**Selling CFLs at Wal-Mart**

*1. Why does Wal-Mar care about CFLs? Why do consumers care about CFLs?*

For Wal -Mart: As the largest Brick and mortar retailer in the US, Wal Mart sells of light bulls in 2009 were as high as 250m, with a constant upper sale trend of these bulbs. However, CFL prices were declining, going down from $15 per bulb in the 1990s to an average of $3 per bulb by 2009. CFL’s accounted for 14% of total bulbs sales and aprox 25% of WalMart bulb sales during 2007[[1]](#footnote-1).

For the consumers, CFLS offered the following advantages:

* Better utility:
  1. CFL use less voltage and save the consumers, on average, $30 a year on their electric bills. While the price of a CFL bulbs is on average only $2.5 more than the common bulb ($3 vs $0.5).
  2. While saving less on electricity, the price of the CFL bulb is significantly lower than the price of the $40-$110 price of LED.
  3. Tax credit benefits that can reach up to $1500.
  4. Longer product life: CFL’s last up to 10 times longer than incandescent bulbs.
* Reduced emissions- CFL’s help reduce Carbone dioxide emissions, which can be appealing to environmental aware consumers.

Disadvantages:

* Higher Upfront cost- of $3 vs. $0.5
* High Mercury levels (that are perceived as dangerous and make the product recycle process harder)
* Low perception of the product features: no dimming setting and understanding it is somewhat more similar to the industrial florescent lights.

*2. What is the diagnosis? Why has public reception been so lousy? You should be able to tie in several concepts we have discussed already.*

Consumer don’t look only at the utility of the product when they chose the type of bulb to purchase. For most consumers the thought of the long-term saving utility. As we learned in the mental accounting, in a somehow similar method to the marshmallow test, consumers are looking for the immediate gratification (in this case low price) than the long one(in this case the long-term savings)- *presence bias(present self vs. future self- hard to pay more upfront for savings).* In addition, the other negative aspects of the bulb, mentioned on Q1, cause the consumer to stick with their option(maybe by the “framing” of it as less good than the regular lightbulb). We see that the transaction utility(the price of the regular bulb is $2.5 lower than the CFL) is higher in the consumer POV than the acquisition utility (the $30 a year savings that the consumer perhaps doesn’t capture as well).

To sum up the problem’s consumer is having with the product:

* Usage problems- long time to warm up, buzz and flicker at the end, no ability to dimmer
* Product design – complaints regarding unflattering white light, “strange bulky figures”
* Mercury poisoning- substantial amount of mercury that had a media attention, caused a fear of poisoning.
* Product image – perceived to be more like the industrial florescent light
* Price sensitivity and difficult to measure the utility- as mentioned in the above, consumers have a difficulty to understand the long term savings.

*3. Identify potential solutions for the problems/issues you identify in the preceding question. In other words, how could the problems be addressed or overcome?*

From question 2, we understand the current problems with the product is mostly how it is perceived rather than its absolute utility. I would suggest the following:

* Change unjustified perception:
  1. Use CFL inside the stores to show the features of it
  2. Use influencers/commercials to exemplify the use of it
* Change utility mindset:
  1. Since these bulbs have much longer lifetime- consider offering a rebate if the product stop working after a short period(let’s say a year) which would create an insurance for the customers
  2. Have doctors or health related figures show their use of the product to take away fear of poisoning.
* Educate by experience:
  1. Lent the bulbs for a period and charge the customers only if they aren’t returned. Using the Endowment effect, more customers would rather keep the product
* Celebrate environmental effect:
  1. Publicize heavily the environmental effect of the CFL’s
  2. Celebrate the customers choosing this environmental approach (stickers, shirts if you buy many and etc…)
  3. Emphasize the harm- instead of “you’re saving in electricity” which is a gain, based on prospect theory, emphasize the “loss”, i.e show the environmental damage that is caused by the current emissions and the prospected damage that would be caused if this continues.
* Educate on the long-term saving utility
  1. Show a simulation of the savings, one can use Framing to show how this bulb save compare to the regular one.
  2. Offer to reimburse some of the cost if there is no saving in electricity in the end of the year (similar to Toro plan). As most customers would probably not reach to the store anyway and the product is expected to lower the electricity bill, the risk for Wal -Mart is low and in addition since it takes the risk from the customers, they would be more willing to purchase the product.
  3. Simplify the tax benefits for the customers (by creating an app or designated website for Wal-Mart customers explaining how to do so)

*4.What about LED bulbs? Will they face the same problems?*

LED bulb don’t have the perceived bad image of the CFL’s, however they are much more costly ($40-$110 vs. $3 for a CFL). Since for them, under normal use the utility of the product isn’t higher than the regular bulb (since the energy savings aren’t enough to pay for the sunk cost). However, customers aren’t always rational (or they are predictability irrational as Dan Ariely says)- and they might use the relativity judgment, since LED is also more costly than the regular light bulb (as CFL) but have similar (or better) features in the views of the consumer regarding the light features. That makes it “easier” for consumers to distinguish between the options, LED save more than traditional light bulb but offer same (or better) features, therefore is easier to be compared to it (and can cost more).

1. https://www.hbsdealer.com/news/wal-mart-makes-light-work-cfl-sales [↑](#footnote-ref-1)