

Consumer Products, Baby Boomers & Profit

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Abstract

- Baby Boomer population has discretionary dollars to spend
- Increasing number of Baby Boomers have a functional impairment or limitation (i.e. being able to stoop/bend, stand, walk, push, climb, carry, sit, reach, or grasp)
- Nearly 50 million Americans (1 in 5) have a disability. In 15 years over 60 million Americans will have arthritis
- Mainstream consumer product companies seeking ways to make their products more usable and accessible for all generations – Transgenerational Design – Side Benefits: **Market Broadening and Profits!!!**

Motivation

- Traditionally, manufacturers of consumer products have made product design decisions without factoring in the needs, wants, and expectations of the full range of end consumers
- In many cases, the result is product failure rates of 30 – 90%¹
- Product cost, profit, and market share are primary drivers in corporate thinking
- Key is to make incremental usability and accessibility improvements in their existing products or in new products they are about to release

Process

- T²RERC uses Participatory Development (PD) and Transgenerational Design (TD) in assisting mainstream product companies in attaining this goal²
- A Fortune 500 company is selected and the PD project is introduced
- From the company's portfolio, a mainstream consumer product that is being developed already and would benefit from improved functional design is selected
- Consumers outline design and functional features for the next generation of the product – 'Consumer Engineering'
- Corporate product design teams are not threatened as they retain the latitude on 'How' to design a product that best fits their company's manufacturing capabilities

Methods

- Step 1: Recruit companies
- Step 2: Recruit consumers
 - Integrate people with functional limitations into all aspects of our program, product evaluation focus groups, and consumer surveys
 - Recruit people comprising a 'representative sample' of the US population via media advertising
- Step 3: Procedure: Alpha Focus Groups
 - Define product requirements and set priorities for product design in open forum led by moderator
 - Made up of four or five mixed groups consisting of twelve to fifteen participants
 - Among other topics discussed, participants are asked to provide the attributes of what they perceive to be the ideal device to perform the given function as well as price point questions
- Step 4: Procedure: Beta Focus Group
 - Second groups conducted for a particular product or topic, primarily allow for the refinement of a product's appearance through a critique of key design features of a prototype
 - Two Beta groups (representative sample of Alpha groups) of twelve participants each are usually sufficient
 - Purpose is to obtain quantitative data on the previously collected qualitative information and allows that data to be applied to the prototype
 - Participants assess whether or not a prototype addresses the top function and design features a product must have to be deemed desirable by the consumer

Results

- New products that have been recent successes resulting for our partnership and process:



- **Black & Decker™ Lids Off Jar Opener**
 - Incorporated 27 out of the 29 features required by focus group consumers
 - Beta focus groups chose the final overall shape, button location, button size, button shape, type of handle, and the bottom jaws unlock activator for the device



- **White Rodgers 90 Series Blue thermostat**
 - Incorporated functional features such as: large and easy to see characters for heat and cool options; large intuitive red/blue temperature keys; a large 12 square inch touch screen display; a blue backlight display which illuminates upon touching the screen to improve display contrast in low lighting, audio prompting to ensure program change confirmation, ambient room temperature, set temperature, and clock are displayed separately all on the main screen



- **Eastman Kodak EASYSHARE G 600 Printer Dock**
 - Incorporated functional features such as: large LCD screen for easier viewing; the ability to view, edit and print Kodak pictures from almost any digital camera; wireless capabilities; the ability to print from digital media cards and USB devices; larger buttons (2.5 times larger than previous models); system ready to use right out of the box; intuitive controls and status lights

Conclusions

- Usability and accessibility improvements of products can be attained at a reasonable cost, and will increase market share and profitability of a company
- Companies begin speaking in accessibility terms, using TD and UD terminology; seeking out ways to integrate design concepts into more products; being aware of Baby Boomer population and positive effect on sales
- Process results in introduction of a new, more usable and accessible consumer product in the marketplace

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