



# The Lifting Rollator

Green Team

# Ascent

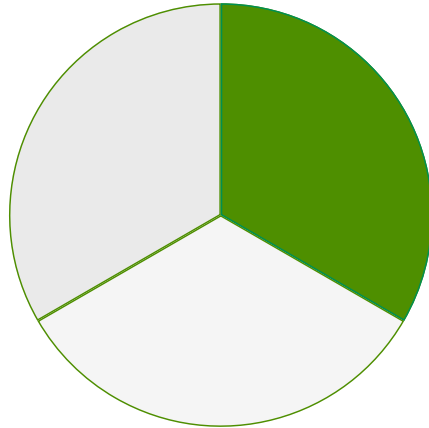
Alpha Prototype



# Motivation

## Independence

US Adults 65+  
(32.6M)






- Elderly want to remain in own homes
- Do not like to call for help when uninjured



2/3 of falls/year  
**do not** require hospitalization

# Benchmarking

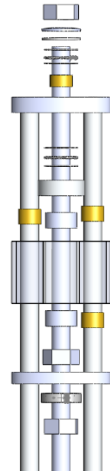
## Existing Products

Independent Walker	Ascent Rollator	Assisted Lift Hoist
		
<b>\$140</b>	<b>\$200 - \$300 \$350</b>	<b>\$1000+</b>
Only assist walking & balance		Movable lifting device

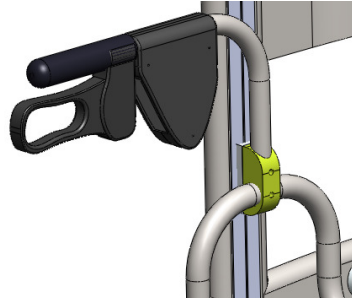


# Technical Challenges

## Outline



**Functionality**



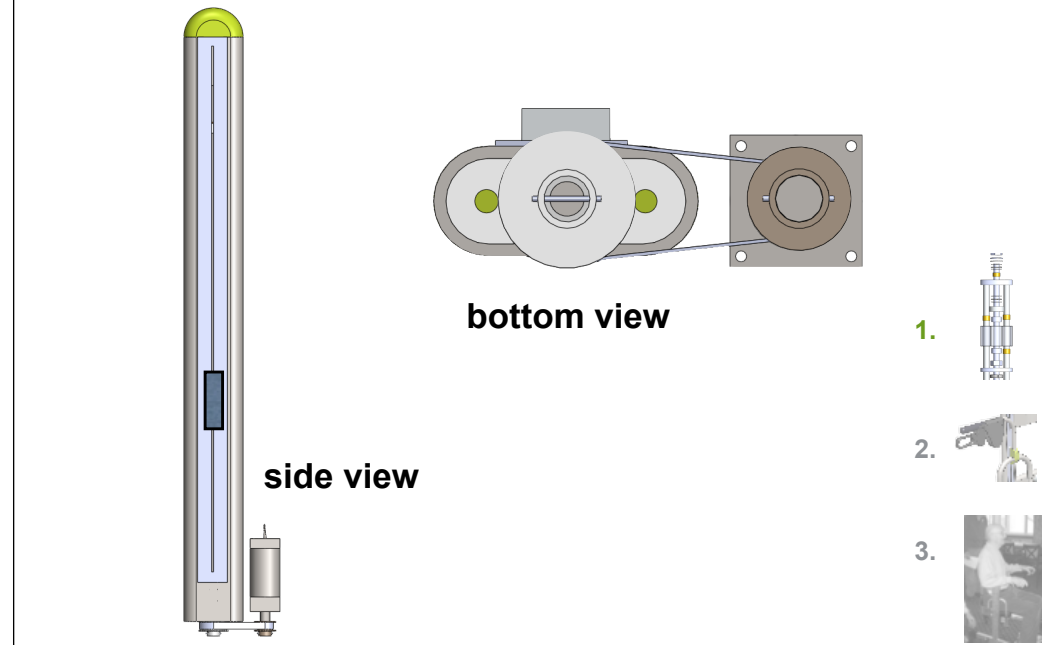
**Safety**



**Acceptance**

# Technical Challenges

## Functionality - Drive Train



Angharad

Looking in depth at the technology used in the walker.

Two lead screws run by belt and motor that ride the seat and handles up and down by an interface carriage.

Speed ?

Noise of the mechanism has been damped by using foam to encase the motor.

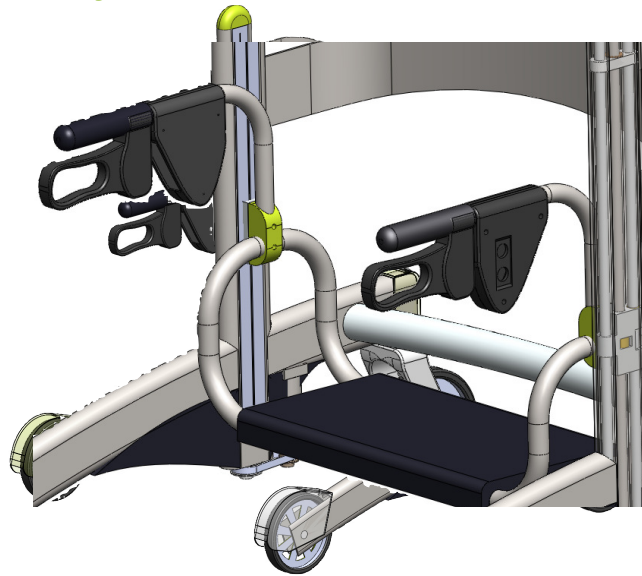
# Technical Challenges

Functionality - Power and Controls



# Technical Challenges

## Safety - Seat



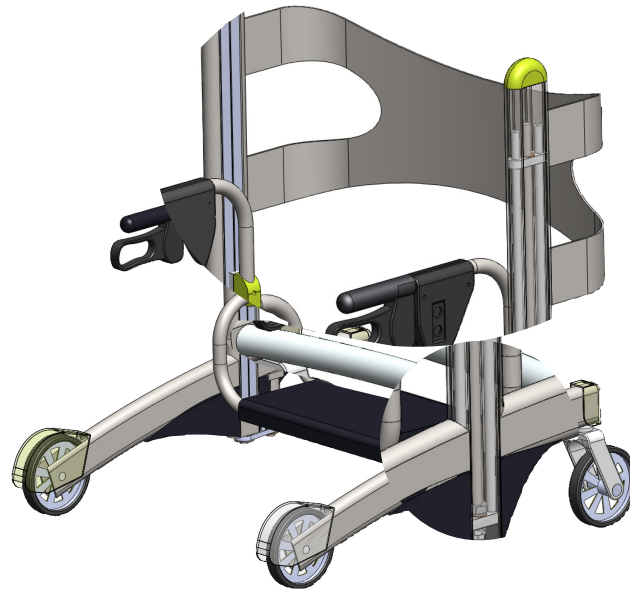
1.

2.

3.

# Technical Challenges

Safety - Structural Integrity





# Technical Challenges

## User Acceptance



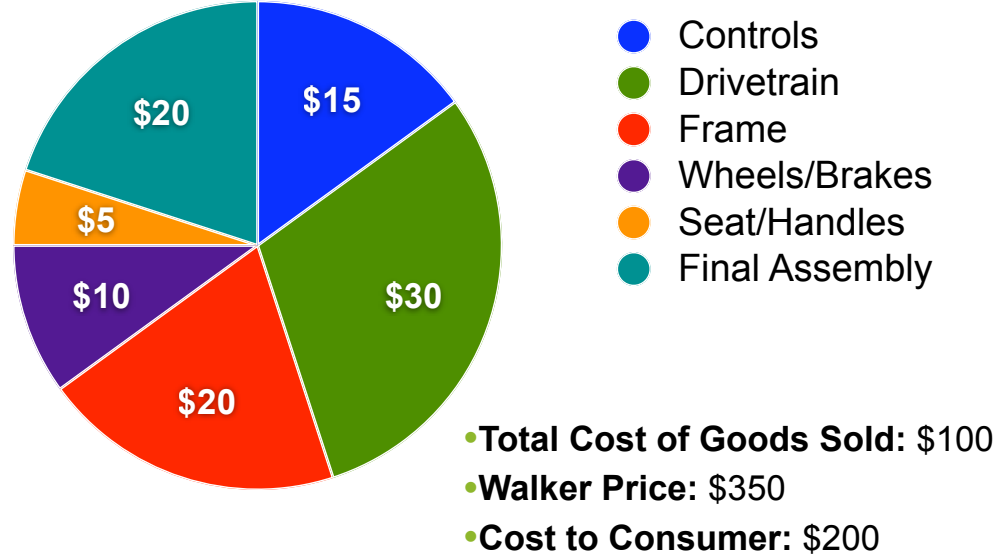
**Noise output: 86 dB**  
Comparable to  
household food blender



1. 
2. 
3. 

# Business Plan

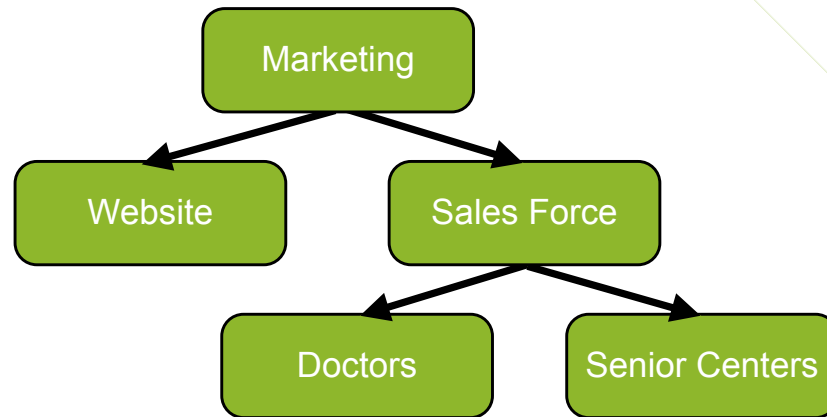
## Manufacturing Cost



# Business Plan

## Marketing and Pricing

**Target Market:** Independent Elderly People



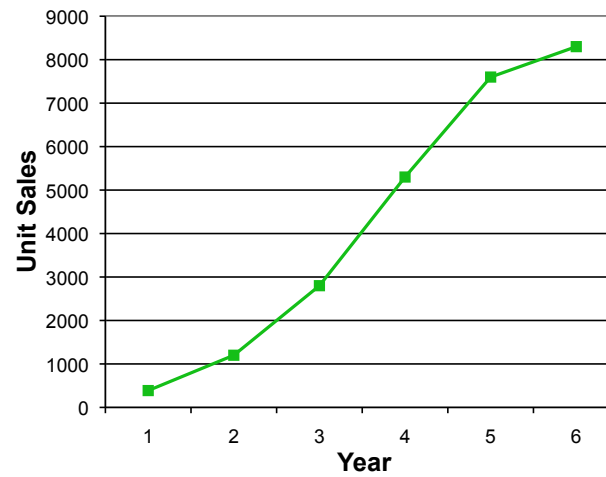


# Business Plan

## Market and Pricing

**Total Yearly U.S. Walker Sales:** 830,000 units

**Target Maximum Sales:** 8,300

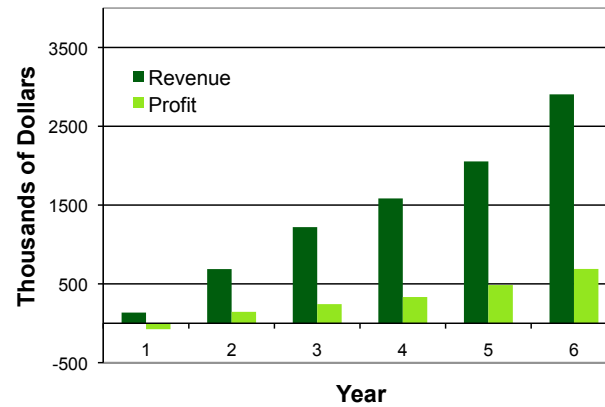


# Business Plan

## Profit and Revenue

**Initial Investment Required: \$170,000**

**Annualized Return (Three Years): 27%**



Raphael

**Thank you!**  
from the Green Team

