

Efficient Lighting: Research Approaches

August 28, 2014



NAVITAS
PARTNERS

Roadmap Background

- Stakeholders re-activated the need for consumer lighting research in a road mapping discussion in Fall 2013. The top points identified on furthering consumer research to inform the ENERGY STAR lighting program included:
 - Selecting the right, more efficient lighting products.
 - Working together to assist consumers.
 - Identifying the critical challenges facing consumers in making a lighting selection.
 - Most effective avenues and tools for addressing those challenges.
 - The stakeholders participating in this discussion group would focusing on funding and designing the research tasks and desired outcomes for the research project(s).

May 2014 Roadmap Research Meeting

- Library of lighting research
 - clasponline.org/LightingResources
 - Continue to create the library?
 - Submit to My Ton at mton@clasponline.org

- Present research approaches for discussion and stakeholder direction

Situation Summary

➤ Common interests

- Help consumers to adopt efficient lighting
- Desire data-driven messaging and marketing
- Interest to pool resources and attain economies of scale in marketing

➤ Common issues

- Lighting is a confusing and dynamic category
- There is no one secret sauce solution

Base Approach

- Focus on one hypothesis at a time
- Data-driven = quantitative research
- Test and learn

Qualitative Data We Know

- Customers care about warm-up time, lighting quality (including color), ability to dim without flicker, and realization of longevity claims
 - Cite long lifetime as a major reason to purchase CFLs/LEDs: preference increases considerably when lifetime goes from 1 yr to 5 yrs with minimal gains that lasts longer than 5 yrs
 - Customers have expressed a need for dimmable lighting products but are confused on compatible accuracy
- LEDs are more likely to be the satisfying efficient lighting choice
 - Customers are hesitant of LEDs due to little to no direct experience with the technology, price of LEDs, and negative past experiences CFLs
 - Customers are very satisfied with LEDs and prefer it to CFLs once they have experienced them

Qualitative Data We Know

- Customers are more comfortable with “wattage” and “wattage equivalent” and make purchasing decisions based on these
- Price and marketing impacts on consumer segments
 - Early adopters are generally less dependent on price and more respondent to marketing
 - LED sales in high-income areas were 4.1 times higher than sales in low-income areas and 1.9 times higher than sales in medium-income areas
 - LED sales in medium-income areas were 2.2 times higher than low-income areas
 - Nearly 67% of urban stores displayed promotional materials for efficient lighting compared to less than 10% of rural stores

What We Know of Consumer Psychology

How do people make choices?

Several situational factors have been shown to very strongly influence decision making. These factors are listed roughly in order of their importance and strength. The more factors present, the stronger the effect. Text in parentheses represents the corresponding scientific terminology for these effects.

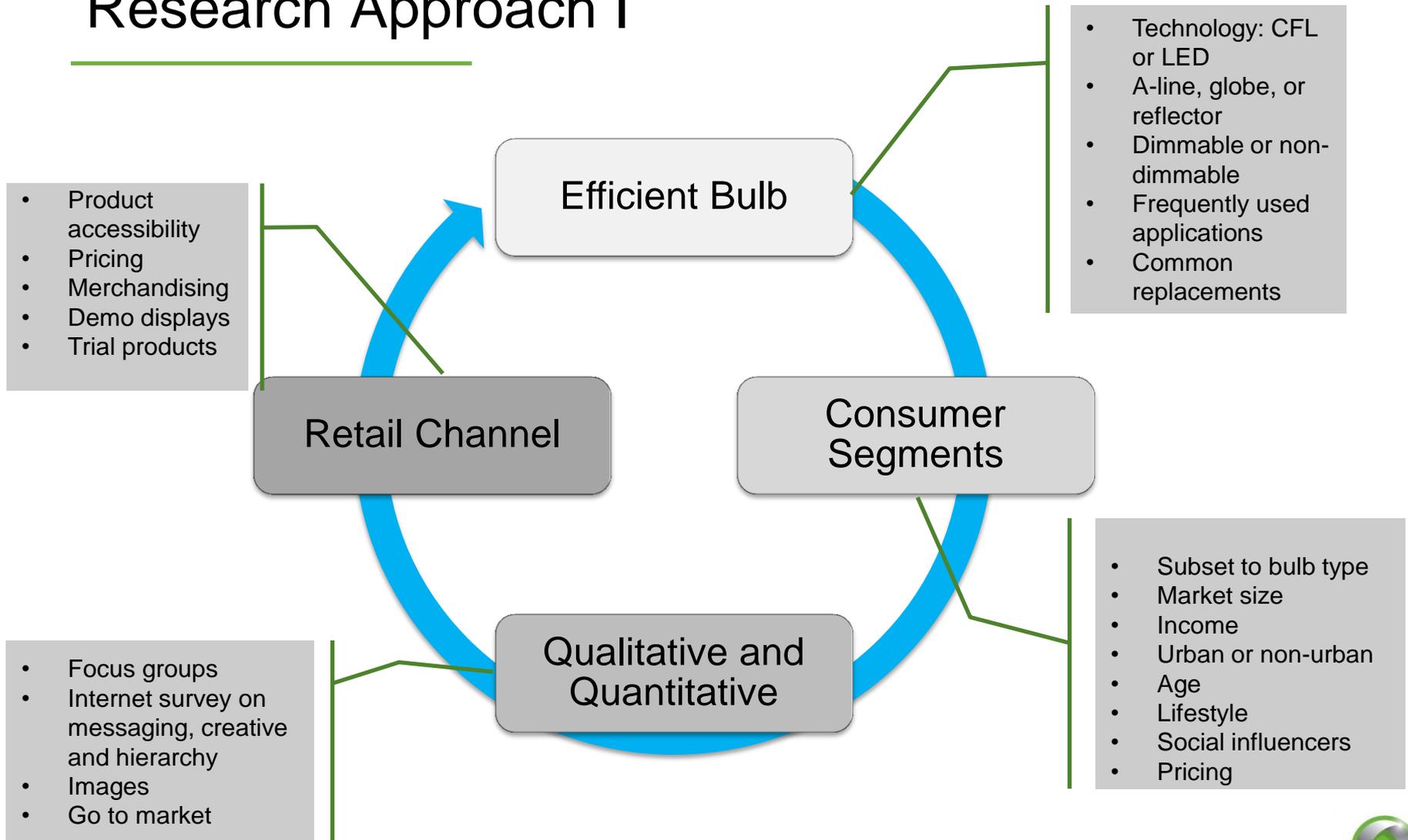
1. The default condition (status quo bias)
2. What we see other people doing (social norms/social proof)
3. Urgency, often due to limited supply or limited time (scarcity effect)
4. Whatever is readily at hand (status quo bias)
5. Reminders, prompts, and other attention-getter (prompts)
6. Relative cost/comparative value (contrast effect/anchoring and adjustment)
7. The number of things to choose among (choice overload/option paralysis)
8. Recommendations from similar people (homophilicity)
9. Familiarity, confidence, and emotional associations (available heuristic)

Objective – Help Consumers to Adopt Efficient Lighting

Strategy	Examples
Improved packaging and package messaging	Had GE redesign packaging to be visually cleaner and simpler
	Rebranded the lamps as “Energy Smart”
	Made “Saves \$38 in energy” the primary message
Installed an in-shelf display in the lighting aisle	Showed 10 types of CFL and incandescent lamps side by side
	Incorporated messaging comparing lifetime costs and highlighting savings
Lowered the actual and perceived product price and promoted purchase of multipacks	Dropped the price of a 3-pack from \$9.58 to \$7.58, which decreased the per-bulb price from \$3.19 to \$2.52
	“Saves \$38 in energy” made \$7.58 seem even smaller in contrast
Placed CFLs in more prominent locations	Increased CFL shelf space by 40%
	Replaced a portion of incandescent product shelf space with CFLs
	Demoted incandescent lamps to lower shelves and placed CFLs at eye level and within easy reach
	Retained sections of lighting set previously devoted to CFLs
	Placed stack-outs in the grocery section of the store and periodically featured the product on the “Catch of the Season” wall at the front of the store
Increased advertising and PR	Advertised CFLs in weekly circulars
	GE ran a complementary print advertising campaign
	Campaign was covered in national newspaper and magazine stories

Figure 3 – Key Components of Walmart’s 18 Seconds Campaign for CFLs (D&R 2012b)

Research Approach I



Research Approach II

- Hypothesis is what can we learn from adopters to apply to non-adopters?
 - Focus groups or mine customer reviews
 - Screen for income levels, urban/rural, male/female, age
 - Inquiry/interview and then test with some messaging/creatives

Research Approach III

What We Know on Consumer Psychology

- Default condition
- Whatever is readily at hand
- What we see others do
- Recommendations from similar people
- Limited time / supply
- Prompts, reminders
- Choice overload
- Prompts, reminders

Collaborate and Channel Research into Go-to-Market Tactics/Tests

- Trial (free or low-cost) LEDs
- Special limited time deals
- Efficient lighting demo displays
- Get better placement of efficient lighting in stores – standout, eye-level, impulse buy
- Seasonally focus on one bulb, one application marketing push
- Get more social proof showcases into the market – blogs, customer reviews/star ratings, social media sweepstakes, celebrity sponsor

Hypotheses

- Open forum to hypothesize LED bulb type-consumer segment-retail channel
- Insights on adopters vs non-adopters
- Collaborate and develop opportunities for merchandising, product demo displays, and trial products