



Share Chair

**2.009 Final Presentation
December 11, 2006**

Green Team



The Share Chair





Traditional Wheelchair



“I hate having to give up all control...I feel vulnerable when I can’t see the person pushing me or communicate with them.”

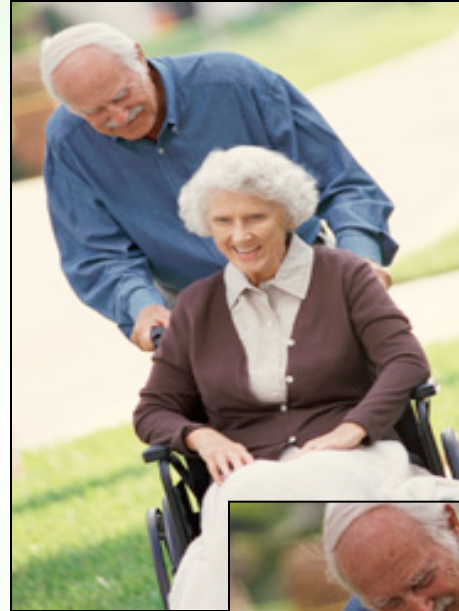
Kaley, wheelchair user from California



Communication Challenges

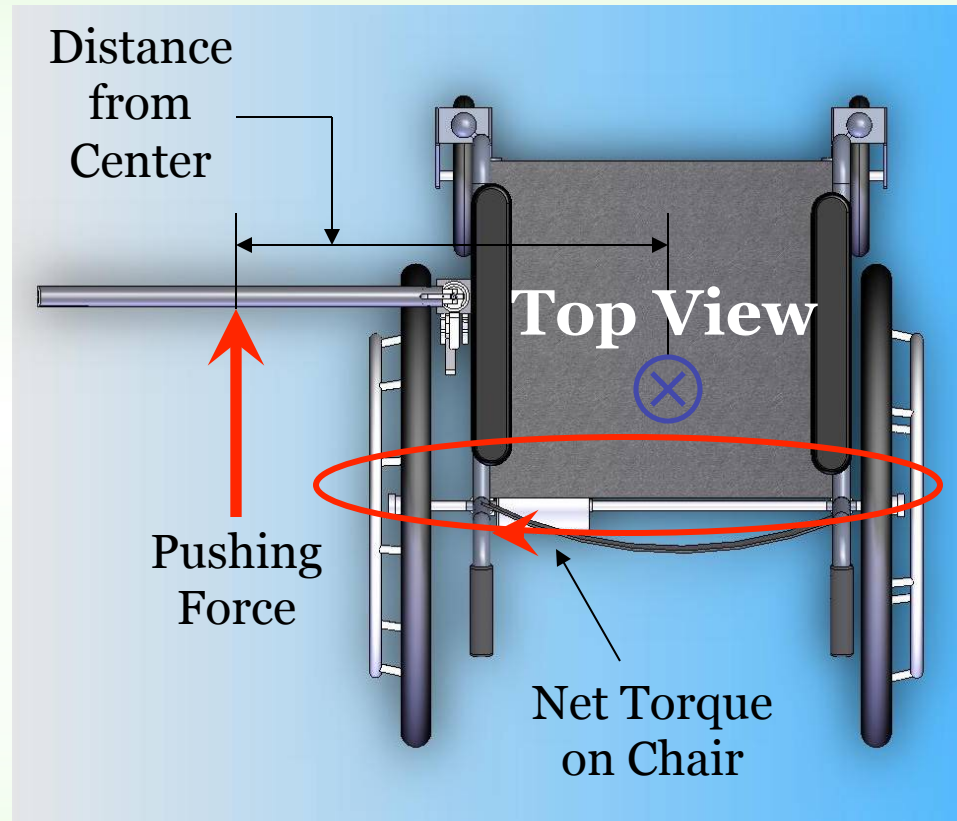
Traditional Wheelchairs:

- ④ Hinder face-to-face communication
- ④ Dehumanize the user
- ④ Hamper emotional connections





Technical Challenges

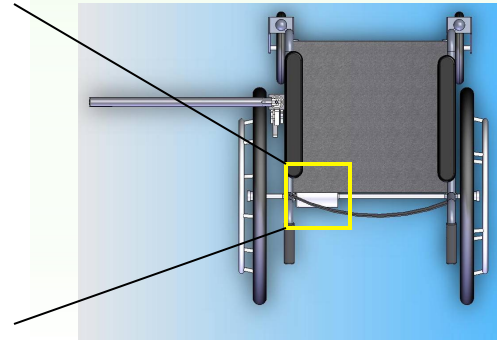
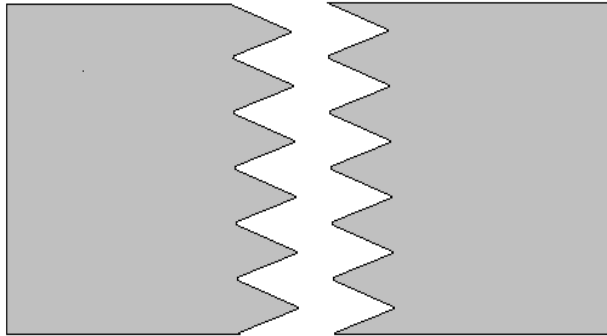


Net **torque** created while pushing from side

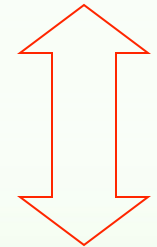
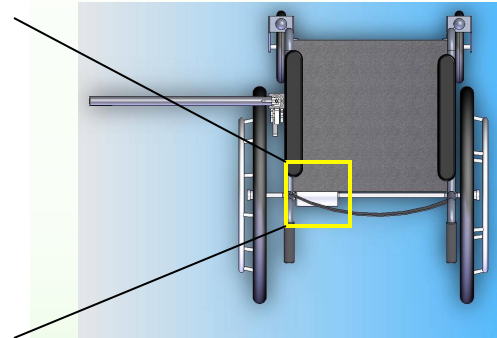
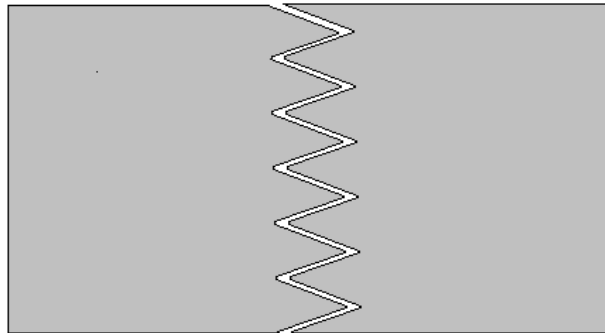


Technical Solution

Clutch Open → Turn



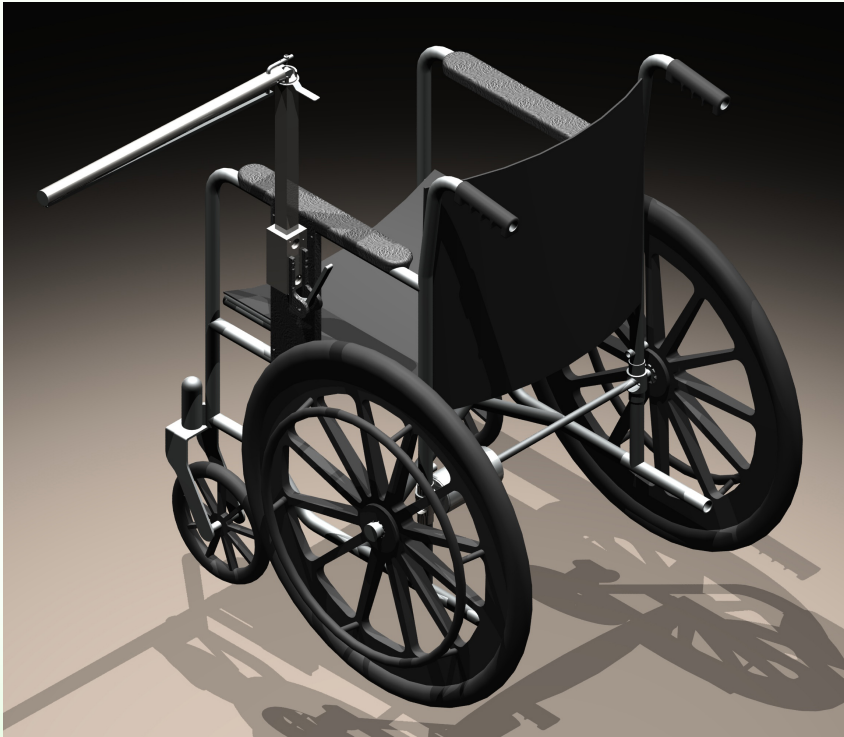
Top View



Clutch Closed → Straight



Our Solution: The Share Chair





Ergonomic Human Interface

④ Comfortable

④ Adjustable

④ Intuitive





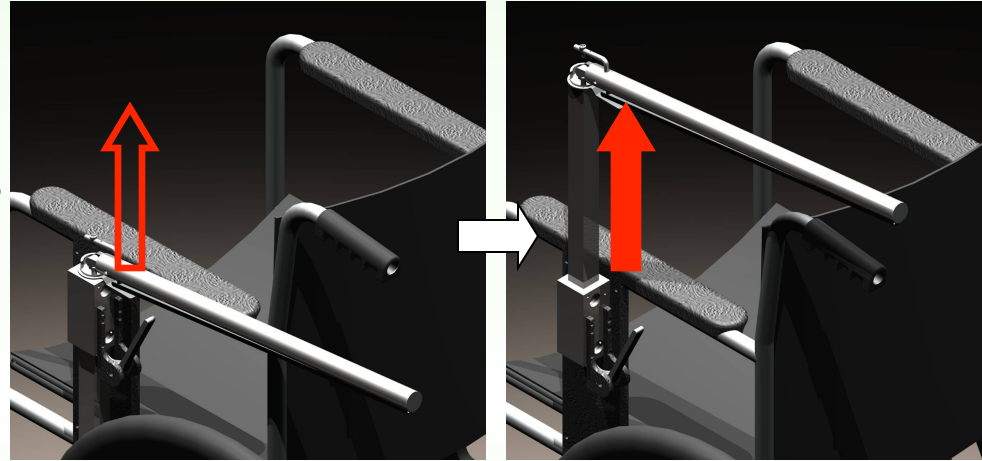
Seamless Mode Switching

🦽 Quickly switch modes

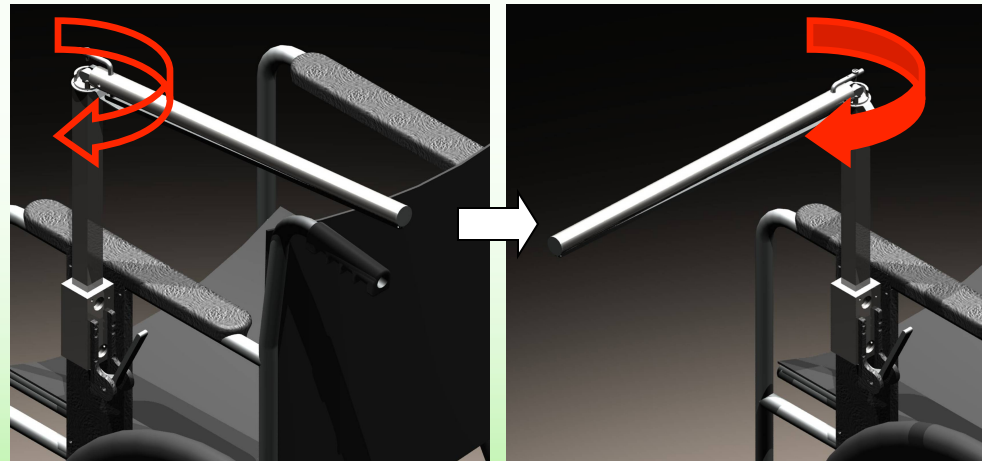
🦽 Easy folding handle

🦽 Intuitive

Lifting



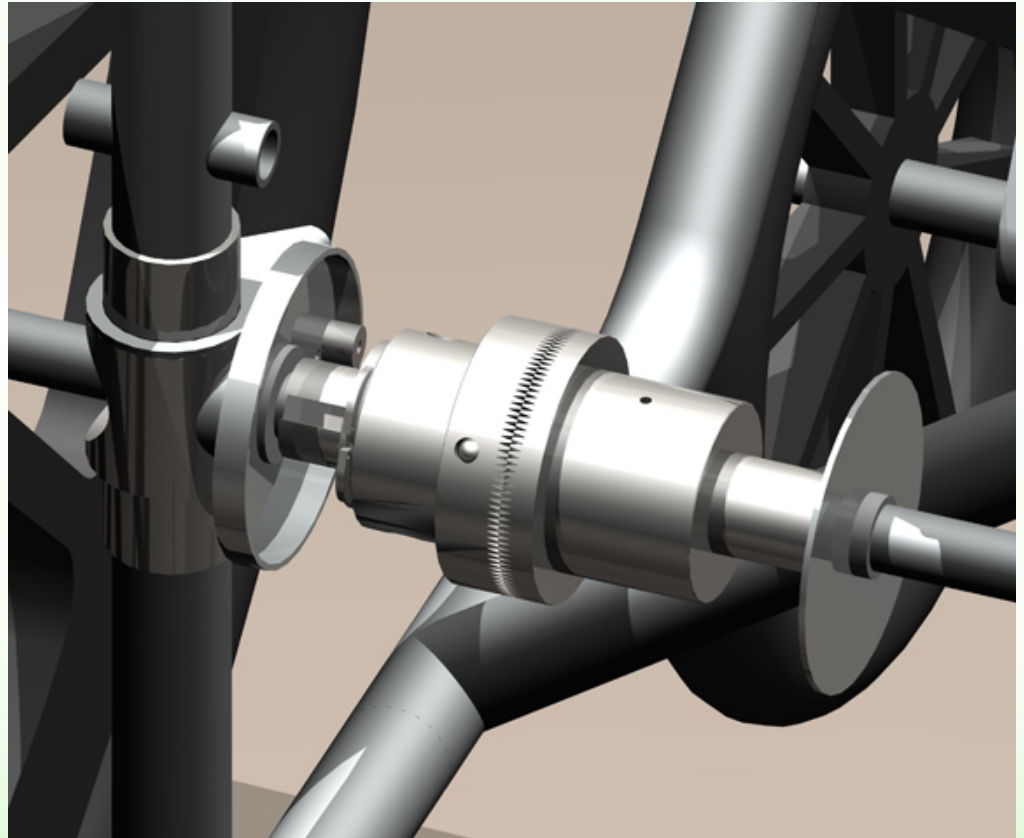
Rotating





Maneuverability

- ④ Simple turning operation





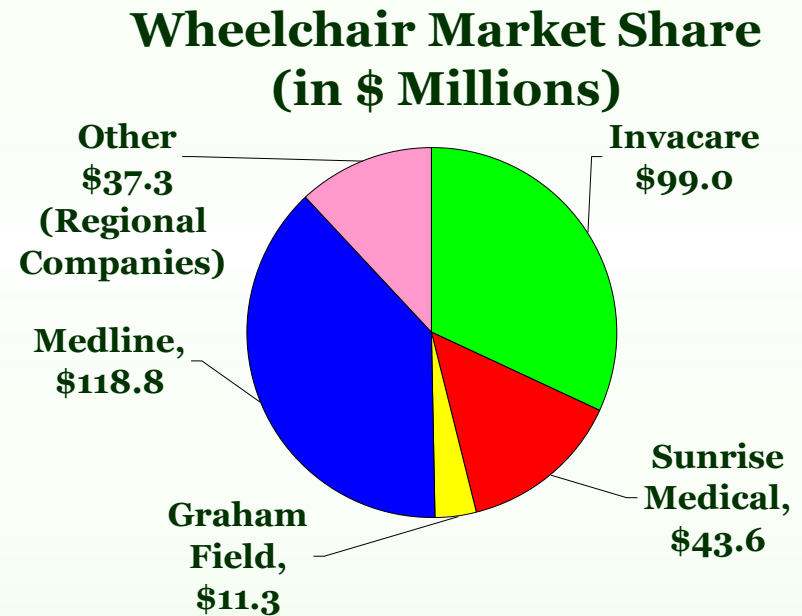
Business Assessment

🦽 Market Analysis

- Market Size: \$330M
- 3% Growth/Year

🦽 Competitive Advantages

- Side-push chair
- Facilitates Communication
- Ergonomic, Intuitive Interface





Business Assessment

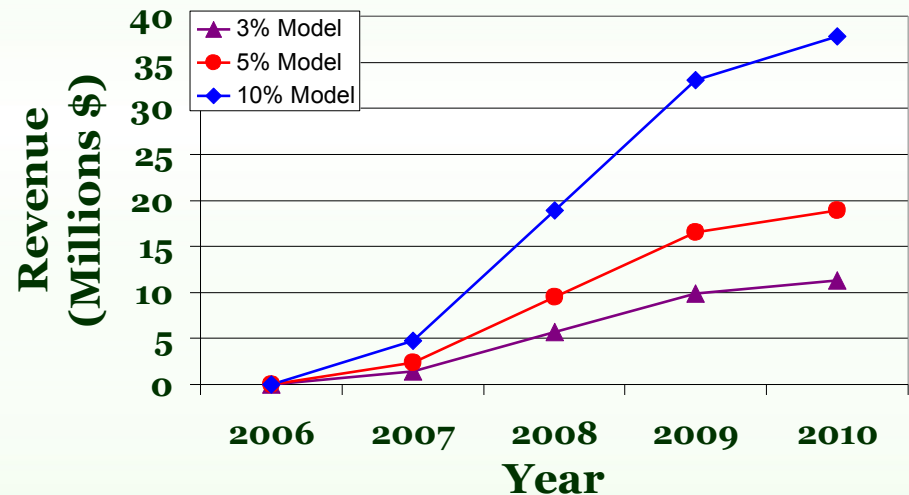
Deployment Strategy

- Museums, Nursing Homes, Public Attractions, Hotels

Manufactured Cost

- Target Price: \$550
- Initial Manufactured Cost: \$350

Project Revenue vs. Market Penetration





Business Assessment

Museum Case Study

- 17,500 museums in US
- 1 Chair replaced/museum/yr.
- Estimate 6% market penetration
- 1000 sales for year one

Forecasted Share Chair ROI : 30.4%

- \$ 3 Million initial investment



Traditional Wheelchair



“It is difficult to have a conversation with someone behind you...often, we have to delay a conversation until a stopping point is reached.”



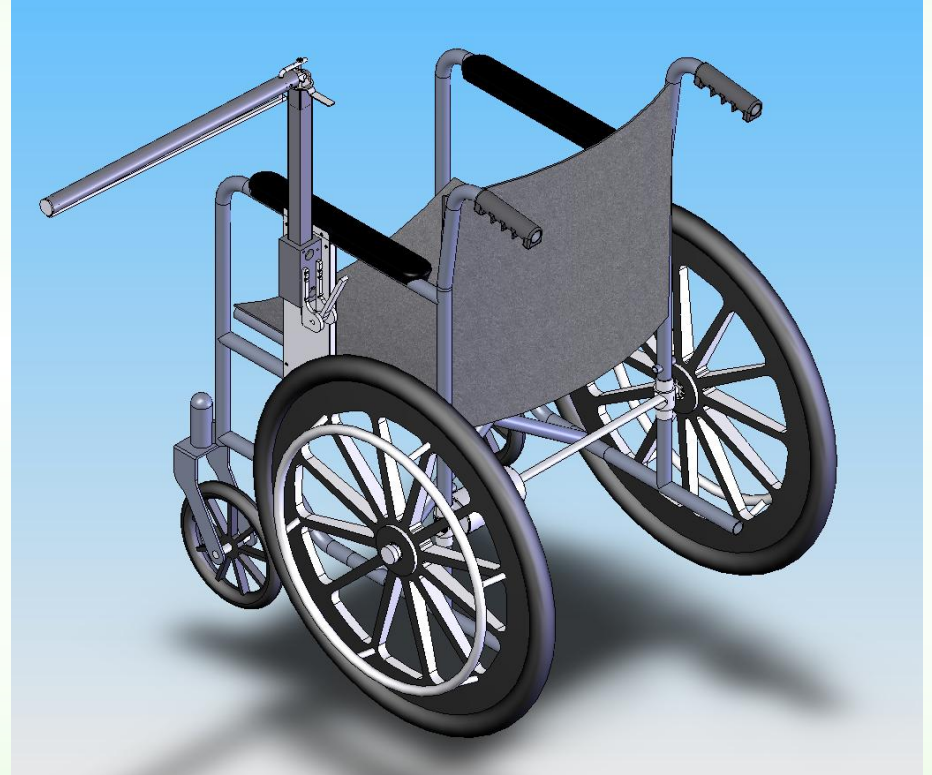
The Share Chair



“Wow, it’s like a real conversation.”



The Share Chair





Special Thanks to...

- ♿ Prof. Dave Wallace
- ♿ Chris Magee
- ♿ Matt Duplessie
- ♿ Ethan Crumlin
- ♿ Jane Conner
- ♿ Dick Fenner
- ♿ Joe Cronin
- ♿ Bob Gertsen
- ♿ Steve Haberek
- ♿ Bob Nuttal
- ♿ Paul Bartush
- ♿ Girard Plante
- ♿ Glenn Mangurian
- ♿ Kaley Zeitouni
- ♿ Lisa Thompson
- ♿ Michele Muehe
- ♿ MGH Volunteers
- ♿ MFA Accessibility Office
 - Hannah Goodwin



Questions?

Group Members:

- ④ Ovid Amadi
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- ④ Mark Egan
- ④ Will Etheridge
- ④ Julian Getachew
- ④ Omar R. Hernandez
- ④ Joshua Jiricek
- ④ Jesse Marsh

- ④ Arthur Petron
- ④ Stephanie Reed
- ④ Gita Srivastava
- ④ Nicola Tan
- ④ Etienne Toussaint
- ④ Cynthia Walker
- ④ Matt Zedler