



Terminology - UX

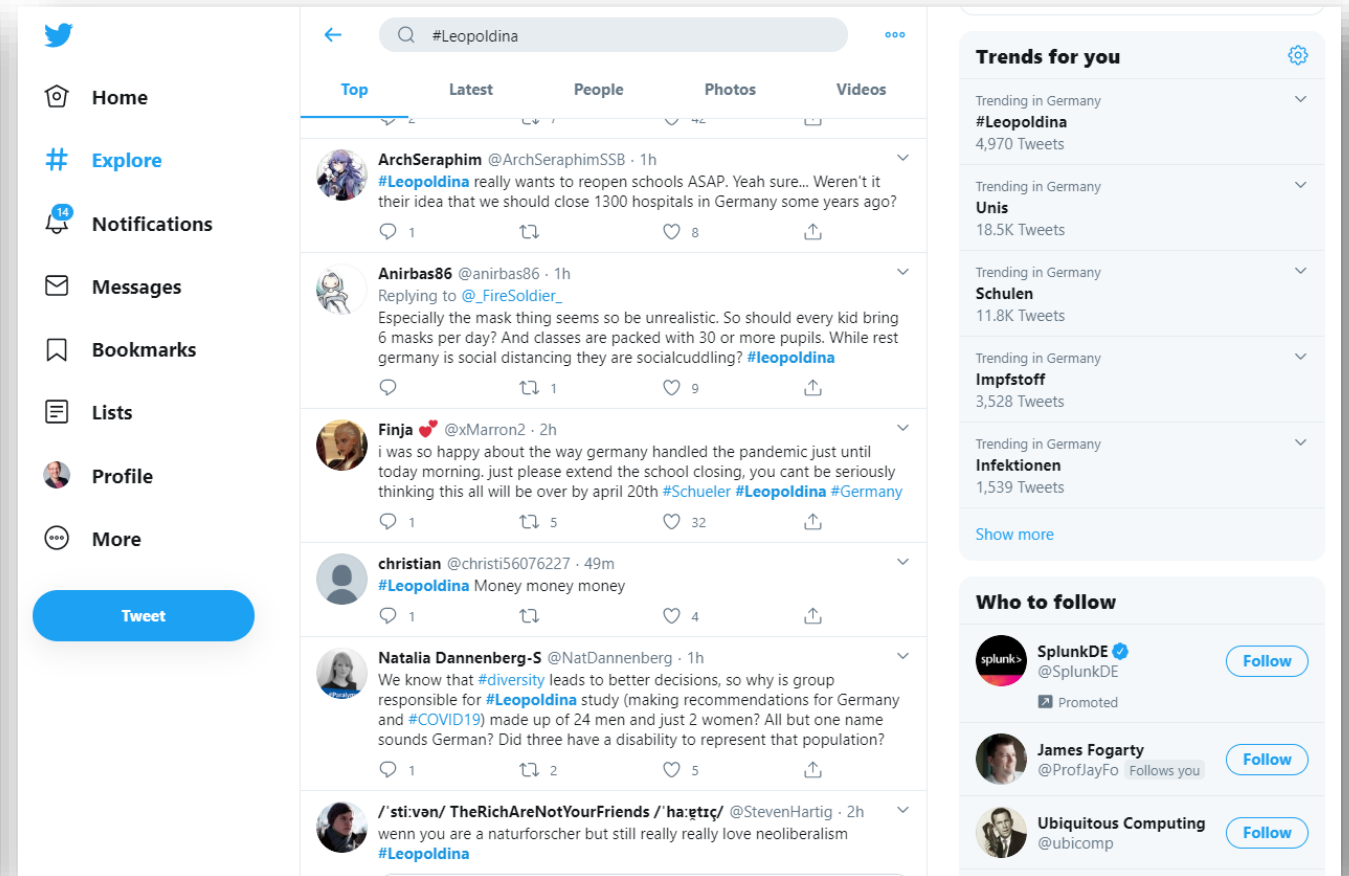
Learning Goals

- Understand ...
 - terms related to user experience and interaction design,
 - descriptions and texts that use these terms.
- Be able to explain technical terms, e.g.
 - Interaction design dimensions according to G. Crampton Smith
 - User experience and user experience design
 - Experience economy

Computers are increasingly defining people's experiences in the real world



Photo by Jurvetson (CC BY 2.0)
<http://www.flickr.com/photos/jurvetson/22226826/>



User Interface Design vs. Interaction Design vs. User Experience Design

Definition

- **User Interface Design** refers to the conception and design of the **user interface**, including the choice of **modalities**, selection of **interface elements** and their **placement** in the interface.
- “**Interaction Design (IxD)** is the design of interactive products and services in which a designer’s focus goes beyond the item in development to **include the way users will interact with it.**” <https://www.interaction-design.org/literature/topics/interaction-design>
- **User Experience Design** describes the more holistic approach in **designing the experience a person will encounter** when interacting with a devices, system or application. It considers the user interface design in the broader context of use.

The Languages/Dimensions of Interaction Design

Gillian Crampton Smith in “What is Interaction Design”

- “1-D includes **words** and poetry. [...]”
- The 2-D languages that interaction design can borrow from include **painting**, typography, diagrams, and icons. [...]
- 3-D languages are those of **physical**, sculptural form. [...] If something has a handle, for example, we know we are meant to grab it [...]
- The fourth dimension is **time**. The 4-D languages include sound, film, and animation.”

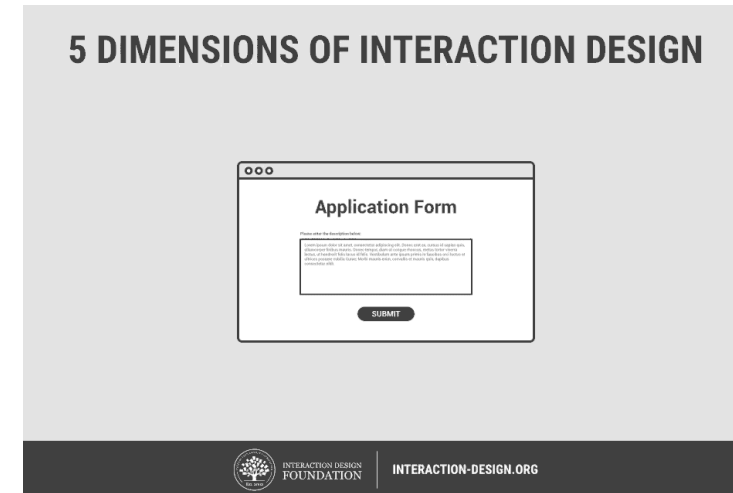
Foreword “What is Interaction Design?”. Interview with Gillian Crampton Smith. Moggridge, Bill, and Bill Atkinson. *Designing interactions*. Vol. 17. Cambridge, MA: MIT press, 2007. page xvii

The 5 Dimensions of Interaction Design

by Yu Siang Teo

<https://www.interaction-design.org/literature/article/what-is-interaction-design>

- Originally by Gillian Crampton Smith (4 dimensions); Kevin Silver added the fifth.
- 1D: Words should be meaningful and simple to understand.
- 2D: Visual representations supplement the words used to communicate information to users.
- 3D: Physical objects or space looks at what physical objects do users interact with the product (laptop, mouse, touchscreen, phones, etc.)? These all affect the interaction between the user and the product.
- 4D: Time refers to media that changes with time (e.g. animation, videos, sounds).
- 5D: **Behaviour** includes the mechanism of a product. How do users perform actions?



<https://www.interaction-design.org/>

Fashion?

How long does an interface look new?
Is there a timeless interaction design?

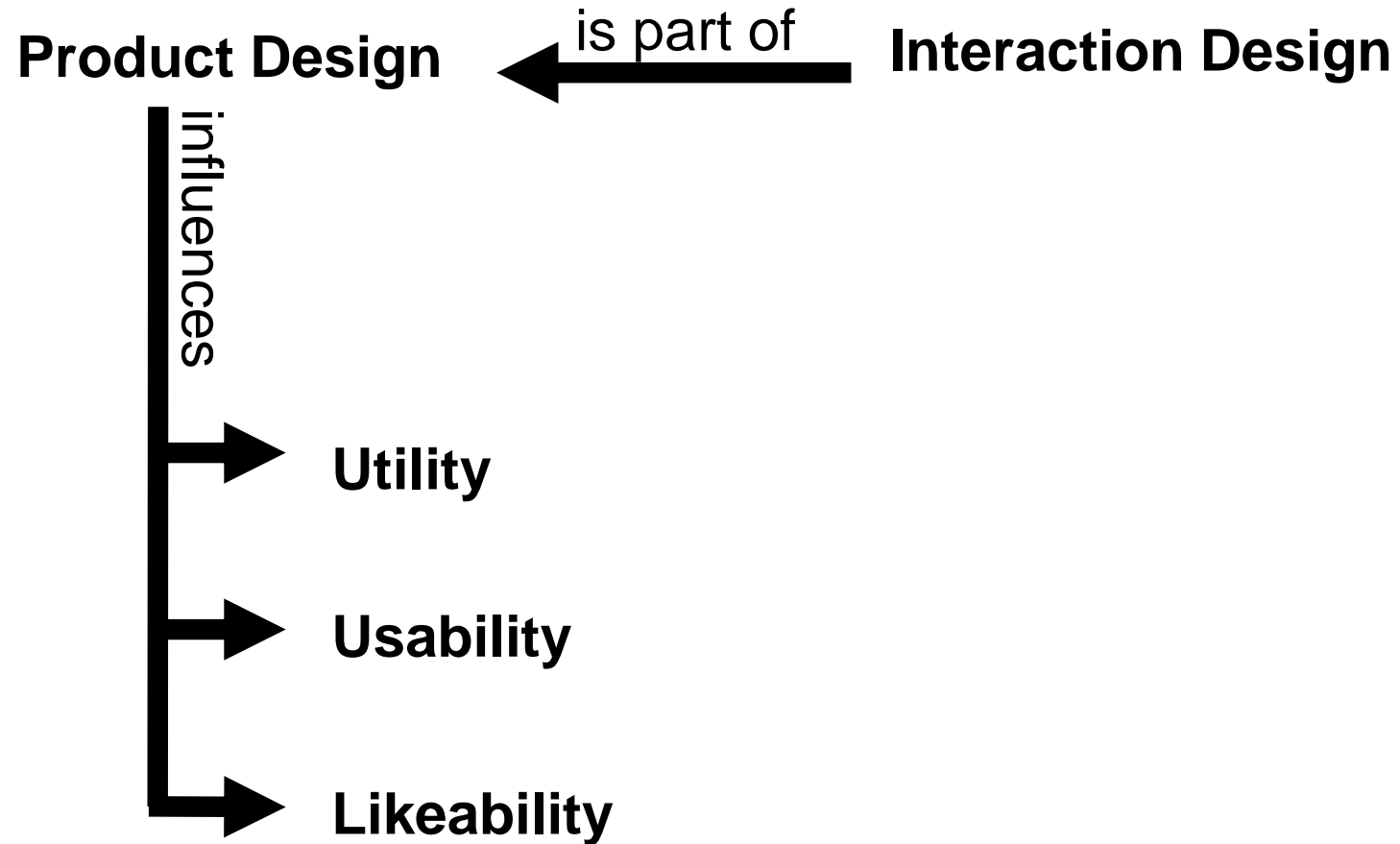


Photo by Bcos47 (public domain)
http://en.wikipedia.org/wiki/File:IBM_Simon_on_Personal_Communicator.png



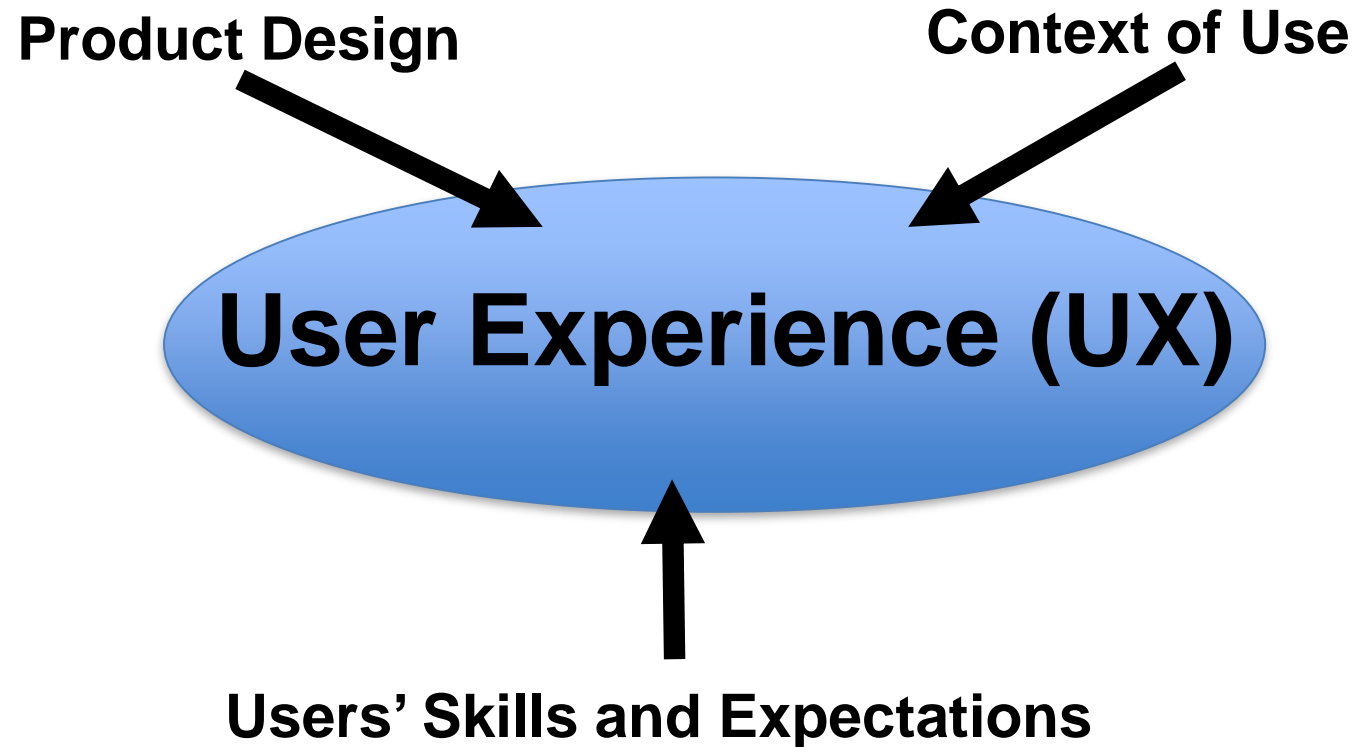
Aspects of Product Design

A simplistic view



Major Factors Influencing the User Experience

A simplistic view



One cannot not communicate

Every behavior is a form of communication.

Mini-Exercise: Find out who made this statement and in what context?

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Every behavior is a form of communication.

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- Paul Watzlawick
- Axioms of communication

<https://www.paulwatzlawick.de/axiome.html>

*You cannot
not create a
User Experience*
Every design will create a user experience.

Experiences are never “stand alone” they cannot be assessed in “isolation”

User Experience is contextualized



Foxconn Workers on Strike Over iPhone 5 Demands, Labor Group Says

By Lauren Indvik | Mashable – Fri, Oct 5, 2012

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Some 3,000 to 4,000 [production workers](#) at Foxconn's Zhengzhou factory went on strike Friday afternoon, according to an alert sent out Friday by [China Labor Watch](#), a not-for-profit, U.S.-based watchdog for [Chinese workers'](#) rights.

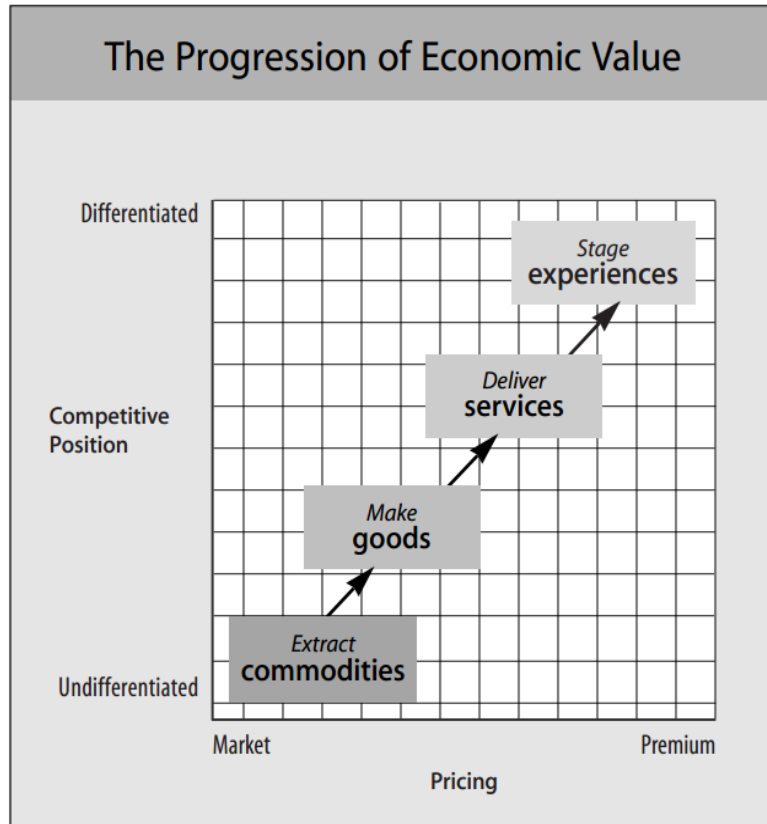
[More from [Mashable](#): [Apple Experts: Stop Comparing Tim Cook to Steve Jobs](#)]

Production was halted as workers -- primarily [quality control inspectors](#) -- protested against a series of escalating demands.

According to the group, [Apple](#) and Foxconn "raised strict quality demands on workers, including indentations standards of 0.02mm and demands related to scratches on frames and back covers" on iPhone 5 devices. When workers failed to meet the new standards, friction between quality control inspectors and workers came to a head, in some cases escalating to physical violence. Several workers were hospitalized, CLW said.

Experience Economy

An Economic Perspective on UX



Pine, B. Joseph, and James H. Gilmore. "Welcome to the experience economy." Harvard business review 76 (1998): 97-105. <https://hbr.org/1998/07/welcome-to-the-experience-economy>

Technology inevitably alters our perception of reality

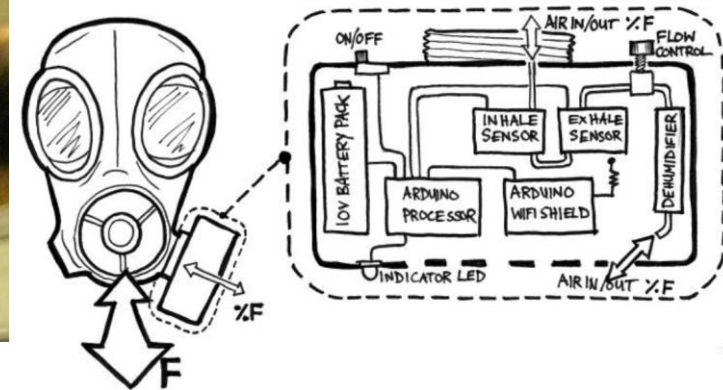


Image from: <http://www.cs.nott.ac.uk/~jqm/?p=501>
Marshall, Joe, et al. "The gas mask: a probe for exploring fearsome interactions."
CHI'11 Extended Abstracts on Human Factors in Computing Systems. ACM, 2011.

Figure 1. Gas Mask and Respiration Monitor



Did you understand this block?

Can you answer these questions?

- Gillian Crampton Smith proposes 4 dimensions of interaction design. What are they? Provide examples of user interfaces components
- Explain the term user experience and name major factors influencing it.
- Why is user experience relevant from an economical perspective?

User Experience in Detail

Recommended Additional Material - read or watch



Video 3.1: Marc's introduction to User Experience and Experience Design.

Courtesy of Rikke Friis Dam and Mads Soegaard. Copyright: CC-Att-ND (Creative Commons Attribution-NoDerivs 3.0 Unported). View full screen version on youtube. View transcription/captions.



The screenshot shows the website interface for Interaction-Design.org. The main article is titled "User Experience and Experience Design" by Marc Hassenzahl. The page includes a navigation menu with "Home", "Design Battle", "Calendar", "Encyclopedia", and "Bibliography". There are social media links for Facebook, Twitter, and LinkedIn. A sidebar on the left shows a Facebook post from Interaction-Design.org with 4,956 likes. The article text begins with "I open my eyes. Lush light floods the room, birds chatter. It is only 6:30 o'clock in the morning, but I feel well-rested and alive; time to get up, to brew some coffee. Are you jealous of my morning routine? Were you startled out of your sleep by a merciless alarm clock? Was it dark outside, no birds around, and did you feel groggy and bleary-eyed?"

Hassenzahl, Marc (2013): User Experience and Experience Design. In: Soegaard, Mads and Dam, Rikke Friis (eds.). "The Encyclopedia of Human-Computer Interaction, 2nd Ed.". Aarhus, Denmark: The Interaction Design Foundation. http://www.interaction-design.org/encyclopedia/user_experience_and_experience_design.html

Effie Lai-Chong Law, Virpi Roto, Marc Hassenzahl, Arnold P.O.S. Vermeeren, and Joke Kort. 2009. Understanding, scoping and defining user experience: a survey approach. In Proceedings of the 27th international conference on Human factors in computing systems(CHI '09). ACM, New York, NY, USA, 719-728. DOI=10.1145/1518701.1518813 <http://doi.acm.org/10.1145/1518701.1518813>

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<https://hbr.org/1998/07/welcome-to-the-experience-economy>
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