Engineering Kits

Winner of

ROHRER College of Business ELEVATOR PITCH

Funded by



Featured in





Business Thesis

OUR MISSION STATEMENT

"Empowering girls to develop into our world's problem solvers"

THINK LIKE A GIRL: ENGINEERING KITS INSPIRES GIRLS TO **LEARN ABOUT ENGINEERING FUNDAMENTALS** WHILE CONNECTING THEM TO **REAL-WORLD APPLICATIONS** IN **WAYS GIRLS ENJOY!**



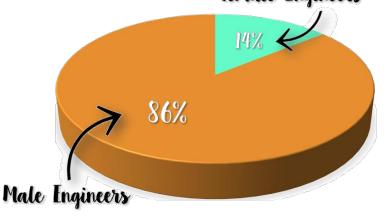
What Problems Do We Solve?

-Only 14% of engineers are female

CRAWFORD, MARK. "ENGINEERING STILL NEEDS MORE WOMEN." ASME. N.P. SEPT. 2012.

- There are a lack of female role models in the STEM field for young girls MOAKLER, MARTIN W. "COLLEGE MAJOR CHOICE IN STEM: REVISITING CONFIDENCE AND DEMOGRAPHIC FACTORS". THE CAREER DEVELOPMENT QUARTERLY. JUN. 2014.
- Girls begin to lose interest in math and sciences during middle school MODI, KAMLA. "GENERATION STEM: WHAT GIRLS SAY ABOUT SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH". GIRL SCOUTS OF THE USA. 2012. Temale Ingineers
- Misconception of what engineers do

KITZINGER, JENNY. "ROLE MODELS IN THE MEDIA: AN EXPLORATION OF THE VIEWS AND EXPERIENCES OF WOMEN IN SCIENCE, ENGINEERING, AND TECHNOLOGY". *CARDIFF SCHOOL OF JOURNALISM*. MAR. 2008.





What's Our Story?



"I created this project because I use to feel really alone in my major and I want girls to feel like they can achieve anything."



"I want girls to know that engineering is a viable option for them and to not face the same struggles and discrimination that I experienced."



Thad a lot of great teachers and role models who encouraged me to pursue my passions. I want to be that for the younger generation of engineers and scientists."



What's Our Story



"I want to be a positive role model empowering and exciting girls in engineering and all STEM majors, because limits shouldn't be set based on gender."



"Coming from an all girls high school where only 3 in my class went into engineering, I want to see more girls get interested and pursue lives and careers in it."



"I want to encourage more girls to pursue a career that makes a difference in the world and improves the lives of other."



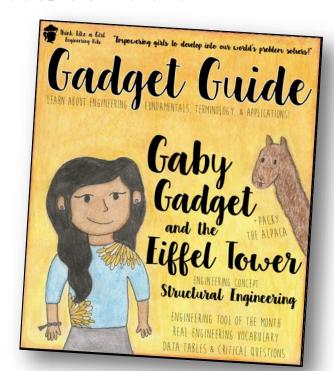
Our Product

PACKAGES THAT ENCOURAGE YOUNG GIRLS, AGES 6-12+, TO LEARN ABOUT ENGINEERING FUNDAMENTALS THROUGH ACTIVITIES GEARED TOWARDS GIRL INTERESTS!

What's Inside?

- Engineering Activity
 - TEACHES GIRLS ENGINEERING SKILLS, TERMINOLOGY, & APPLICATIONS
- "Gadget Guide"
 - ILLUSTRATED SHORT STORY & INSTRUCTION MANUAL FOR THE ACTIVITY
- -Design Project
 - INTRODUCES IMPORTANT DESIGN/CREATIVITY SKILLS





Our Product

PACKAGES THAT ENCOURAGE YOUNG GIRLS, AGES 6-12+, TO LEARN ABOUT ENGINEERING FUNDAMENTALS THROUGH ACTIVITIES GEARED TOWARDS GIRL INTERESTS!



- -Gaby Gadget
 - 17-YEAR-OLD FILIPINO GIRL ENGINEER FEATURED IN THE "GADGET GUIDE"
- -Real Woman Engineer Trading Card
 - INTRODUCES GIRLS TO REAL WOMEN ENGINEERS IN THE INDUSTRY
- -Outfit Design for Gaby Gadget
 - GIRLS CAN SUBMIT ONLINE FOR THEIR DESIGN TO BE FEATURED

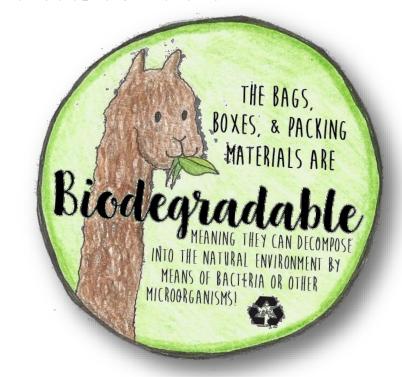


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-Sustainability Fact Card

- EXPLAINS HOW PACKAGING & MOST MATERIALS ARE ECO-FRIENDLY
- HAS MONTHLY SUSTAINABILITY FACTS ON THE BACK
- "Sur-Prize"
 - SMALL PRIZE INCLUDED IN EACH PACKAGE THAT FOCUSES ON THAT MONTH'S THEME





Business Model

- BUSINESS TO CONSUMER SUBSCRIPTION MODEL
 - ORDER DIFFERENT SUBSCRIPTION OPTIONS FROM OUR WEBSITE
- -CURRENTLY CREATING BUSINESS PLAN; GAINING A NETWORK THROUGH CONFERENCES, SOCIAL MEDIA, AND REACHING OUT TO MENTORS; RECEIVING PUBLICITY THROUGH MEDIA & COMPETITIONS; USING SEED FUNDING (\$5,000) FOR R&D OF PROTOTYPES; AND PROVING A VIABILITY OF CONCEPT THROUGH FOCUS GROUPS & RESEARCH
- WILL MOVE TO MANUFACTURING STAGE UPON RECEIVING FURTHER FUNDING



Progress to Date

- CURRENTLY IN PROTOTYPING STAGE
 - RESEARCHING COMPETITION
 - BUILDING PROTOTYPES
 - FOCUS GROUP/SURVEYS
- BUSINESS DEVELOPMENT
 - RESEARCHING MARKET
 - FINANCIAL ANALYSIS
 - CONSULTING WITH ADVISORS
 - GAINING A STRONG NETWORK





Progress to Date

SOCIAL MEDIA









- CURRENTLY DEVELOPING "THINK LIKE A GIRL" WEBSITE



Marketing Plan

- FOCUS GROUPS
 - -ROWAN UNIVERSITY, BUSINESS OF DOING GOOD, LOCAL ELEMENTARY SCHOOLS
- -SOCIAL MEDIA (FACEBOOK, INSTAGRAM, TWITTER, SNAPCHAT)
- MARKET PROJECT THROUGH SOUTH JERSEY MAGAZINE
- MARKET PROJECT THROUGH THE SCIENTISTA FOUNDATION
- MARKING ADVISING FROM DINO ENTERPRISES









Collaborations

Collaboration with "The Scientista Foundation"



- WILL PROMOTE LAUNCH PARTY FOR OUR CROWDFUNDING CAMPAIGN 2016
- WILL PROVIDE WOMEN ENGINEERS FOR TRADING CARDS
- WILL FEATURE "THINK LIKE A GIRL" IN SCIENTISTA NEWSLETTER AND BLOG
- WILL INVOLVE US IN FUTURE SCIENTISTA EVENTS

Collaboration with "The New York Academy of Sciences" (The New York Academy of Sciences



- WILL INVOLVE OUR PRODUCT IN THEIR FUTURE EVENTS
- WILL INVOLVE OUR TEAM IN THEIR COMMUNITY



Collaborations

Collaboration with Dino Enterprise

- ADVISING WITH ADVERTISEMENT AND MARKETING
- ADVISING WITH SOCIAL MEDIA

Camden Colab Student Fellowship

- CAMDEN COLAB STUDENT FELLOWSHIP
 - CAMDEN COLAB MEMBERSHIP
 - ACCESS TO CO-WORKING AND MOBILE OFFICE SPACE, CONFERENCE ROOM AND COMMON SPACE
 - MAILING ADDRESS
 - BUSINESS INCUBATION SERVICES







Competitive Overview & Strategy

- WE **FOCUS ON WHAT GIRLS LIKE** AND THEN INCORPORATE ENGINEERING FUNDAMENTALS, TERMINOLOGY, SKILLS, AND APPLICATIONS
- OUR PRODUCT ZONES IN ON THE MAIN REASONS WHY GIRLS DON'T GO INTO ENGINEERING
- WE INTRODUCE GIRLS TO REAL FEMALE ENGINEER ROLE MODELS AND REAL WORLD APPLICATIONS
- OUR PACKING SUPPLIES AND MOST MATERIALS ARE ECO-FRIENDLY
- BUSINESS TO CONSUMER SUBSCRIPTION MODEL
- WE CAN EXPAND TO OTHER ADD-ONS OR LINES OF SUBSCRIPTIONS OR ADDITIONAL PRODUCTS



Competition Comparison Matrix

	Think Like a Girl	GoldieBlox	Roominate	Green Kids Crafts	Tinker Crate	Growin' GEERS
Geared towards girls	✓	√	✓			
Environmentally conscious	✓			✓		
Supplies provided	✓	✓	✓	✓	✓	
Monthly subscription	✓			✓	✓	✓
Includes storybook	✓	✓				✓
STEM-based activities	✓	✓	✓	✓	✓	✓
Teaches spatial skills	✓	✓	✓			
Teaches engineering fundamentals	✓					✓
Provides women role models	✓					
Relates to engineering applications	✓				✓	
Encourages creativity with projects	✓			✓		



Market Opportunity

■ MANY CONSUMERS ARE LEANING TOWARDS SUBSCRIPTION-BASED PRODUCTS FOR A HASSLE-FREE SHOPPING EXPERIENCE.

LONGANECKER, CHUCK. "WHY YOU SHOULD USE A SUBSCRIPTION BUSINESS MODEL." *ENTREPRENEUR*. 19 MAR. 2015.

■ 12 MILLION GIRLS AGES 6-12 IN THE UNITED STATES

UNITED STATES 2010 CENSUS

■ 50 MILLION MARRIED-COUPLE FAMILIES WITH CHILDREN UNDER 18 IN TARGET INCOME BRACKET (60,000+ YEARLY SALARY)

UNITED STATES 7010 CENSUS



Market Size of Target Toy Industries

■ TARGET TOY MARKETS TOTAL \$5.5 BILLION IN 2014 AND HAVE INCREASED FROM 2013 TO 2014

TOY INDUSTRY ASSOCIATION, INC., ANNUAL SALES DATA, U.S. DOMESTIC MARKETS

	Annual 2013	Annual 2014	Annual 2013 to Annual 2014 % Change
Action Figure/Accessories/Role Play	\$1.15B	\$1.26B	10%
Arts & Crafts	\$0.91B	\$0.94B	3%
Building Sets	\$1.64	\$1.85B	13%
Games/Puzzles	\$1.29	\$1.42B	10%



Meet the Team!

Lexi Basantis

Clinic Team Mechanical Ingineering, Junior

Megan DeGeorge

Clinic Team Mechanical Ingineering, Senior

Gaby Rochino

CIO and Founder Mechanical Ingineering, Senior



Sam Winterburn

Clinic Team Chemical Ingineering, Senior

Sam Mann

Clinic Team Civil Ingineering, Senior

India Woodruff

Clinic Team Civil Ingineering, Senior

Dr. Jennifer Kadlowec

Faculty Advisor
Chair & Professor of Mechanical Ingineering



Financials - Profit-loss Statements, Years 1-3

Projected Net Income for Year 1, Ending 20	16	
Rowan Innovation Venture Fund Income		5000
Cost of Materials		
Packaging Expense	400	
Prototype Materials Expense	300	
Printing Expense	600	
Brand Recognition	400	
		1700
Period Costs		
Domain Name Expense	18	
Networking Expenses	1000	
Conference and Travel Cost	590	
Market Research	90	
Supplies	200	
Outreach Events	1000	
		2898
Total Expenses		4598
Net Income		<u>402</u>

Projected Net Income for Year 2, Endir	ng 2017	
Revenue		349247
Costs of Goods Sold		
Shipping Expense	60215	
Kit Expense	120430	
Packaging Expense	48172	
		228817
Gross Profit		<u>120430</u>
Period Costs		
Web Design Expense	5000	
Online Advertising Setup Expense	8000	
Online Advertising Expense	6000	
Domain Expense	15	
Makerspace Rent	1200	
Outreach Expense	2000	
Networking Expense	2000	
		24215
Net Income		<u>96215</u>

Projected Net Income for Year 3,	Ending 2018	
Revenue		698494
Costs of Goods Sold		
Shipping Expense	120430	
Kit Expense	216774	
Packaging Expense	90323	
		427527
Gross Profit		<u>270968</u>
Period Costs		
Online Advertising Expense	6000	
Print Advertisements	6000	
Domain Expense	15	
Makerspace Rent	2400	
Outreach Expenses	2000	
Networking Expense	2000	
Salaries	40000	
		58415
Net Income		<u>212553</u>



How Can the Audience Help?

- WE ARE SEEKING \$50,000 TO MOVE FROM THE PROTOTYPING TO MANUFACTURING STAGE
 - PURCHASE SUPPLIES IN LARGER QUANTITIES
 - LARGE-SCALE MANUFACTURING
- WE ARE LOOKING FOR MENTORS
 - LEADERS IN STEM OR EDUCATION, ENTREPRENEURS, BUSINESS/FINANCIAL ADVISORS
- COLLABORATION WITH ORGANIZATIONS THAT HOLD ALIGNING MISSIONS
- SPREAD AWARENESS ABOUT THINK LIKE A GIRL
 - THROUGH NEWSLETTERS, BLOGS, EVENTS/CONFERENCES, SOCIAL MEDIA





We'd love to hear from you!

thinklikeagirl@outlook.com

- f facebook.com/engineeringkits
- @engineeringkits
- Oengineeringkits

#tlagengineer