Georgia Institute of Technology Capstone Project Spring 2022 Baek, Bunner, Jang Jia, Survance, Yerramilli

Project 18: TranzVolt 2.0 Market Research

Our market research plans include:

- A. Gather information on the average sale price of competitor's products, and set a goal based on that information to be cheaper in cost but better in value (can carry more weight, move faster, easier UI, etc).
- B. Survey Tranzvolt's main consumer base and get feedback on the pros and cons of the Tranzvolt current available in the market, as well as the pros and cons of our competitors (if they've used them).

Our results from market research include:

- Biggest Competitor: GEDA
- Target Price: \$3000 ~ \$4000 wholesale, which is roughly \$200 cheaper than German units.
- Avg. Number of Uses per Year: We were unable to obtain this information as there is no way of
 predicting usage or statistics since the unit is completely offline.
- Reviews/Evaluations:
 - o Pros:
 - Safer than gas powered alternatives
 - Quiet
 - Quick ROI compared to Boom truck, crane etc.
 - o Cons:
 - Too much training required
 - Setup time is too long, averaging 15 minutes
 - Cable needs too much maintenance replacements, ensure level-wind, sensitive to fraying etc.

Our Research has led us to lean towards a design that separates the motor, rope, and power from the platform that will lift materials to the roof. This is because we need to meet our goal of significantly decreasing dead weight to 10-20 lb.