Universal Product Family Design

Jon Holler
Varun Narayanan
Chris Garneau

Motivation

- Everyone will likely be disabled at some point (either temporarily or permanently)
- 40 – 50 million people have a disability
- Universal product families allow everyone to make the most of their abilities
- Universal design is cost effective when considered proactively, but it is costly when considered reactively
Objective

- Analyze 5–6 product “pairs” to evaluate how universal they are
- Determine how companies can consider universal design during the design of product families
- Development of metrics to be used during design to rate or evaluate how “universal” product families will be

Progress

- Reading and understanding of initial material discussing universal design
- Analyzing several existing product “pairs” that have previously been studied
Semester Plan

- Find several product “pairs” which have not yet been analyzed (1 week – starting 3/16)
- Examine methods currently used to rate product pairs (1 week – starting 3/23)
- Modify or develop metrics to be used during the design of product families to rate how universal a product family will be (3 weeks – starting 3/30)
- Test metrics via a case study (2 weeks – starting 4/20)

Planned Deliverables

- Product Pairs Analysis
  - Metrics that can be used when developing product families to evaluate the incorporation of universal design strategies
  - Case study evaluating the developed metrics
References