LAZY USER MODEL: SOLUTION SELECTION AND DISCUSSION ABOUT SWITCHING COSTS

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This presentation

- Lazy User Model
- Learning issues & Switching costs
- Conclusions & some implications to design
Lazy User Model

- The model tries to explain *selection of solutions* ≈ technology adoption
- Focus on the *user need and user characteristics*, not only on the technology characteristics
- Focus on the *effort needed from the user* (in €, £, $; time; activity)
- Focus on putting *many* solutions on the same line (e.g., competing technologies)
- Usable in enhancing our understanding about the chances of market penetration of new products & in the design of new products (solutions)
- Focus on effect of learning to the effort needed
The Lazy User Model of Solution Selection

User need defines set of possible solutions to fulfill the need

User state limits selection of solution based on the lowest level of effort (cost) "likelihood to select solution"

User focus on competitive solutions (technology)

Explicitly specifiable wants that can be completely, fully filled. These can be tangible or intangible available information, type of information, depth of information, quality of information, completeness of information, urgency of information delivery

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Relationship with some models explaining IT adoption

Main differences:
- **UTAUT**: Focus is mainly on the technology and the use of technology, with a focus on constructs that are affected by four characteristics (different individuals). Use is also strongly related to performance (better interfaces => better performance).
- **COGNITIVE MODELS**: Focus is on the fit of technology to task and information presentation format leads to differences in performance.

The Lazy User Theory of Solution Selection implication for IT adoption:
- **The selection of a solution is dependent on the need & characteristics that define the available solutions and the lowest effort solution from the set of available solutions will be selected.**
- **Focus on single technology at a time.**

*Source: Shaft & Vessey (2006)*

*Source: Goodhue and Thompson, (1995)*

*Source: Franck Tétard & Mikael Collan SCIS 2011*
Mechanics of solution selection

User has selected a solution (technology)

The original solution

A newer less costly solution enters the market

Learning takes place (user learns the system)

A new level reached through learning (becoming an expert user)

Users choose the solution

It has a combination of cost level & likelihood that

Cost (in effort/time) becomes lower due to expertise in use, this makes the likelihood to use the solution higher

Because of the sunk cost in learning the user will not be more likely to adopt the new lower cost solution

At least if it goes below where the user is now

What is a "universal solution"?

It is a solution that offers a cost level that is clearly the lowest universally => the likelihood to choose the universal solution

What about a new inexperienced user?

Which solution will he/she be more likely to choose?

Also: cost level of the universal solution is lower than any cost level of other solutions reachable through learning

The new solution, because it offers a lower cost level

Likelihood to choose solution

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Learning issues

- An investment in learning a solution makes the cost of repeated use lower (*economies of scale*).

- Learning is a *sunk investment* that is also a *barrier of entry*; new competing solutions must be so much better that they justify ex-ante a new investment in learning, i.e., the faster the investment is "paid back", in the form of the lower effort of use, the better.

- The size of the learning investment comes from the *learnability* of the solution (how easy is it to learn [to use]) and from the portability of the knowledge needed (*transferrability*).

- The barrier of entry is affected by *memorability* (how easy is it to remember how to use), if low memorability => low barrier of entry.

**Transferrability implication:**
Design new solutions so that users can use their previous knowledge.

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Some design implications

• Design in a way that:
  – users can use existing (previous) knowledge to use, or to learn to use, a new artifact (knowledge portability - transferability)
  • eg. 1. New car: “the user doesn’t need to learn how to use a new car, even though steering controls might look different”
  • eg. 2. Mobile phone: “key mapping - and related functionality - is fairly standard and doesn’t need to be learned, although keys might look and feel different”.

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Some design implications

• Design in a way that:
  – users can use the product WITHOUT any actual learning effort (learnability very high, memorability issues do not come into play)
  eg. 1  Simplistic design philosophy: include only the minimal number of functions (buttons etc.)
  eg. 2  “Icons” – icon depicts the action so well that it is easy to understand what the action does just by looking at the icon (eg. using thumbnail photos of people in a phone directory)
iPad: "no-learning cost revolution": a two-year old using the iPad with his dad
Final thoughts / Takeaway message

• There is a clear relationship between learning effects and switching costs
• Switching from one solution to another is ”the same” as selecting a new solution
• The Lazy User Model can be used to understand (and perhaps even quantify) some of the elements that contribute to switching
• It is possible to illustrate the effect of learning in a visual and intuitive way that is compatible with the previous research connecting learning with switching costs
• Learning as a sunk cost has implications on how solutions should be designed
Thank You!

Questions? Comments?

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