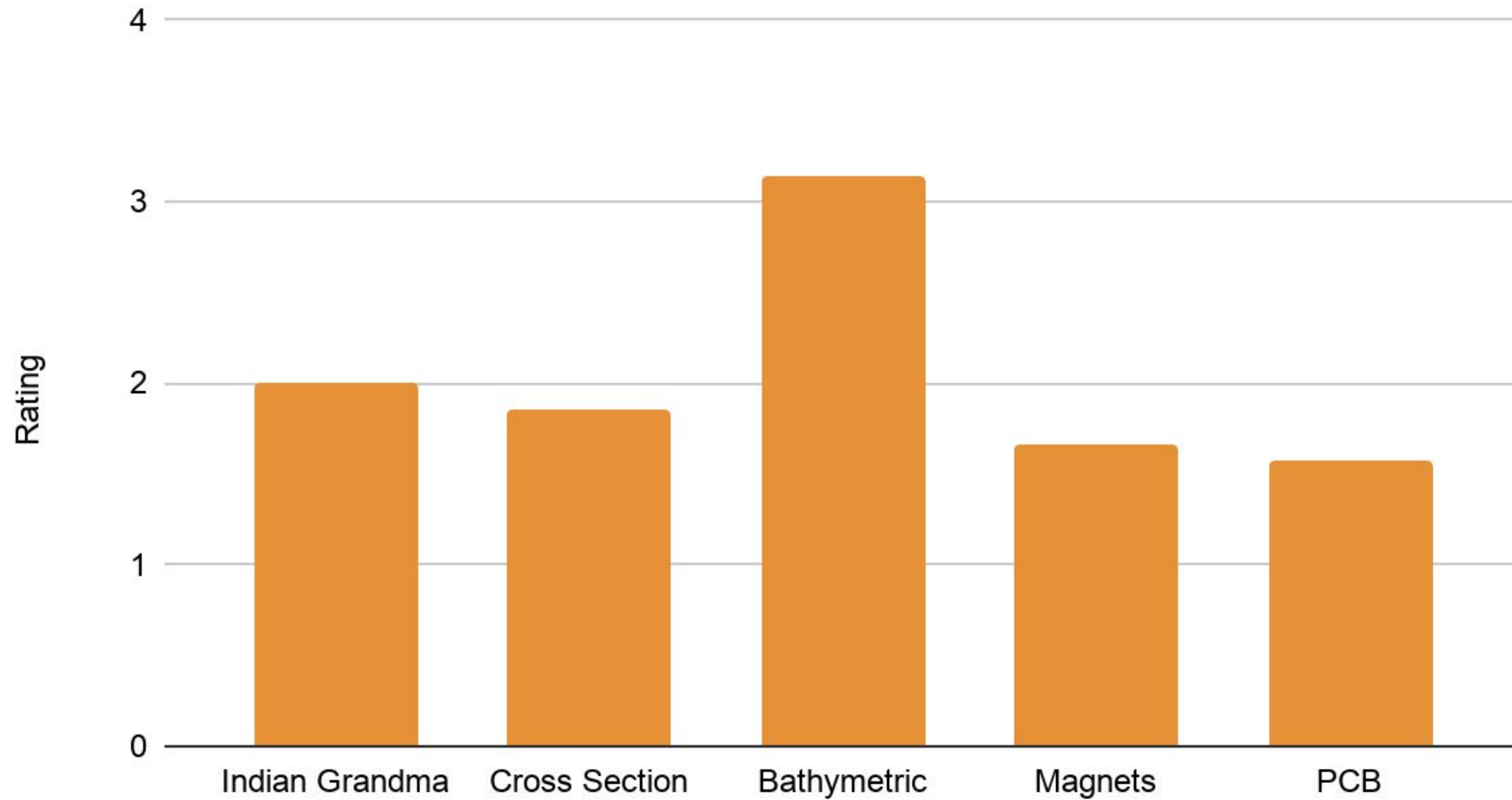
# Concept Selection

ROUND 1





# Concept Selection





# User Research

## ROUND 2: Prototypes, Sizes & Design

*Key design decisions:*

- 1) Large format preferred
- 2) No extruding handle
- 3) No large hole





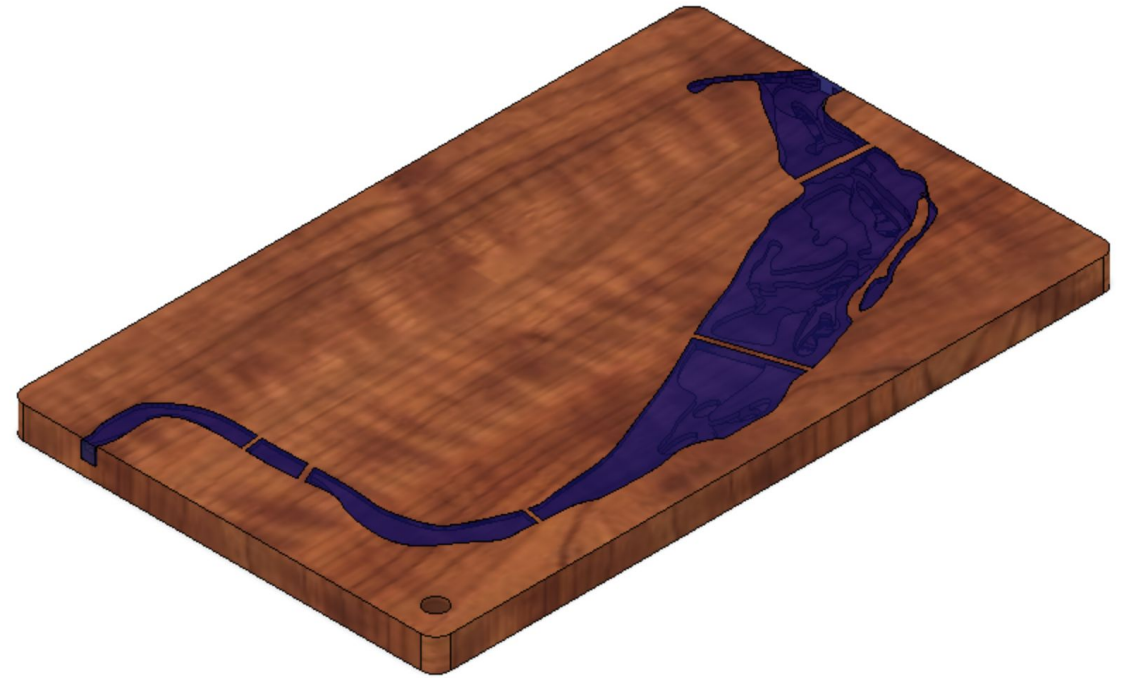
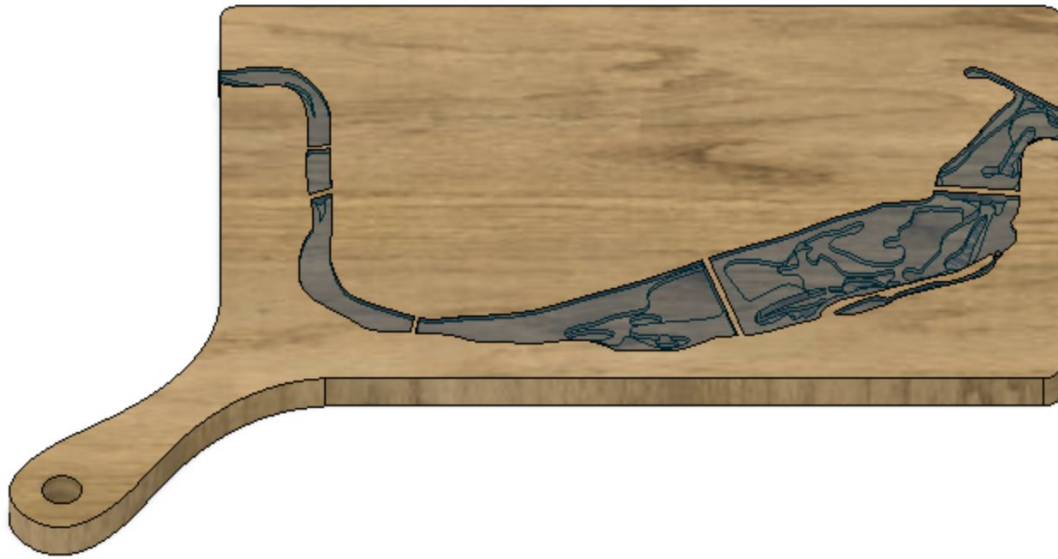
# Prototypes

## *Image to CAD*



# Prototypes

*Round 1 CAD*





# Prototypes

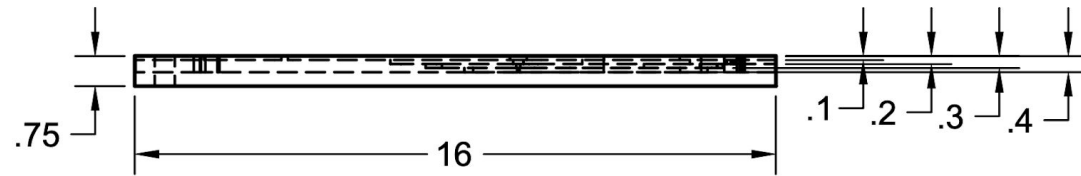
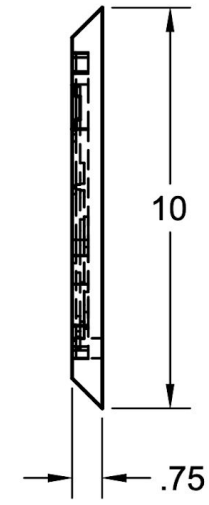
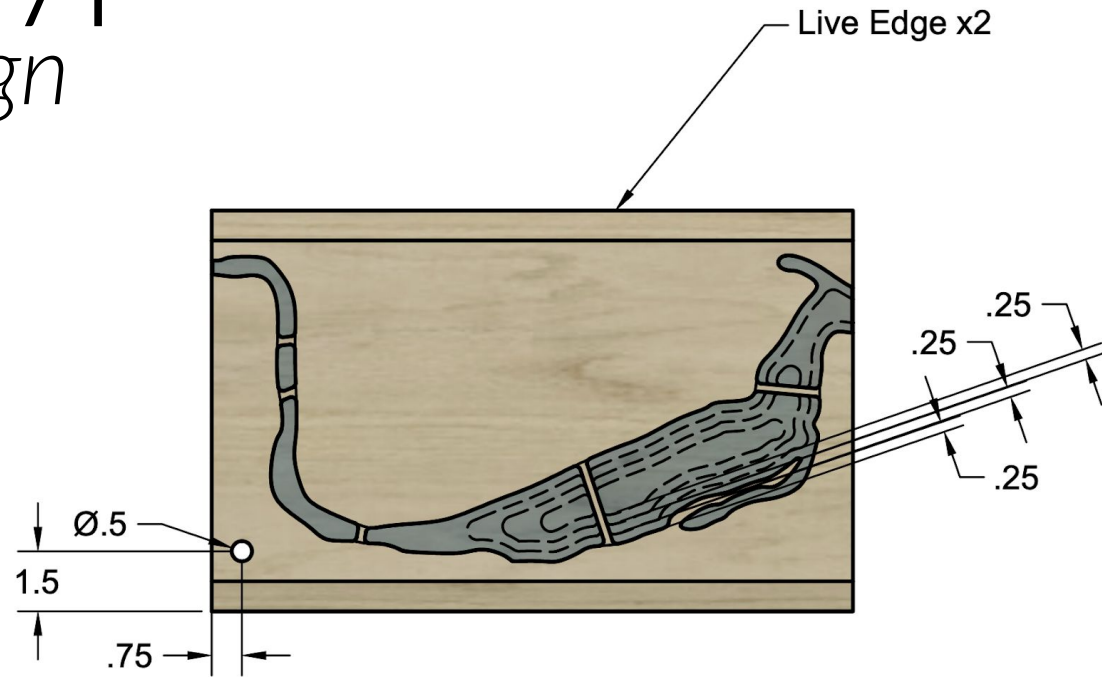
*Round 2 CAD*





# Prototypes

## *Detail Design*





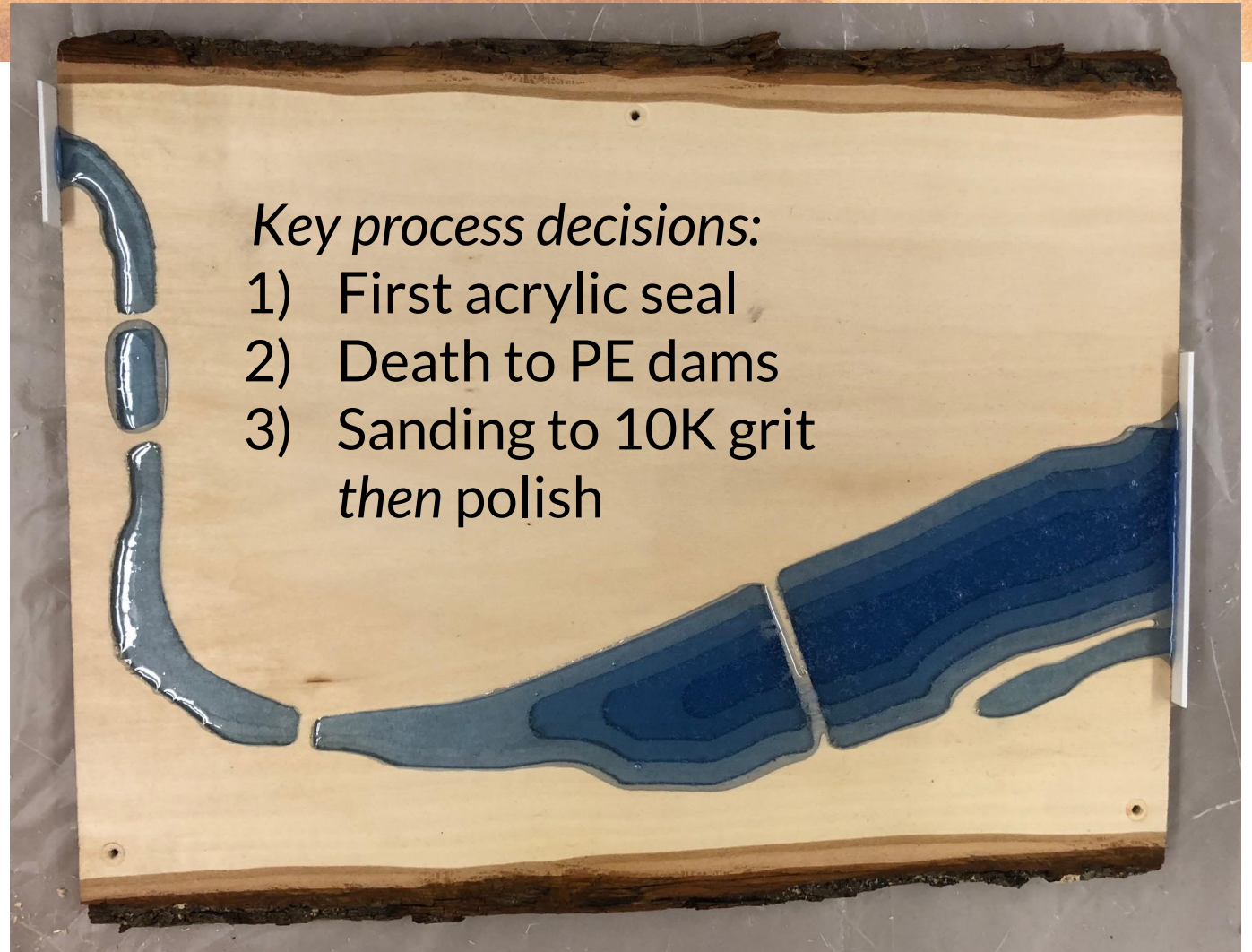
# Prototypes

## Resin Pour



*Key process decisions:*

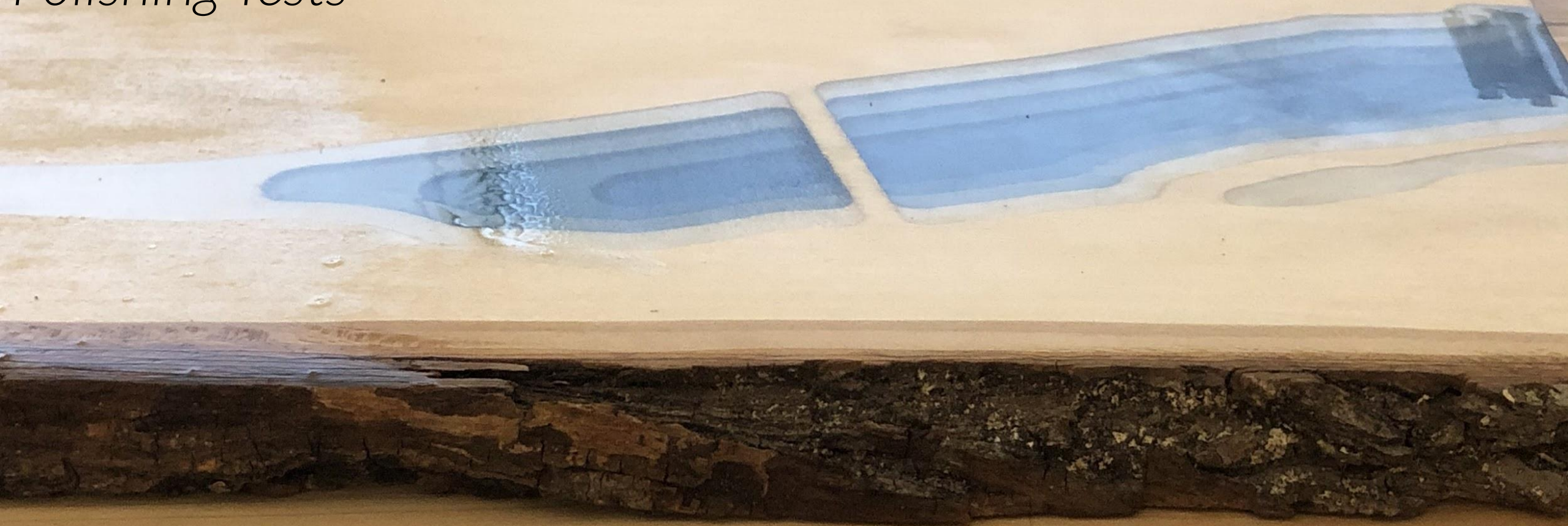
- 1) First acrylic seal
- 2) Death to PE dams
- 3) Sanding to 10K grit  
*then polish*





# Prototypes

## *Polishing Tests*





# Material Selection







# CAM Testing



# User Research

ROUND 3: Prototype:  
feature-specific & use  
cases

Key design decisions influenced:

- 1) Color of resin
- 2) Edge style
- 3) Use cases
- 4) Willingness to pay
  - a) Size implications





# User Research

*"A Work of Art"*





# User Research

## *"The Gift Value"*





# Manufacturing Plan

Assumed Batch Size: 5					
Task	Machine/ Equipment	Materials	Time per board	Notes + Considerations	Location
Cut board into 16" lengths	Track saw	Boards	5		Hobby Shop
Plane both sides	Planer		1		
Mount + CNC board	Router	Two-sided tape, 1/8" downcut bit	5		
Transport to spraypainting area			1		
Acrylic seal - couple of coats		spray can, gloves	1.6	One coat, wait 2-3 min, second coat	Loading dock
WAIT 20 MINS - Transport to IDM Lab			1		
Mix resin			3	Can prep resin while clear coat is drying. 45 min working time	IDM Lab
Pour resin		Resin, mixing cups, tint	2		
Heat at least 3 times with 5 minutes between each	Heat gun		3	Try to check back after ~45 min to see if any more bubbles	
WAIT 24 HRS - Transport to Hobby Shop			3		
Surface sand to depth w/ 80 grit	Time saver		2		Hobby shop
Cut ends to length	Track saw		5		
Wire brush bark	Wire brush		1		
				Make sure all scratches have been removed before starting high grit	
Sand top, bottom, and endgrain	Orbital sander	240, 400 grit	5		
Dry sand top and end resin	Orbital sander	800, 1500, 3000 grit	10		
Wet sand top	Orbital sander	water + 5000, 10000 grit	5		
Transport to IDM			3		
Polish resin	Dremel	Felt heads, polishing compound	3	Pressing too hard may heat up and melt resin	IDM Lab
Finish twice	Microfiber cloth	Mineral oil	5		
Hot iron brand	Iron brand, propane torch		1		
Packaging		kitchen towels, twine	5		
		Total Time	65.6		

With Batch Size of 1:

**120 min**

With Batch Size of 10:

**58.8 min**



# Manufacturing Plan

[illegible]



# Financials

Number of Units =		55	Avg Price =	\$75.00
COGS				
	Material			
		Live Edge Olive	\$20.73	
		Mineral Oil	\$0.53	
		Acrylic Sealant	\$0.10	
		Resin	\$3.27	
		Resin Tint	\$0.27	
	R&D			
		Basswood	\$0.09	
		Test units	\$1.60	
	Process Consumables			
		Microfiber Cloth	\$0.18	
		Orbital Sandpaper	\$0.49	
		1/8" Downcut Endmill Bit	\$0.27	
		2-Sided Tape	\$0.48	
		Mixing Cups	\$0.16	
		Propane	\$0.36	
		Polishing Cones	\$0.24	
		Polishing Compound	\$0.15	
		Branding Iron	\$1.00	
		Price	\$75.00	
		COGS Total	\$29.93	
		10% Rejection	\$32.92	
		Gross Profit	\$42.08	
		Gros Margin %	56.1%	
		Total Profit	\$2,314.46	

Number of Units =		55	Avg Price =	\$90.00
COGS				
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		Polishing Compound	\$0.15	
		Branding Iron	\$1.00	
		Price	\$90.00	
		COGS Total	\$29.93	
		10% Rejection	\$32.92	
		Gross Profit	\$57.08	
		Gros Margin %	63.4%	
		Total Profit	\$3,139.46	



# Point of Sale

## Payment Portal



- Square Reader
- Venmo
- Cash
- Online portal to be identified



# Narrative Pitch

The Charles River forms the **centerpiece of MIT's campus**, bringing both **beauty and grounding**. Our map of the Charles inlaid into figured Olive wood portrays the **diversity and cross-disciplinary culture** on campus, while the **natural** wood and live edge add **warmth and character**.



# Branding





serving board





cheese board





conversation piece



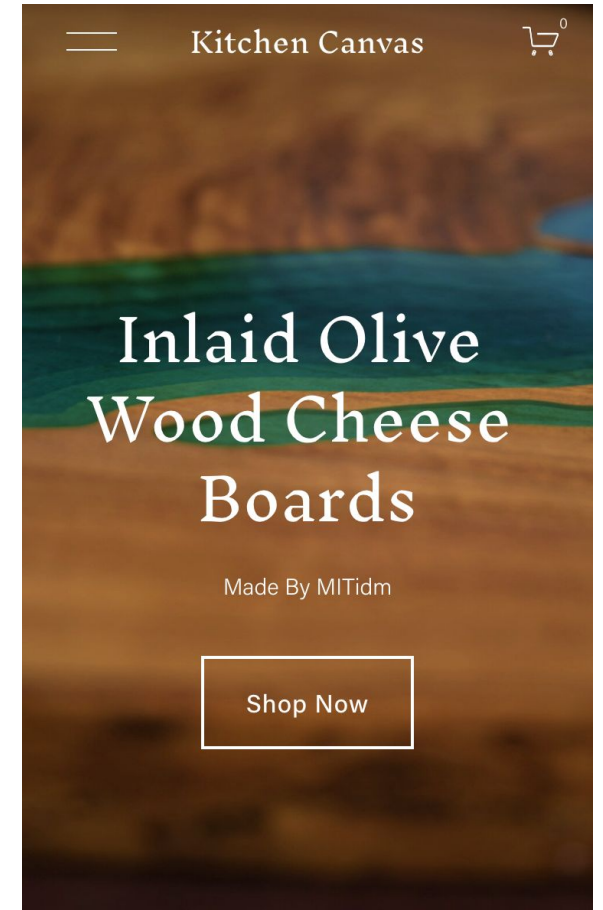
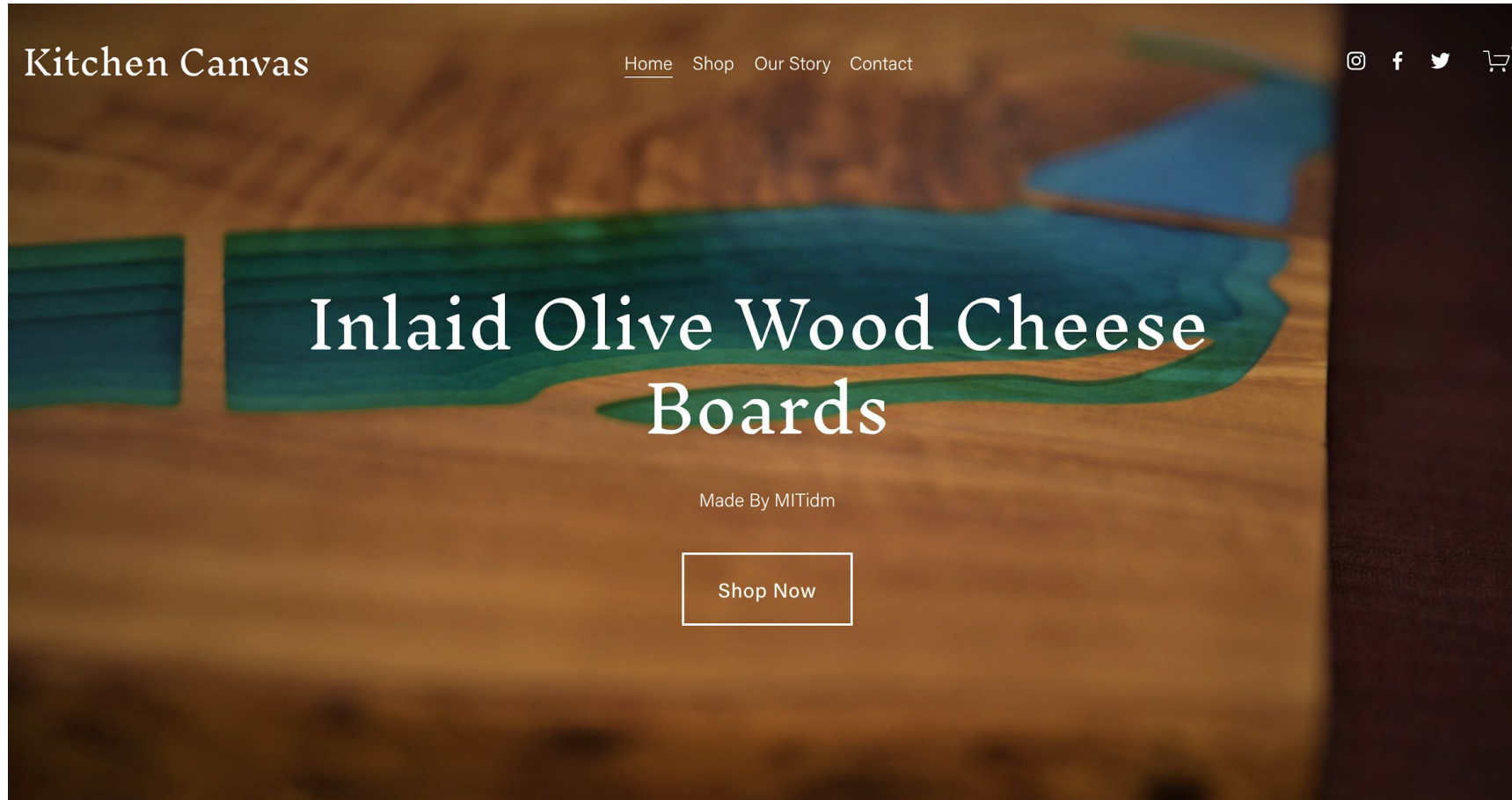


# Packaging





# Marketing



www.kitchencanvas.design



# Marketing

Facebook interface showing a search for "kitchen canvas". The search results dropdown displays "kitchen canvas" and a link to "See all results for kitchen canvas". The profile page for "Kitchen Canvas" is visible, featuring a circular logo with the text "kitchen canvas" and "MIT idm". The page name "Kitchen Canvas" is displayed below the logo. The main content area shows a cover image of a wooden cutting board with cookies and a glass of wine. Below the cover image are buttons for "Like", "Follow", "Share", and "Add a Button". The left sidebar contains navigation links: "Home", "Posts", "Jobs", "Events", and "See more". The bottom section includes a toggle for "Automatically respond to new" and a link to "Invite friends to like your Page".

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*Thank You!*

