Market

- In 2006, 3.1 million households bought a crib spending over $800 million.
- For 2008, the birth rate is 14.2 births per 1000 people → 4.5 million newborns.

Sources:
Current Products

Cribs with Drop Side Rail

Manual Height Adjustable Cribs/Play Yards

Sources:
- Atlantic Hospitality atlantichospitalityinc.com/.../1785DScrib.jpg
- Baby Crib Shop baby-crib-shop-manpela23.blogspot.com
- FEHA Design cgi.ebay.co.uk/Playpen-100x75-height-adjustable-NEW-L07_W0QQitemZ230294950524QQcmdZVi...
Customer Needs

- One *single* device to serve as a:
  - Crib
  - Play Yard
  - Changing Table
- Back Saver
- Crib whose height can be adjusted while the baby is still inside
Our Idea

- **Adjustable Height Crib!**
- **Technical Requirements:**
  - Can lift up to 50 kg.
  - Height range: .75 meters
  - Power requirement: 100 Watts
- **Design Requirements**
  - Circular Shape
  - Height: 45 inches (~1 meter)
  - Diameter: 45 inches
Design Challenges

- Raising/Lowering Mechanism
  - Electrical or Mechanical?
  - Ergonomics Issues
- Safety Compliance
  - JPMA Standards
  - “Pinch Point”
  - Storing the raising/lowering mechanism away from infant