



UTM

UNIVERSITI TEKNOLOGI MALAYSIA

INTRODUCTION TO HUMAN COMPUTER INTERACTION

Chapter 01 (Part 3)

01 USABILITY & USER EXPERIENCE GOALS

Usability

What is Usability?

- Practical implementation of a good HCI
- Usability means **easy to learn, effective to use and providing an enjoyable experience**

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"It's the latest innovation in office safety.
When your computer crashes, an air bag is activated
so you won't bang your head in frustration."

<https://www.youtube.com/watch?v=pCm-WgaS4tw>

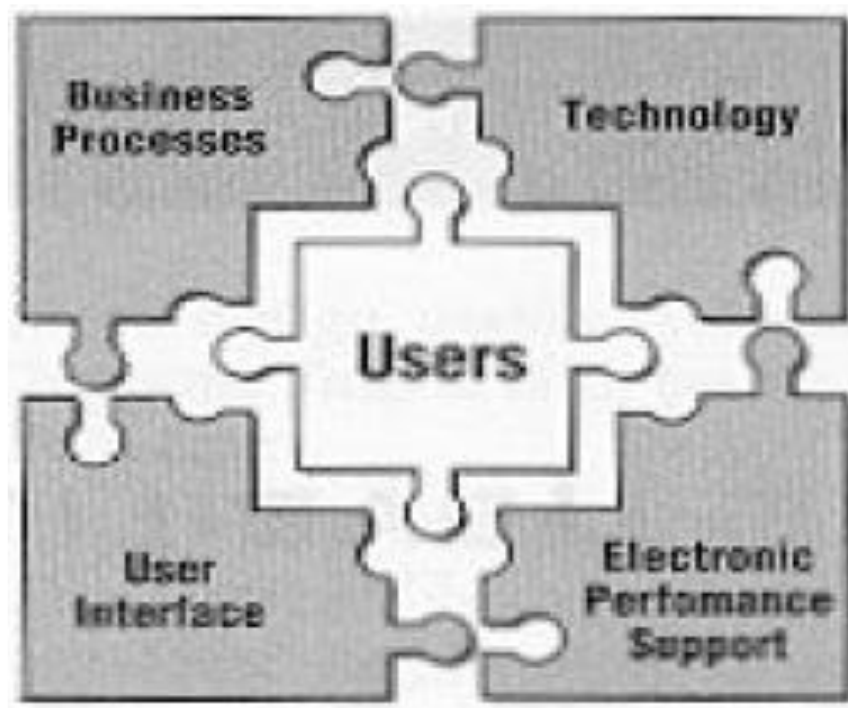
What is Usability?

- “The **effectiveness**, **efficiency**, and **satisfaction** with which specified users achieve specified goals in particular environments.”
 - source: ISO 9241-11
- applies equally to both hardware and software design



What is Usability?

- It's not about **“is this product usable?”**
- But it's about **“how usable this product?”**



What is Usability?



Which design you prefer and why?

What is poor usability?

"I really like it,
but I don't use it
much"

"Can't it be
more like
Google?"

"It doesn't do
what I need it
to do"

"I can't find
what I'm
looking for"

"I don't think it
seems trustworthy"

"It's very fancy,
but it's not very
useful"

"I find it a bit
frustrating"



What is poor usability?



Usability Goals

- Effectiveness
- Efficiency
- Safety
- Utility
- Learnability
- Memorability

Effective to use

Efficient to use

Safe to use

Useful/Beneficial

Easy to learn

Easy to remember how to use

A look into usability design at Google

<https://www.youtube.com/watch?v=sRTydeYJVXI>

Measuring Usability

- Effectiveness
 - How good the system is at doing what it is supposed to do
- Efficiency
 - Minimizing number of steps to complete a task
- Safety
 - Errors are recoverable and do not pose any danger
- Utility
 - Users can do what they need and want to do
- Learnability
 - Short learning curve. 10 Min rule for simple systems
- Memorability
 - How easy is it to remember once learnt
- Satisfaction
 - A subjective evaluation

Measuring Usability

Examples of Usability Measures for a Website:

- 95% of customers will be able to find and order a product.
- 95% of physicians will be able to find, read, and understand the latest information on lung cancer treatments.
- 95% of travelers will be able to make their own airline reservations.
- All trained "service representatives" will be able to handle an average of 25 customer calls per hour.

User experience goals

User experience goals

Desirable aspects

satisfying
enjoyable
engaging
pleasurable
exciting
entertaining

helpful
motivating
challenging
enhancing sociability
supporting creativity
cognitively stimulating

fun
provocative
surprising
rewarding
emotionally fulfilling

Undesirable aspects

boring
frustrating
making one feel guilty
annoying
childish

unpleasant
patronizing
making one feel stupid
cutesy
gimmicky

User experience design

- What the #\$%@ is UX Design?
<https://www.youtube.com/watch?v=Ovj4hFxko7c>
- What is User Experience Design?
<https://www.youtube.com/watch?v=Nj6x01wg2WA>
- The Fundamentals of User Experience
<https://www.youtube.com/watch?v=O8zmUJqxrng>

Usability and user experience(UX) goals

- Selecting terms to convey a **person's feelings, emotions**, etc., can help designers understand the multifaceted nature of the user experience
- How do usability goals differ from user experience goals?
- Are there trade-offs between the two kinds of goals?
 - e.g. can a product be both fun and safe?
- How easy is it to measure usability versus user experience goals?



Any
Questions