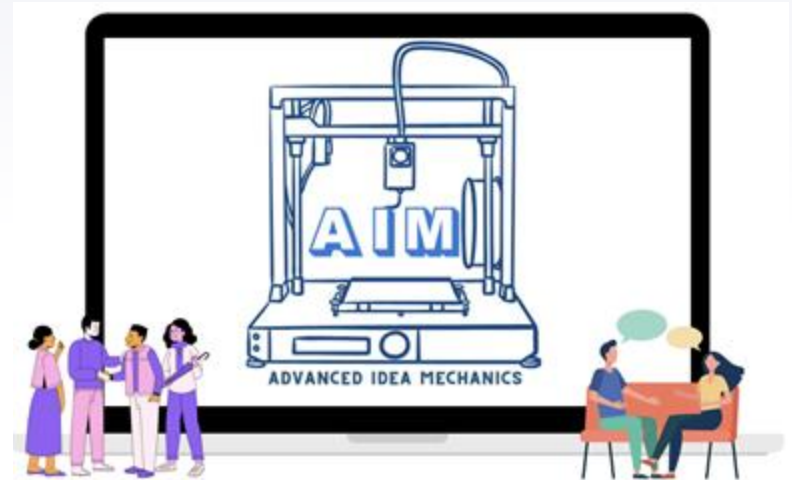


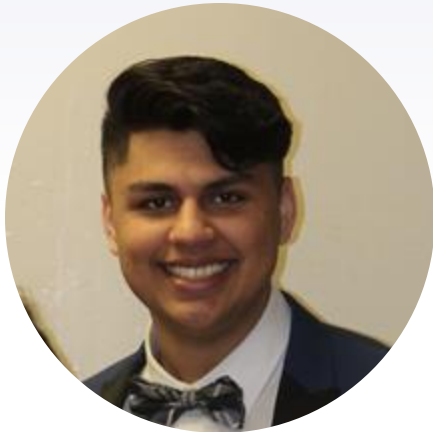


# A.I.M

## Advanced Idea Mechanics



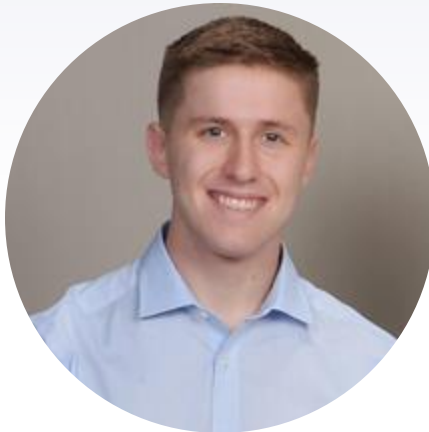
# Team Presentation



**Jay Joshi**

CEO

Stakeh



**Samuel Kralowetz**

CFO

Financial Analyst for 3D Systems



**Sarthak**

CTO

Technology Head for 3D Printers

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- INTRO
- OUR INDUSTRY, BRAND, PRODUCT CATEGORY(Background research)
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- PRICING STRATEGIES
- ACKNOWLEDGEMENTS & BIBLIOGRAPHY



# ► What is A.I.M?

A.I.M is the future of the manufacturing industry. We believe that 3-D printing will help to tackle current and future environmental, medical, and social problems. An affordable way to combat global issues and provide customers with premium products.



# Background Research



# History of 3D Printing

- Earliest 3D printer originated in 1981
- 1990 growth in the industry
- 2006 first commercially available 3D printer on the market
- 2018 ISS printed first tool in space using low gravity 3D printer
- Modern day demand for 3D printing in Aerospace engineering is booming



# 3D Printing Market

- 2021 Market Cap of 18.33 Billion USD
- Compound Annual Growth Rate (CAGR) of 24.3%
- 2029 Market Cap projection of 83.90 Billion USD
- Manufacturers investing heavily in 3D printers is boosting the market
- Asia Pacific projected to have largest share in global market in 2029



# North America

- North America currently has largest share of global market in 3D printing
- Due to surging spending on manufacturing capabilities with these 3D printers
- Largest percentage of facilities is within the United States followed by Canada
- U.S. has existing infrastructure for manufacturing with 3D printers, continued investment can ensure North America remains global leader in this market



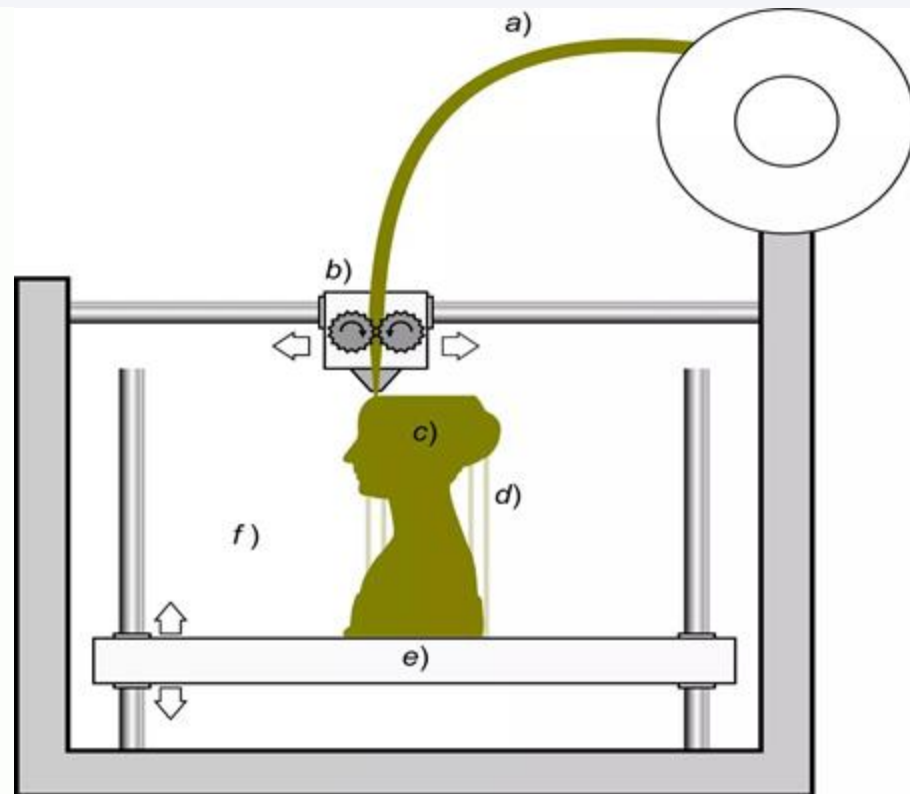
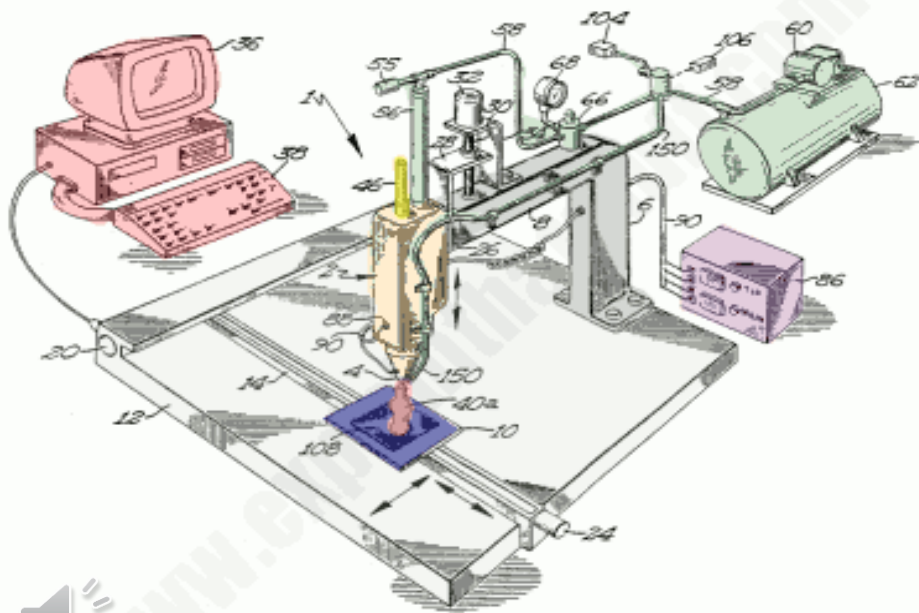


# How the 3D Printer works

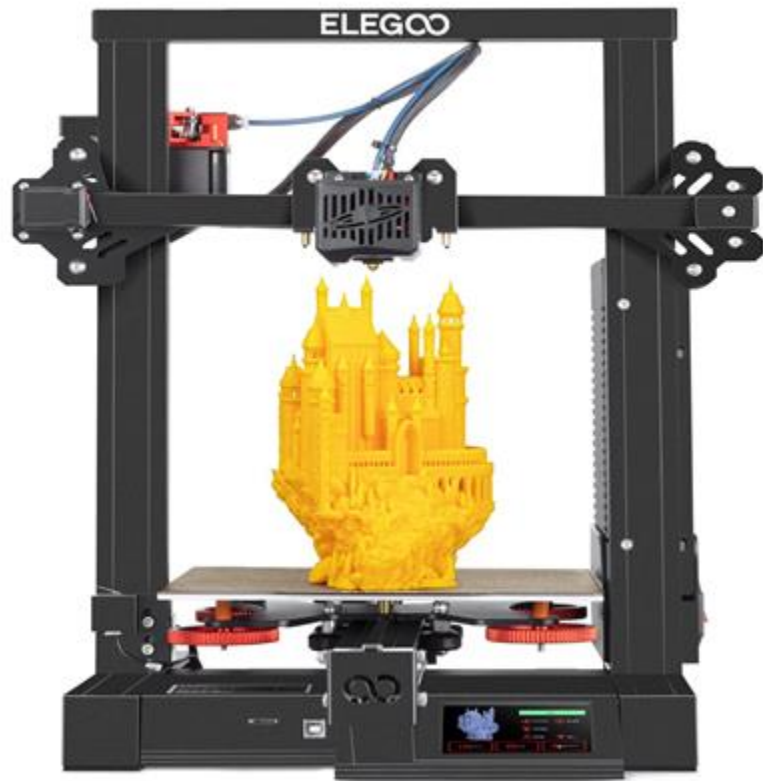
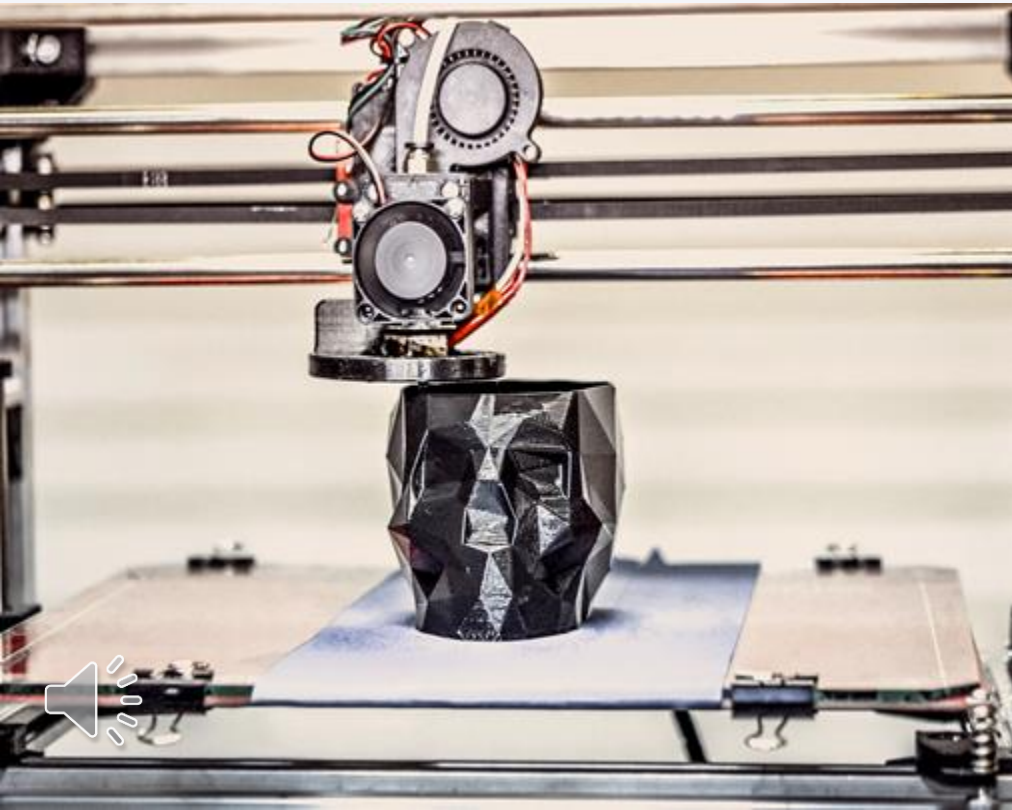
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June 9, 1992

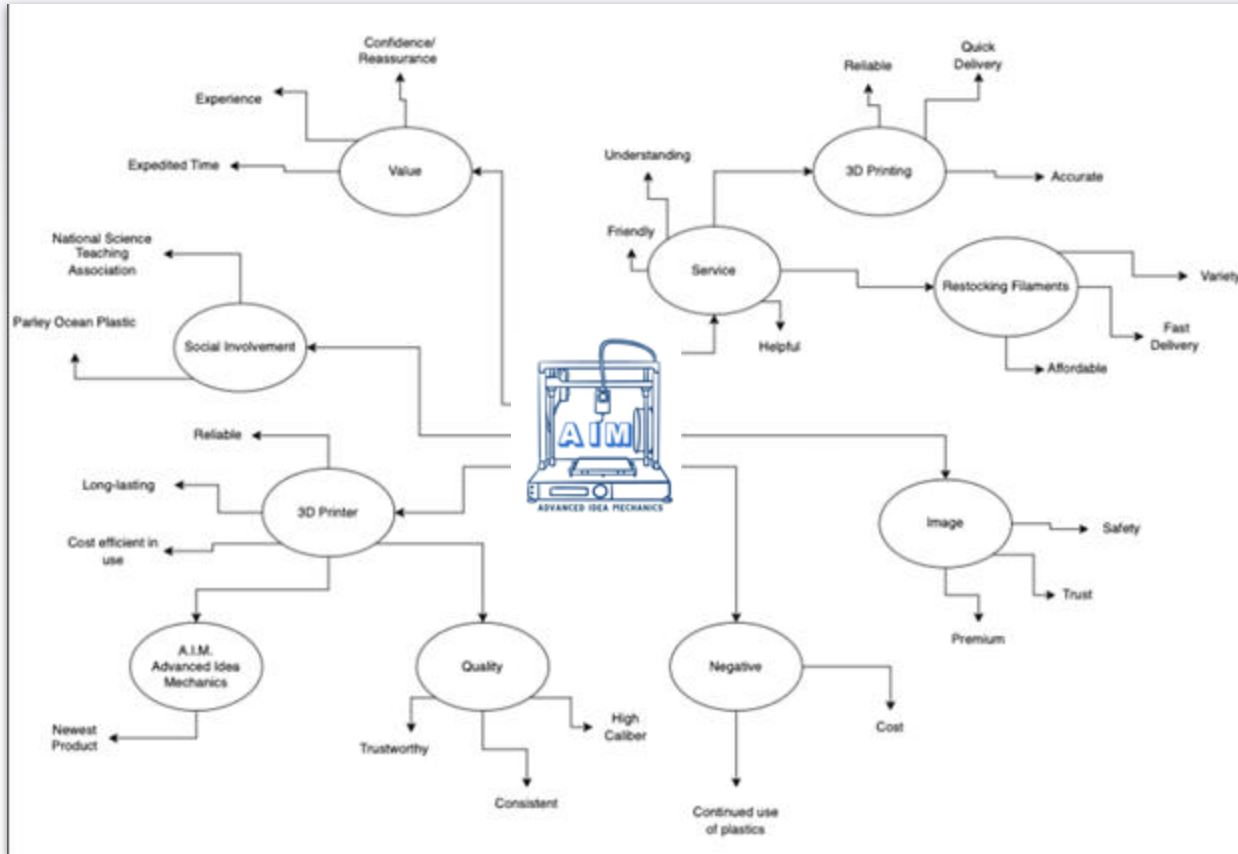
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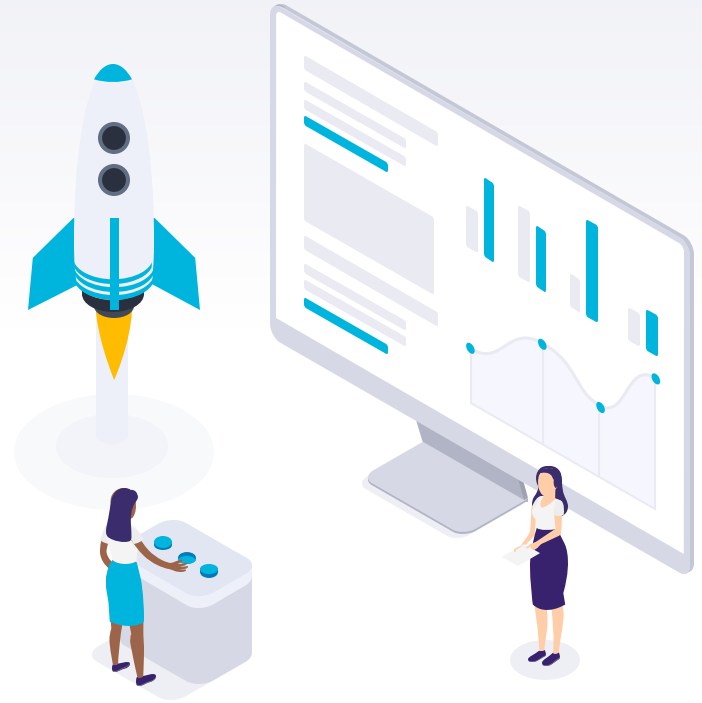
# How the 3D Printer works



# Brand Association



# Customer Demographics and Market Segmentation



# Jesse



**Age:** 25  
**Income:** \$45-\$60K  
**Education Level:**  
Bachelor's Degree  
**Industry:** Set Design/ Theater  
**Region:** Northeast US  
**Tenure:** 2 years  
**Family:** Single

## Customer Persona

### Goals & Motivators

- Drive costs down for wasteful items with the use of 3D printing
- Production of materials on site, reducing use of shipping required to receive set items
- 3D printing different designs for hobbies and personal interests
- Utilizing new technologies to increase quality of life
- Sharing and creating new designs with friends in similar theater and arts fields
- Staying up to date with the newest technologies offered.

*"The possibilities are endless with 3D printing! I can look online for unique designs created by others and get them printed and sent directly to my home. 3D printing has helped in comfort of living designs and with my design of items for different theater productions."*

### Technology Use

- ? Set Design and Design Programs
- ? Internet
- ? Videography
- ? Inventory Management

### Jobs To Be Done

- Design and layout of sets
- On-site production of resources
- Designing set pieces used theater productions
- Real-time news updates

### Personality Type

Introvert	←	Extrovert
Thinker	←	Feeler
Sensing	→	Intuitive
Activator	←	Follower
Doer	→	Curious

# Skylar

## Customer Persona



**Age:** 42  
**Income:** \$300-\$450K  
**Education Level:**  
College/Master's  
**Industry:** Manufacturing  
**Region:** Northwest US  
**Tenure:** 5 years  
**Family:** 4 people

### Goals & Motivators

- Decrease expenses and minimize waste while leveraging technology
- Analyzing customer purchase trends
- Automating procurement processes by cleaning up the data
- Leading the discussion among stakeholders in the development cycle to help procurement team avoid unnecessary pressure
- Analyze risk in supply chain internal and external (cybersecurity)
- Comparing vendors against KPIs to evaluate their performance and reevaluate

### Technology Use

- ? Coupa (Business intelligence tool)
- ? ERP Systems
- ? Contract management
- ? Project management

### Jobs To Be Done

- Sourcing new vendors
- Negotiating contracts
- Presenting to leadership
- Delegate tasks
- Mentor employees
- Developing procurement strategies

### Personality Type

Adapter	←	Introvert
Thinker	→	Detail oriented
Follower	→	Leader
Analytical	←	Shy
Conservative	←	Open Minded

*“3D printing is going to create efficiencies in procurement and add to the customer experience.”*



# Mike

## Customer Persona



**Age:** 65  
**Income:** \$100-\$120K  
**Education Level:** College/PhD  
**Industry:** Professor - Engineering  
**Region:** Northeast US  
**Tenure:** 10 Years  
**Family:** N/A

### Goals & Motivators

- Continue his research in the field of engineering
- Inspires his students to pursue careers in the industry
- Motivated to stay up-to-date with the latest advancements in 3-D printing technology
- Researching new applications for 3-D printing technology in his field
- Providing his students with hands-on experience in advanced manufacturing techniques
- Publishing research papers and articles related to 3-D printing technology and its applications

*“Research and education are the keys to unlocking the potential of emerging technologies. With the right tools and knowledge, we can transform the world and inspire future generations to pursue their passions.”*

### Technology Use

- ❓ Computer-aided design (CAD)
- ❓ Simulation software
- ❓ Lab equipment
- ❓ Data analysis software

### Jobs To Be Done

- Teach and mentor students
- Conduct research
- Stay current with emerging technologies and trends
- Real-time news updates
- Secure funding for research and programs
- Academic projects

### Personality Type

Open-minded	←	Narrow-Minded
Persistent	←	Inconsistent
Detail-oriented	←	Careless
Curious	←	Uninterested
Collaborative	←	individualistic

# Value Proposition Statement

“ Our services are designed to accelerate your time-to-market, enabling you to launch new products faster and gain a competitive edge in your industry.





## Product Mix (Product Line Breadth and Depth) Matrix

Product Line	Product Depth/Models	Direct Sales	Online Sales	Retail Sales
Home	Entry-level 3-D printer for beginners	X	X	X
	Mid-range 3-D printer for hobbyists	X	X	
Prosumer (consumer who is also actively involved in the creation, design, or production of the products or services they consume)	High-end 3-D printer for small businesses	X	X	
	Multi-functional 3-D printer with scanner and copier		X	X
Industrial	Large-format 3-D printer for industrial use	X		X
	Professional-grade 3-D printer for engineers and designers	X		
	Robust 3-D printer for manufacturing and prototyping		X	X



# SWOT Analysis

## STRENGTHS

- Customization
- Versatility
- Cost-effective production

S

## WEAKNESSES

- Limited print size
- Limited material selection
- Technical expertise required
  - Overheating printers

W

## OPPORTUNITIES

- Pharmaceutical, Aerospace, Sports etc...
- Personalization trend
- Education market

O

## THREATS

- Intellectual property issues
  - Cost of materials
- New competition with the same business model

T



# Competitive Benchmark Assessment



## Best Practice Benchmarking

- Looking at a company's direct competitors and how they do their business. If their methods are more efficient, consider bringing into process.

## Process Benchmarking

- Looking at all the different branches of a business and how they interact

## Performance Benchmarking

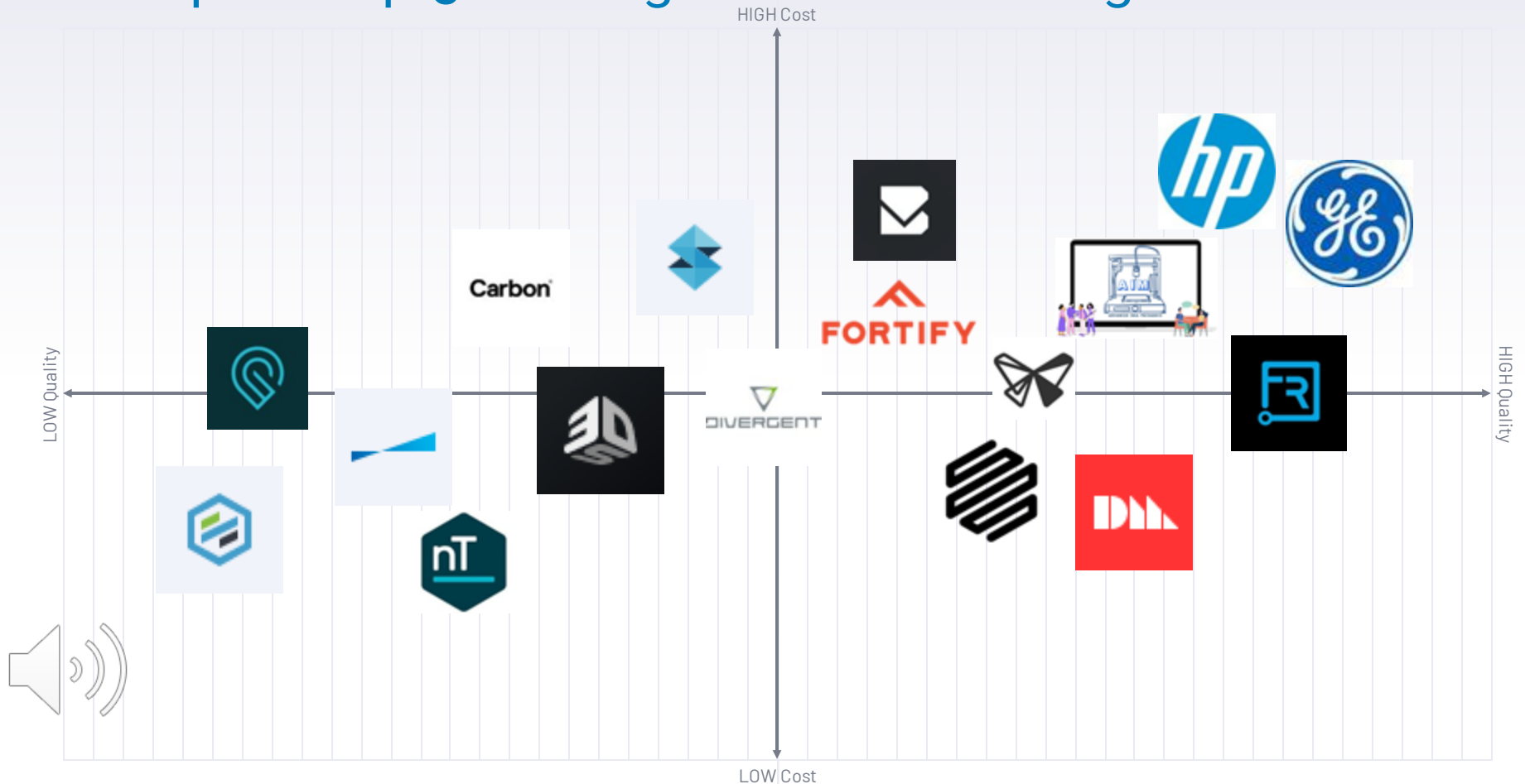
- Looking specifically at one branch and if it is working at top efficiency

## Metrics

- Quality
- Price
- Customer Satisfaction
- Printing Complexity Available



# Perceptual Map: 3D Printing (Peer Benchmarking)



# Corporate Social Responsibility

1. Environmental Sustainability: As a 3D printer manufacturing company, we implement eco-friendly practices in our manufacturing process and reduce waste. Holding suppliers accountable for leading standard sustainability protocols. Our company also partners with environmental organizations to support conservation efforts and promote sustainable practices.
2. Education and Training: Our company supports education and training programs that promote STEM education, particularly in underprivileged communities. This include donating 3D printers and hosting workshops.
3. Community Outreach: Our company participates in community outreach programs, such as sponsoring local events or donating 1% of net profit to local charities. This helps our company to build goodwill and create positive relationships within the community.
4. Employee Well-being: Our company implements programs that support the well-being of our employees, such as providing health and wellness benefits, flexible work schedules, and career development opportunities.



# Advertisement Plans

1. Social Media: Our company can leverage social media platforms, such as Facebook, Twitter, and Instagram, to reach potential customers and engage with your existing customer base. We can share product updates, industry news, and promotional offers on these platforms.
2. Online Advertising: We can also invest in online advertising, such as Google Ads or banner ads, to increase your visibility and reach a broader audience.
3. Trade Shows and Exhibitions: Our company can participate in trade shows and exhibitions to showcase our products and connect with potential customers and partners. This can also be an opportunity to stay up-to-date with the latest industry trends and innovations.
4. Influencer Marketing: Our company can collaborate with influencers in the 3D printing industry to promote your products and increase our brand awareness. This can be in the form of sponsored posts, reviews, or product demonstrations.
5. Content Marketing: Our company can create high-quality content, such as blog posts, infographics, and videos, to educate our audience and showcase the capabilities of our products. This can help establish your company as an authority in the industry and attract potential customers.

# Digital Marketing Strategy

## **Search Engine Optimization**

- Using data mining and the creation of customer profiles to target potential customers who are in the aerospace industry
- When they are searching for solutions to specific problems with their research our website pops up with the solution in the form of 3D printing

## **Social Media Marketing**

- Mentions in any social media postings of scientific achievement, successful launches, articles detailing research efforts.
- Broadcasting AIMs contributions in helping these different engineers and companies reach their goals by providing them with excellent 3D printing services
- Posting stories on page detailing where different AIM printed devices are in the world and how they are benefiting both science and people in general



# Geographic Distribution networks & Channels





## Distribution Strategy:

- Standardization vs Adoption:
  - Home-country Channel Reseller partners (complimentary or piggybacking marketing)
  - Focusing on Two tier or direct channels (Producer to Consumers) and Three tier or Indirect channel ( Producer to retailers to consumers)
- Direct selling:
  - Online marketing
  - Social media
  - Trade shows/ events
  - Referral program



# Supply Chain Considerations

## Sourcing



Procuring raw materials such as metals & resin

## Inventory Management



Manage raw materials, finished products

## Production/Planning



Optimize customer demand, and focus on minimize lead times

## Quality Control



Verify finished products, meet customer expectations

## Logistics and Distribution



Ensure operations are running smoothly and optimize delivery

## Customer Relationship Management



Build strong relationships with customers

## Risk Management



Identify/manage risks associated with supply chain

## Continuous Improvement



Identify new services to act upon. Focus on improving experience for customer.

# Pricing Strategy & recommendations



## Pricing strategy:

- Penetration Pricing strategy:
  - Low entry price compared to competitive offerings
  - Initial low price to secure market acceptance
- Razors & Blades (Companion) pricing:
  - Selling products at a subsidized prices, so profits accrue on sales of ancillary offerings
  - Sell the 3D printers and make money off of cartridges
- Product line Pricing:
  - The practice of marketing different lines of products at varying prices
  - 3D printing services will be offered in three different ranges priced at \$199, \$377, \$499

## Recommendation: Product line pricing

- Standardization vs Adoption:



One Star

Three Star

Offers:

- CNC Machining
- 7 - 14 business days delivery



Two Star

Offers:

- CNC machining, 3D Printing
- 4-5 business days delivery
- 50+ custom templates



Offers:

- CNC Machining, 3D Printing, Sheet metal
- 2 business days shipping
- Premium Custom Templates
- A.I.M Merchandise with each order

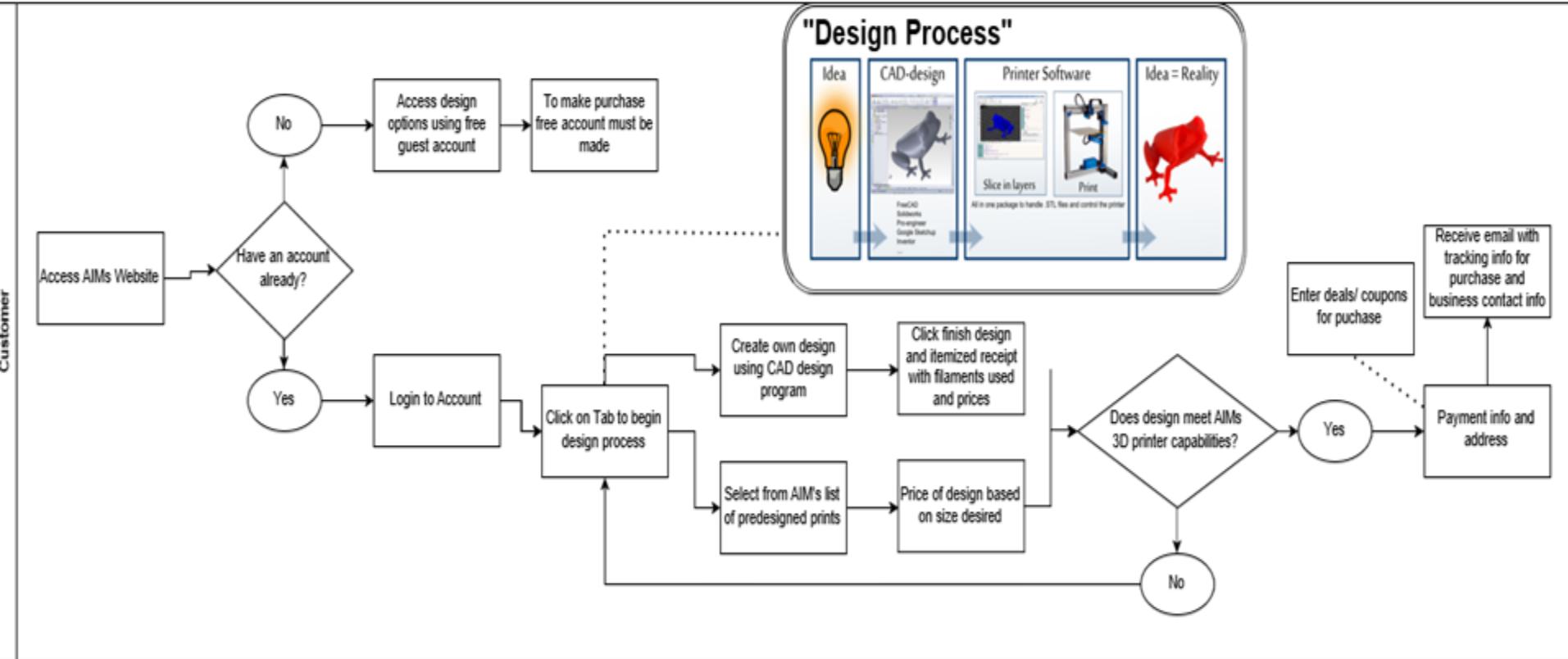
### Pricing strategy:

- Product line Pricing:
  - The practice of marketing different lines of products at varying prices
  - 3D printing services will be offered in three different ranges priced at \$199, \$377, \$499

# Customer Needs Matrix

<b><u>Verb</u></b> (What we heard consumers say about what Jobs they want to do & need help accomplishing)	<b><u>Object</u></b> (What we heard consumers say they want to activate / address their Jobs – technologies, tools, resources, platforms, artifacts, etc.)	<b><u>Context</u></b> (What we heard consumers tell us about where they'd experience and complete their Job/s)
Printing	Shapes	At home
Watching	Online tracker	At home
Sharing	Artifacts	On social media
Writing	Artifact testimonials	At home
Scanning	Artifact	At work
Designing	Artifact	Remotely

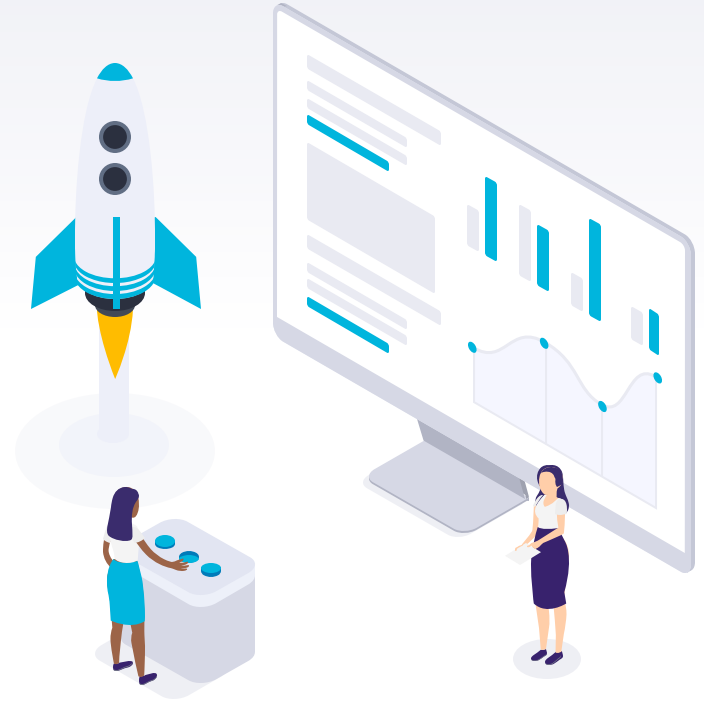
# User Requirements





# - Market Research Strategy and Tactics - Jay

Let's start with the first set of slides



# Manufacturing Specifications

## Manufacturing Specifications:

1. **Printing Technology:** Fused Deposition Modeling (FDM) and Stereolithography (SLA). We specialize in both depending upon what the customer needs.
2. **Printing Materials:** Different materials can be used for 3D printing, including plastics, metals, ceramics, and even food.
3. **Print Resolution:** The print resolution of a 3D printer determines the level of detail and precision that can be achieved. We aim to produce printers with high print resolution, which will be more attractive to our customers.
4. **Build Volume:** The build volume of a 3D printer refers to the maximum size of an object that can be printed.
5. **Speed:** The speed at which a 3D printer can produce an object is an important consideration for customers. We strive to produce printers that are fast and efficient.

# Experience Platform

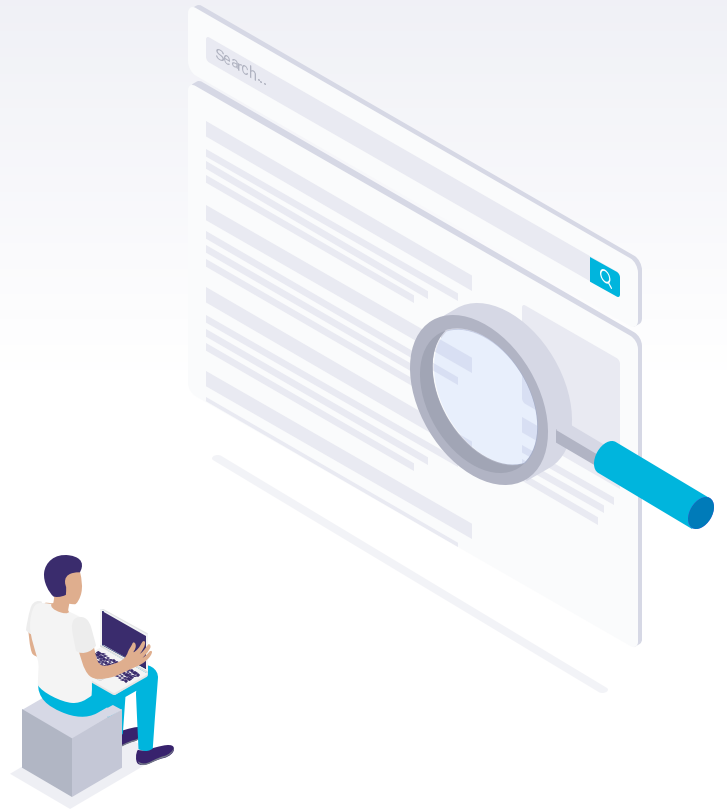
1. Online Store: [Aimforprinting.com](https://aimforprinting.com)
2. User Community: Create a community where users can share their experiences, tips, and designs. This can be in the form of a forum, blog, or social media group.
3. Tutorials and Support: Provide tutorials and support for our customers to help them get the most out of their 3D printers. This can be in the form of instructional videos, FAQs, or live chat support.
4. Educational Programs: Partner with schools and universities to provide educational programs that teach students how to use 3D printers and integrate them into their curriculum.
5. Events and Competitions: Organize events and competitions to showcase the capabilities of your printers and engage with your customer base. This can include hackathons, design challenges, and exhibitions.

# THANKS!

## Any questions?

You can find me at:

- ▶ [customer@aimforprinting.com](mailto:customer@aimforprinting.com)
- ▶ AIMforprinting.com
- ▶ 1-468-452-4815



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