How to change built in behavior? 
The example of lighting

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Why are we interested in lighting?

It represents 19% of the world production of electricity
The second highest personal consumption expenditures

- Incandescent lamps are going to be banned and replaced by LBC (energy-saving lamps)
  - But why don’t people buy these new lamps?

It’s necessary to explore

Social practices

What are the arguments used to explain the reasons why habits don’t change?
and why programs to influence energy consumption behavior are not efficient?
Lighting according to sociologist

1. People don’t declare their real attitudes in valuations surveys

2. Energysaving programs are not really efficient: they run up against resistance

3. We must find an alternative way to make behavior change with a combination of
   - Theory of involvement
   - Theories of change and diffusion study theories
   - Socio-économic theories and social marketing
1. Why don’t behaviors change?
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- 1.1. Because of the socio-technic system
- 1.2. Because of the influence of prejudice
- 1.3. Because of the lack of technological knowledge
- 1.4. Because of daily routines
- 1.5. The fact that technologies (like LBCs) are rather unknown
- 1.6. The lack of concrete personal interest
- 1.7. The lack of awards or distinctions for whoever takes part in energysaving
1.1. The Socio-technic system’s influence

- Individual behaviors depend on:
  - Lights and lamps market
  - The electric system
  - How people feel about the use of electricity
  - Our culture of waste
  - The consumer society (fashion…)
    - = a consumer culture
  - Quest for comfort
  - A short-turn economic view
1.2. The influence of prejudice

- A self-centred attitude to the environment
- Electricity is virtual
- Conserve energy = regressive attitude
- A stingy attitude
- The fear of losing our comfort
- An uncertain context (controversy about the urgency of climate change)
1.3. The lack of technological knowledge

- Lack of knowledge about physics
- Blind trust in professionals and distributors
- The impossibility of distinguishing between the different electrical consumptions (heating, lighting, baking, refrigeration...)
1.4. The daily routines

Routines are:

- Automatic reactions
  - = first condition for the performance of the behaviour
- Thoughtlessness
- Practical habits
- Implicit knowledge
- Our type of consumption
1.5. LBCs are rather unknown

- Not enough emphasized on department stores
- LBCs are judged inferior / incandescent lighting
- Not promoted enough by salesmen and electricians
- There are not enough choices (lamp spockets, forms..) in stores
- People who use LBC, never talk about it = no promotion in the local network
1.6. The lack of concrete personal interests

- Promised energysavings are not noticeable
- Energysavings are not clearly visible in the bill
- LBCs are too expensive
- People are often obliged to change their lamps/light fittings
- So, what’s the real interest for households?
1.7. The lack of awards or distinctions

- Buying LBC necessitates other changes
  - Economic cost
  - To artfit the house with new equipment
  - To have good information
  - To take care when using LBC
  - To be more attentive to breaking bad lighting habits (twining out lights before leaving for ex)

- But no thanks in return, no rewards for having bought sustainable domestic technologies
2. What are Energysaving campaigns? What do they achieve?
2.1. Energysaving campaigns’ tools

- **Mass media campaigns**
  - **Obj:** changing practices and habits
  - **Hyp:** knowledge influence behaviors

- **Distributives free samples of LBC**
  - **Obj:** introduce these lamps
  - **Hyp:** « try before you buy »

- **Energy-Information « Espaces »**
  - **Obj:** give advice
  - **Hyp:** there is a need for advice centers

- **Bonus, financial help….**
  - **Obj:** induce people to buy
  - **Hyp:** it’s supposed to help the change habits
2.2. The campaigns failures

- Mass media campaigns
  - Too global, not well-focused enough
  - Not enough concern, so don’t give any sense of responsibility

- Supply Campaigns of LBC
  - No instructions for use
  - Products don’t live up to expectations
  - LBC are too expensive = it’s not a good incentive to buy

- Energy-Information « Espaces »
  - Only already informed people used them
  - They don’t give advice face to face (just on telephone)

- Bonus, financial helps….
  - The result = reduced introductory offers
  - People need to be involved
2.3. Promotional campaigns not well thought out

- Mass media campaigns
- Too global (no target), not attractive enough
- They look like marketing campaigns, but they always forgot the mediate actors
- The supply-market is very badly organised (stores, salerman…)
- Its selling points are weak
  - They are energysaving but….. they are expensive
  - They consume less = we can use them more often
  - They are ecological ? But they contain mercury…
- Their particularities are not made clear
  - Only to be used in rooms which are regularly occupied
  - Cannot be used with dimmers
  - They adapt to all kinds of lamp sockets
2.4. ECONOLOGIS in Canada, a very efficient campaign

- Program focused: for low income households

- Home visit with an educational objective
  - Explanations about the advantage of changing energy habits
  - Booklet with advice
  - Teaching aids: a questionnaire (the DRMC)
  - Small jobs like lagging and watersaving are done immediately
  - + installing energysaving lamps (LBCs)
3. Lessons from some energysaving campaigns
3.1. Lessons from some energysaving campaigns

- Auvergne: «10,000 lamps for the year 2000»
- South of France: «The foot in the door»’s way
- Lille: «Energy-Environment-check-ups»
- Québec: «The energysaving program in Metabetchouan»
4. Some keys to better energysaving programs
4. Some keys to better energysaving programs

● A solution: mix

● Psycho-sociological theories
● Change and diffusion study theories
● Socio-economic theories
● And marketing tools
4.1 Psycho-sociological theories

a) The influence factors

- **3 factors influence behaviors** (Olivier Corneille)
  - The norm (is it well accepted?),
  - The attitude (am I well disposed towards this?)
  - And control (do I have the competency, will I be able to do it?).

- = 3 conditions for changing
4.1 Psycho-sociological theories
b) The pattern of « engagement »

- To optimise educational practices and help someone to change his habits (Beauvois et Joule)
  
  - **The principle of freedom**
    (to give assurance)
  
  - **The principle of (involvement) engagement**
    (to get people to accept simple rules or obligations and graduate their involvement)
  
  - **The principle of the contract** :
    (encourage people to continue, without return)
  
  - **The principle of naturalization**
    (reduce the dissonances. People adhere to the project as something normal)
  
  - **The principle of denaturalization**
    (don’t stigmatize those who think or do differently)
4.2 Change and diffusion studies theories

a) Energysaving = an innovation

- Hypothesis: conserving energy is rather new for people
- So, what about its social acceptability?
- This new attitude =
  - Meeting between supply and demand
  - That occurs in a social and technically structured society
  - And also produces instability and unpredictability

- To introduce innovations supposes:
  - A favorable environment
  - A pertinent project of change
  - Change is considered as an opportunity
b) Some indispensable conditions (Rogers)

5 conditions are necessary for an innovation spreads:

- A comparative advantage (benefit, + value)
- A compatibility with the technical system (lighting system, lamps sockets for example)
- Not too much complexity (it has to be modern, but not too modern)
- The possibility to test and judge the efficiency
- Advantages have to be verifiable (on electricity meter for example, or on the electricity bill)
4.3 Theory of the « captation » (Soubeyran)

- More explain the intentions and show a very personal interest
- Think about an attractive program (It has to seduce)
  - Show the pertinence
  - Give importance to plus-values (image, financial…)
  - = « capture the interest »

- Find « ambassadors »
- Implicate all partners
- Make people trust and believe in the project
- Earn customers’ loyalty = « fidéliser »

- And think to reward
4.4 The theories of social marketing

- **3 keys of marketing strategy (Arnaud PETRE)**
  - To segment
  - To target
  - To place

- **A model of communication**
  - Communicate to whom? : which are the concerned public?
  - What is to be communicated? Whitch message?

- **What are the objectives?**
  - Do people know?
  - Do people prefer: but how to persuade people to buy?
  - Do people adopt the change: but how to change peoples’ attitudes?
5. Some ways to make people permanently change their attitude to lighting
5.1 Energysaving campaign is «efficient» if and only if:

- Plans are based on the long term
- There is a real engagement and mobilisation of all partners
- With local animators
- Information face to face and/or closely followed up
- Training local mediators or ambassadors
- Demonstrate the personal interest too (civic, economic…)
5.2 Give signification to changes

- Put into perspective a real personal and tangible interest
- Promote the « community » or cultural effects
- Introduce social and ethic, good sense and values
- Prove it «goes without saying » = it has to be normal
- « Conserving energy » becomes a virtue
  - People take on a new identity as conservationiste
  - A benefit for health and the environment
  - A form of collective participation
5.3 Give back to each one his «capacity to do»

- Create a culture of energy saving = make people more sensitive to..., sell the idea
- Improve ordinary knowledge, technical information
- Change everyday attitudes and beliefs
- Educate people to the challenges of tomorrow (pedagogy about responsibility)
- Make the changes compatible with social values and buying power
5.4 The conditions to capture peoples’ imaginations (1)

- Identify concerned public ways
- Imagine as many « dispositifs of seduction » to attract different « group-cibles » as possible
- Implicate people in their own futures
- Plan energysaving ambassadors
5.4. The conditions to capture peoples’ imaginations (2)

- Compensate for the contribution
- Install little individual measuring instruments to show the consumption decreases (« seeing is believe », « try then you adopt »)
- Demonstrate the efficiency of the project

- **Gongratulate people having participated**
Conclusion

Program have to change equation

- « Concentrated Cost – small benefit »

Over another equation, like

« small cost – real benefit »

Compensate for the engagement

Think in a systemic way

(= implicate all the partners)

Objective: create a real energysaving culture