

LAZY USER MODEL: SOLUTION SELECTION AND DISCUSSION ABOUT SWITCHING COSTS

Mikael Collan

University of Turku, Pori Unit, Finland
mikael.collan@utu.fi

Franck Tetárd

Åbo Akademi University, Turku, Finland

This presentation

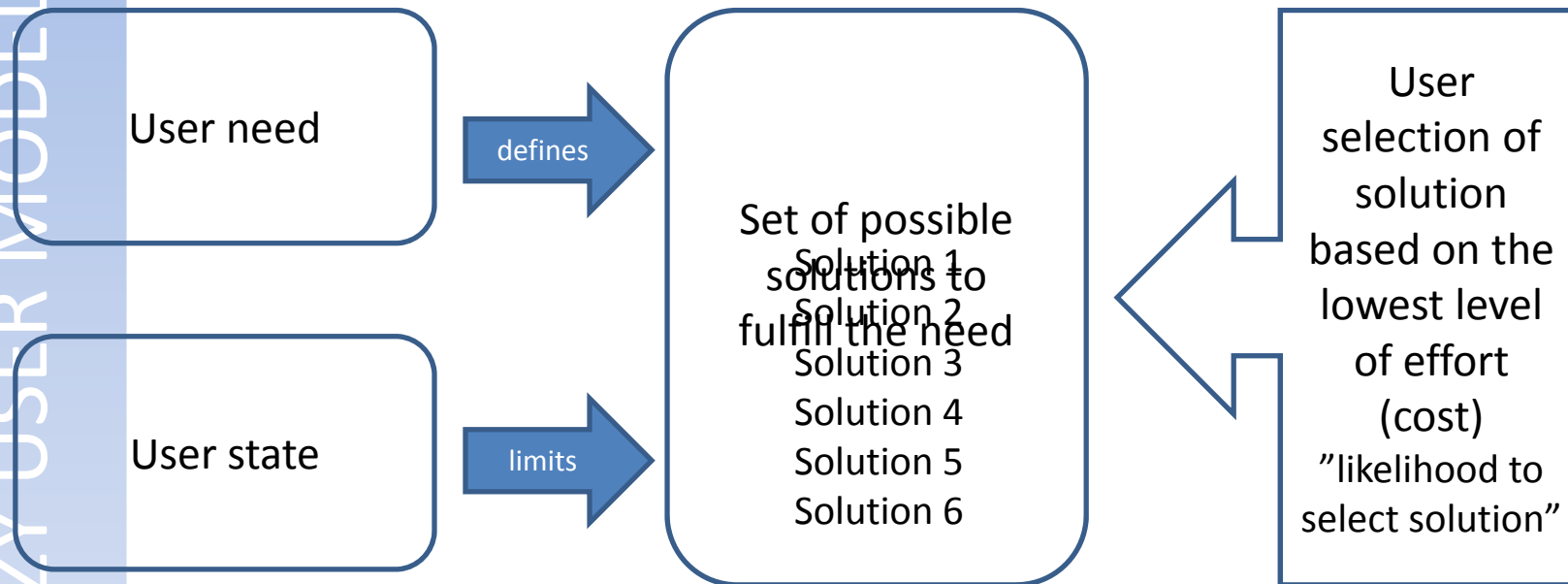
- Lazy User Model
- Learning issues & Switching costs
- Conclusions & some implications to design

Lazy User Model

- The model tries to explain *selection of solutions* \approx 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

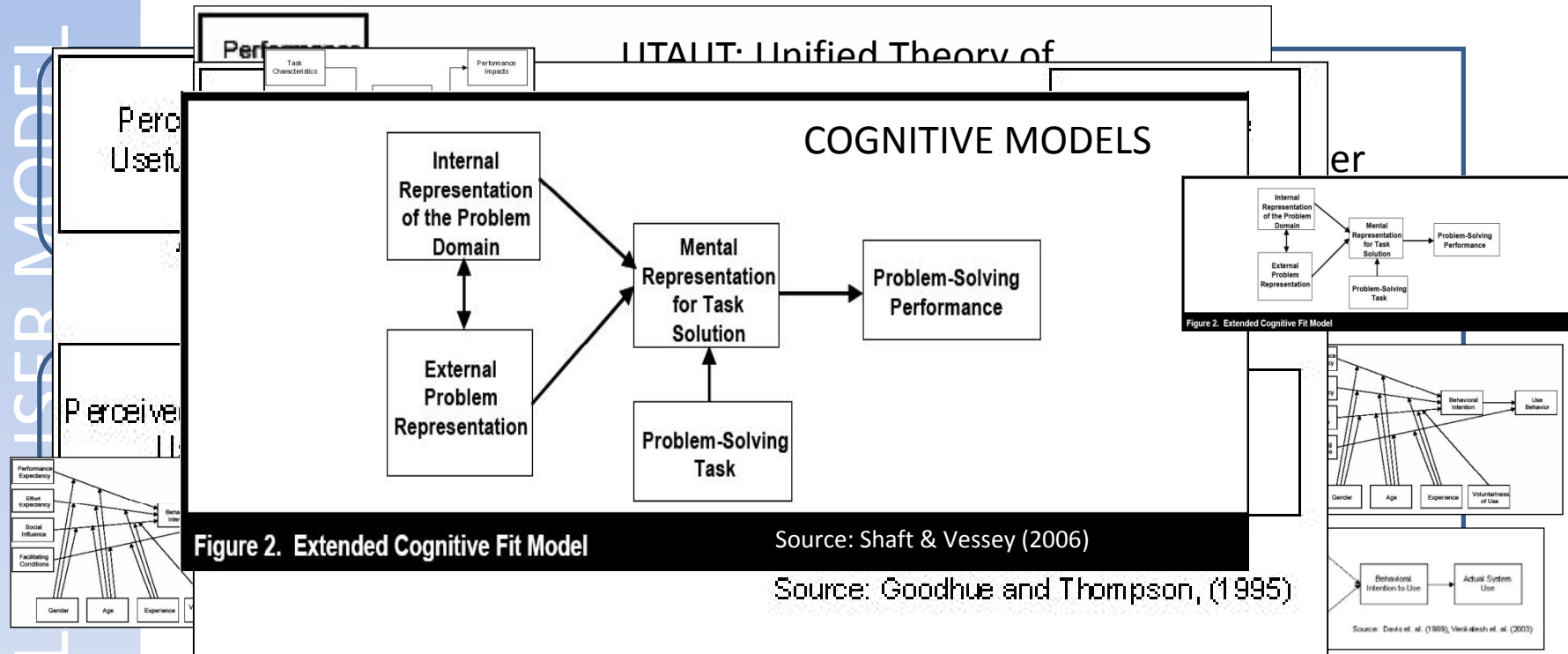
LAZY USER MODEL



Explicitly specified location, available resources, fulfilled. The device can be tangible or intangible, available information, type characteristics, depth of information, quality of information, completeness of information, urgency of information delivery

USER FOCUS **COMPETING SOLUTIONS (TECHNOLOGY)** **COST (UTILITY)**

Relationship with some models explaining IT adoption



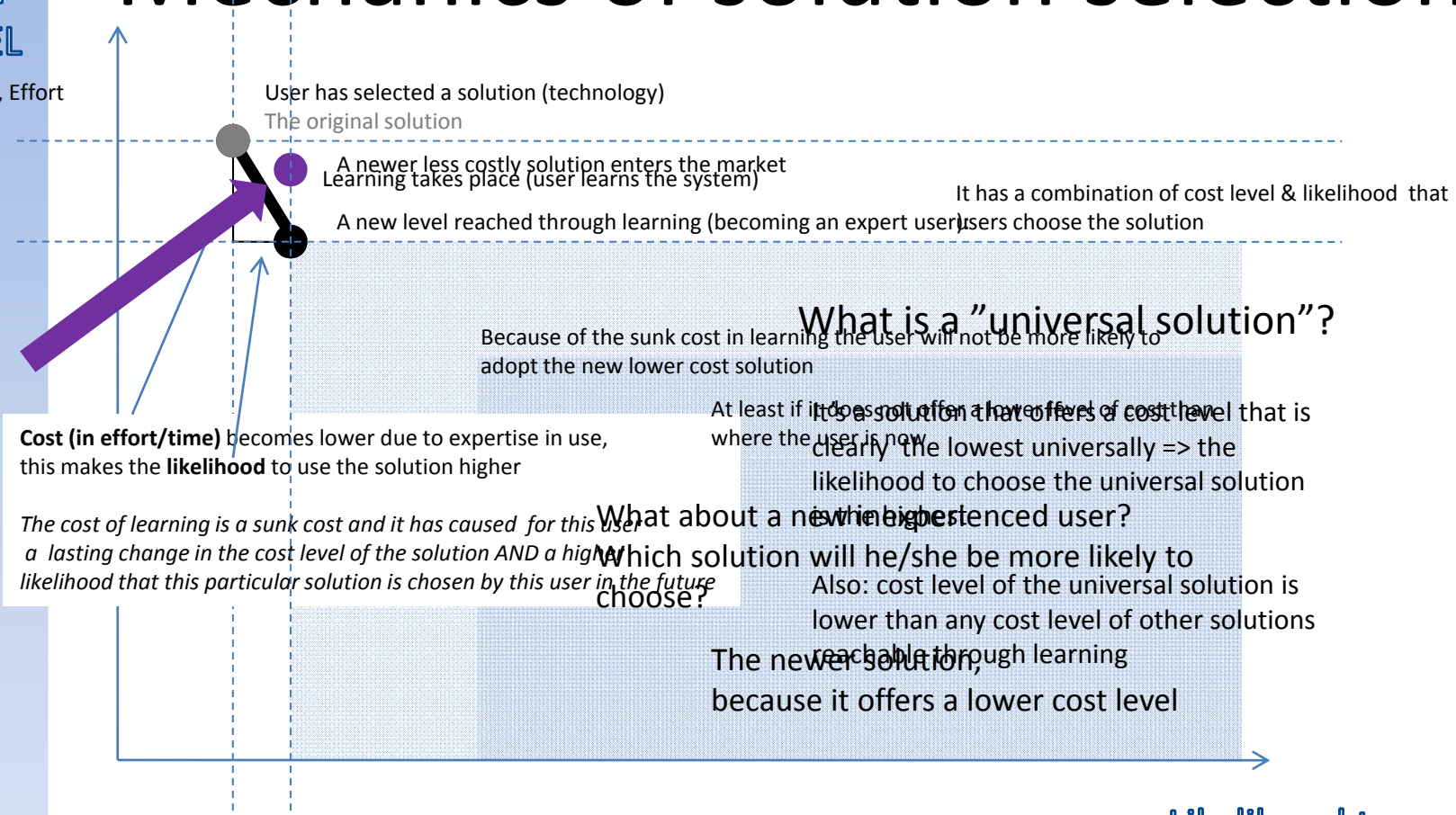
The Lazy User Theory of Solution Selection implication for IT adoption; Main differences with other models include the inclusion of competing solutions and the acknowledgment of user characteristics that define the available (suitable) solutions and that the user will select the performance (better solution from the set of available solutions). Focus on single technology at a time

Mechanics of solution selection

COST LEVEL

€ £ \$, Time, Effort

LAZY USER MODEL



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

The cost of learning is a sunk cost and it has caused for this user a lasting change in the cost level of the solution AND a high likelihood that this particular solution is chosen by this user in the future

What is a "universal solution"?
 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 does offer a lower level of cost than where the user is now, clearly the lowest universally => the likelihood to choose the universal solution is higher

What about a newly experienced 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 because it offers a lower cost level

Likelihood to choose solution

Learning issues

COST
LEVEL

€ £ \$, Time, Effort

ANALYSER MODEL

Gain of each
repeated use

Gain over old
solution

How many times
must I use the new
solution to justify the
cost of learning?
= Trade-off between
cost of learning & the
expected benefit

Cost of learning
(for example)

Transferrability implication:

Design new solutions so that users can
use their previous knowledge

- 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

Likelihood to
choose solution

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”.

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)

LAZY USER MODEL



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?

mikael.collan@gmail.com

franck.tetard@abo.fi