

Market Opportunity Analysis

3D Printing for End-Use-Parts

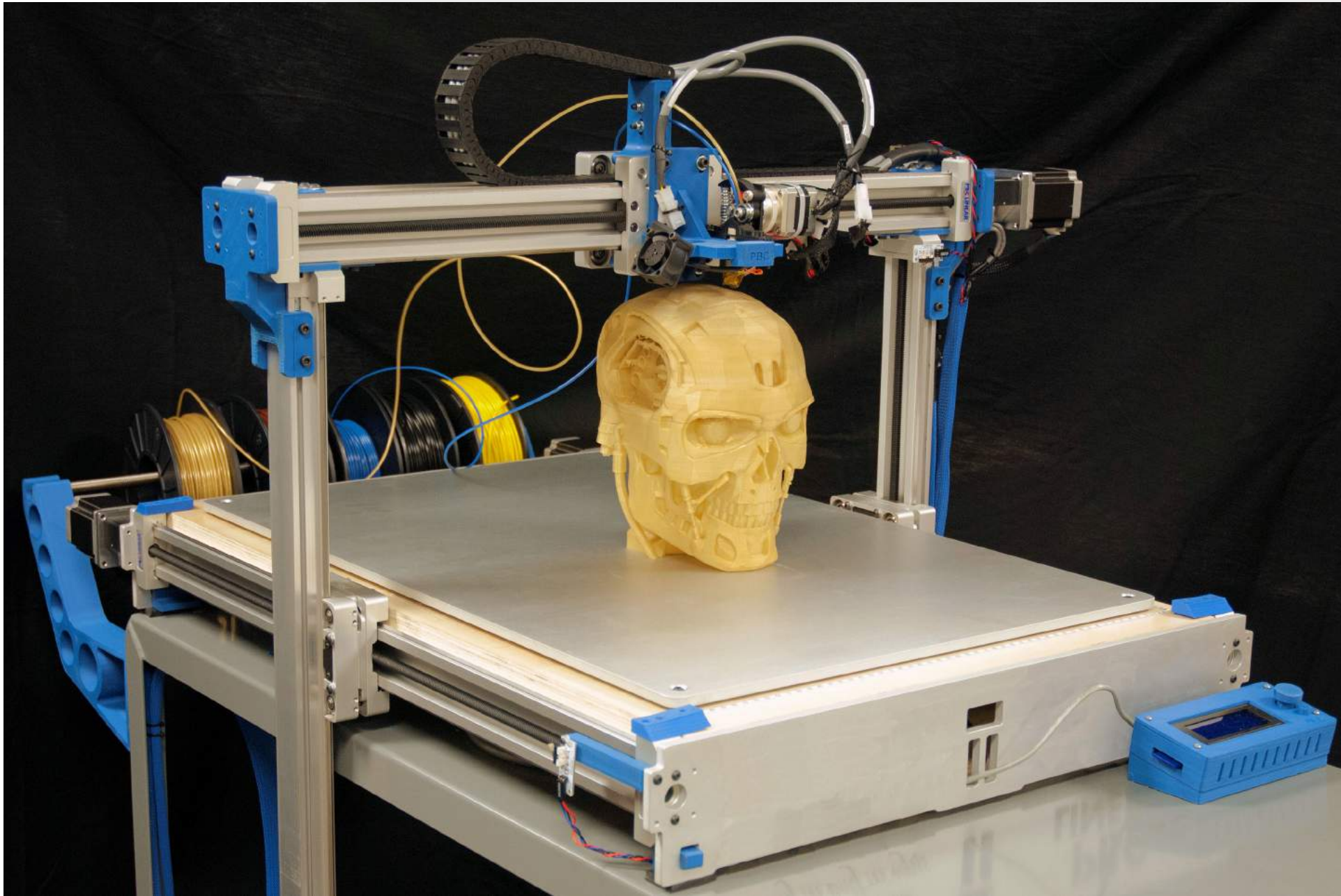
Capstone Project

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Problem

Challenges faced when developing a market opportunity analysis for additive manufacturing technology (3D printing), more specifically in volume manufacturing of end-use-parts (EUP).



Main Goals

1. Provide our client with sufficient industry and market research data that allows them to make strategic decisions for the manufacturing of end-use-parts in the future.
2. Address the impact of additive manufacturing in the end-use parts industry.
3. Competitive assessment on both direct and indirect competition.
4. Understand whether there is a profitable market for plastic-manufacturing of end-use-parts.

3D printing industry applications range from Aerospace design to Health Care. Listed below are some of the major industries where 3D printing is booming for manufacturers of end-use-parts:

Aerospace industry, Automotive industry, Medical industry, Dental industry, Consumer Electronics

Key Players: 3D Systems and Stratasys

Work Methodology:

- Primary Research: Obtain first-hand data through surveys
- Secondary Research: Benchmark our primary data with secondary online-obtained data.
 - Additional techniques:
 - SWOT (Strengths, Weaknesses, Opportunities and Threats)
 - PEST Analysis (Political, Environmental, Social and Technological)
 - Porter Five Forces (Supplier Power, Barriers to Entry, Buyer Power and Threat of Substitutes)
 - Market Segmentation (Competitor, Competition, Company, Technology)

Potential Value Proposition

1) Customization

3D printing allows for mass customization. Numerous products can be manufactured at the same time to end users requirements at no additional cost.

3) Tool-less

For industrial manufacturing, production of tools is the most intensive stage in terms of cost, time and labor. However, 3D printing can eliminate the need for tool production and the cost, lead times and labor associated with it.

2) Complexity

3D printing helps in designing products in digital environments involving less level of complexity. It also allows the usage of more complex components that are lighter and stronger.

4) Sustainable & Environment Friendly

3-D printing is an energy efficient technology that provide 90% of the standard materials, thus creating less waste and reducing carbon footprint. It also helps reduce inventory and unsustainable logistics for shipping high value of products around the world.

