

Wooden Toy

Design Brief | ID 316 2021 | Project 2
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Product Market Statement

Company ABC&D see an opportunity in the wooden toy market.

Motion and interaction are important, they want a product that a child or user can interact with on multiple levels.

They want Toys that can be for rollplaying, imaginative play, educational, sensory or any play you can think of.

ABC&D would like an inclusive product, something that would be played with by all genders or identities.

Market Overview

Toys have been made from wood for centuries, if not millenia, but ABC&D want to have something current and updated for modern market.

The current market ranges from educational to high end sculptural forms bordering on art. Many toys incorporate interaction or puzzle solving to make them more engaging.

Sustainability and ecological concerns should be considered when designing for the modern market as users feel wood is a more earth friendly material.

Toys designed for children have certain safety standards, and you must consider the users safety as paramount. Don't hurt a kid.

Client Perspective

What do they want?

ABC&D would like a toy that moves, can be pulled or pushed around and involves some level of motion/exercise for the user. They would also like another element of motion incorporated into the design. Something else that moves on, with or into the product. It must have at least 2 moving elements (for example: wheels and a propellor). Articulation of a joint, wheel, lid, removable parts or other elements count toward this number.

What opportunities do they see?

The toys can incorporate other material that might be interesting or useful. Silicones, rubbers, metal, plastics, fabrics, leathers and magnets are all options, but should not be the main material.

Toys should be of a scale that they can be easily transported. If a child wanted to take their favorite toy with them on a trip, they could carry it in a carry on bag. Roughly 9 inches x 14 inches x 22 inches should be the max size.

A finish should be applied to protect and potentially decorate your product. Safety to the user and the environment should be considered.

Glue and joinery should be the primary method of construction. Metal, screws, nails, etc can be used but should consider safety, longevity, and aesthetics.

What is important to their brand?

ABC&D would like to see a variety of options as wooden toys is a new product category for them.

Please work up Mood boards showing different inspiration images, products, materials, etc, that could be used to help define the design language of the product.

Product Concepts | Mood Board

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Retailers

- \$15-20 for lower end toy prices. \$20-50 mid range, \$50+ for high end.
- Often pretty simple and can be outgrown.
- Majority wood with small amounts of metal or fabric. Being environmentally friendly is a big selling point to parents.

Competitor Products

- Painted wood, very colorful, some parts painted some not.
- Needs to pass many different tests before it can be sold. Needs to be nontoxic, in the case of wood it must not splinter.
- If the grain of the wood is exposed then it is coated in a finish that increases durability.

Construction

- Glue would be most effective to keep costs low for manufacturing.
- Only use metal pins to connect the different joints.
- Only want exposed material to be wood and anything on the very exterior of the wood. ie. rubber O-ring for a wheel.
- Smooth and rounded edges.

Sustainability

- Reclaimed wood toys, repurpose wood to be made into kids toys.
- Non-toxic chemicals and paints.

User

- Parents' main concern is that the kid is safe while they are playing with their toy.
- When the kid is young the parents buy the toy once they are old enough to have interests, the kid becomes the one that chooses

Function

- Primary function to entertain kids.
- Secondary function to look good on a shelf or desk in a room.
- Played with by kids around the target age, once outgrown, could be handed off to another family or be used as a decoration in a room.
- Long lasting, repairable.

Design

- Smooth and sleek.
- Not overly vibrant, should be able to fit into most rooms aesthetic.
- Do not have very bright colors.
- Cute and appealing appearance .

Material

- Injection molded plastic is the most common toy material. Wood toys are often labeled as hand made for higher end versions.
- Water based finishes.
- Metal for parts that need strength.

Brand/retail/manufacturing

- Brand wants a wooden toy.
- Should have different color options.
- \$45-70 price range, mid to higher price range.
- Hand made in USA.

Image	Brand	Link	Pros	Cons	Price
	Manhattan Toy Company	manhattantoy.com	Colorful Well made Interesting to look at for all ages	Very simple Can be boring for kids	\$18.00
	Grimm's Spiel & Holz Design	grimms.eu	Sail can be removed Cute Good to roll and race	Sail can get lost Has small parts(choking hazard)	\$25.00 ea
	SWOODZ	swoodz.com	Modular Silicon to prevent scratches Creative combinations	Very heavy Only wooden base Not as eco friendly	\$25.00 ea
	Friendly Toys	etsy.com	Well made Heirloom toy Calm yet pretty colors	Expensive	\$50.00
	Crate and Barrel	crateandbarrel.com	Cute design Set of various animals	More decorative than for play Lacks any movement Paint chips off	\$39.00

Common Features

The majority of this type of product should do this or have this feature
Have moving parts, be interesting to look at as well as play with.

P.O.D

Allow kids to be creative when playing with the toy. Have the movement be dynamic. The colors are bright but they don't stand out. Do not make it unappealing to look at.

Suggested Price

\$45-70 price range. In the range of high quality heirloom toys.

Image	Description	Opportunities	Challenges
	Cutting wood to be bendable	Could create really fun and unique movement for appendages.	Could break easily. Cannot be repaired.
	Supporting toys	Creates an environment to play in. Allows for more in depth play.	Could limit play to the environment and not allow for as much creativity.
	Roller Ball Bearing	Allows for movement in all directions as well as spinning.	Hard to have it look well on the bottom. Would have to attach in a safe but strong way.

CMF

Dyed or painted to still show wood texture. Have some parts unpainted for variation.

Market Trends

Possible upcoming trend, having toys themed on different endangered plants or animals to raise awareness.
Should not be influenced by contemporary characters, wood toys out live short term trends.

Key Retail

Amazon, Crate and Barrel, Pottery Barn

Problem Statement

To create a dynamic animal based wood toy, that once outgrown could be passed down to another kid or placed on a desk or shelf as a decoration.

Research and Testing Summary

- Needs to be safe and durable.
- Durable to increase lifespan.
- Joints need to be strong to withstand use.

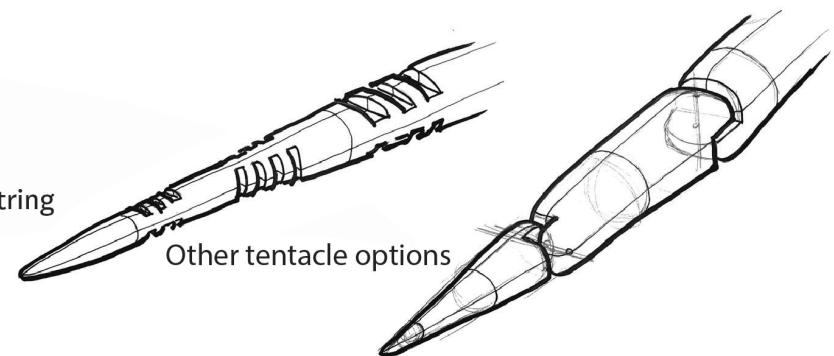
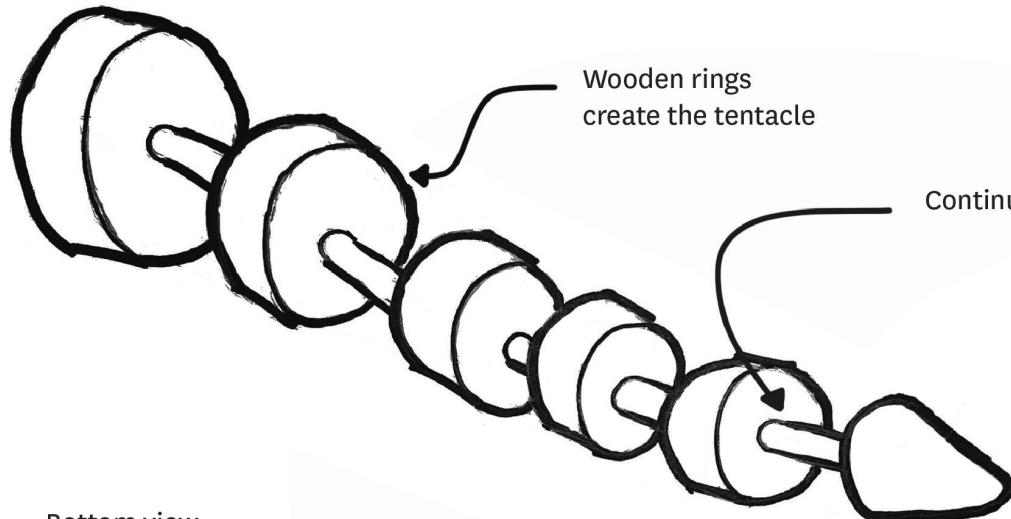
How Will This Product Succeed

- Have interesting and fun play with spinning and sliding.
- Have the colors be interesting, yet not overpowering.
- Have a cute and fun design that the family will want to keep after the kid has outgrown.

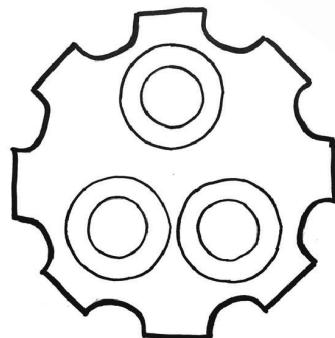
Name	Concept Details	Features	POD
Otis the Octopus	Wooden octopus with articulating tentacles, and rollers on the bottom.	materials: Wood, Metal pins, rollers function: Slide and spin Otis on a flat surface user: Kids ages 4-6 price: \$55	Cute octopus design that allows for fun and interesting movement.

Product Concepts

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Bottom view



Painted on eyes

Side view

