



Webinar BR-CHI#05

# From HCI to UX:

Building a New meaning through  
the history in the industry



De HCI a UX: construyendo un nuevo significado  
a través de la historia de la industria



01

## Clécio Bachini

President at UXPA São Paulo  
Founder at Soyuz



## Rafael Burity

Executive Board at UXPA São Paulo  
UX Manager at Santander

02



# About UXPA São Paulo

Acerca de UXPA São Paulo

3



We are the São Paulo chapter of the Association of User Experience Professionals (UXPA).

We defend and represent the interests of the professional, aspirant or student of user experience, through education, instruction and mentoring for individuals.

# AGENDA



01

## Human-Computer Interaction

Interacción humano computador

02

## User-Centered Design

Diseño centrado en el usuario

03

## User Experience

Experiencia de usuario

Ergonomía

# ERGONOMICS

Evolucionó durante las décadas de 1950 y 1960.  
Investigación centrada en el desarrollo de electrodomésticos y automóviles más fáciles de usar.

It evolved over the 1950s and 1960s.  
Research focused on the development of home appliances and automobiles that are easier to use.



- Origin between the decade of 1970 and 1980. **Union of the disciplines** of Computer Science, Psychology and Ergonomics.  
(Moraes & Rosa, 2008; Amaral & Nascimento, 2010).
- It is related to the design of computer systems **that help people** so that they can perform their activities productively and safely.  
(Heloísa V. da Rocha and Maria Cecília C. Baranauskas, 2003)
- Origen entre la década de 1970 y 1980. Unión de las disciplinas de la informática, Psicología y Ergonomía.
- Está relacionado con el diseño de sistemas informáticos. que ayudan a las personas a realizar sus actividades de forma productiva y segura.

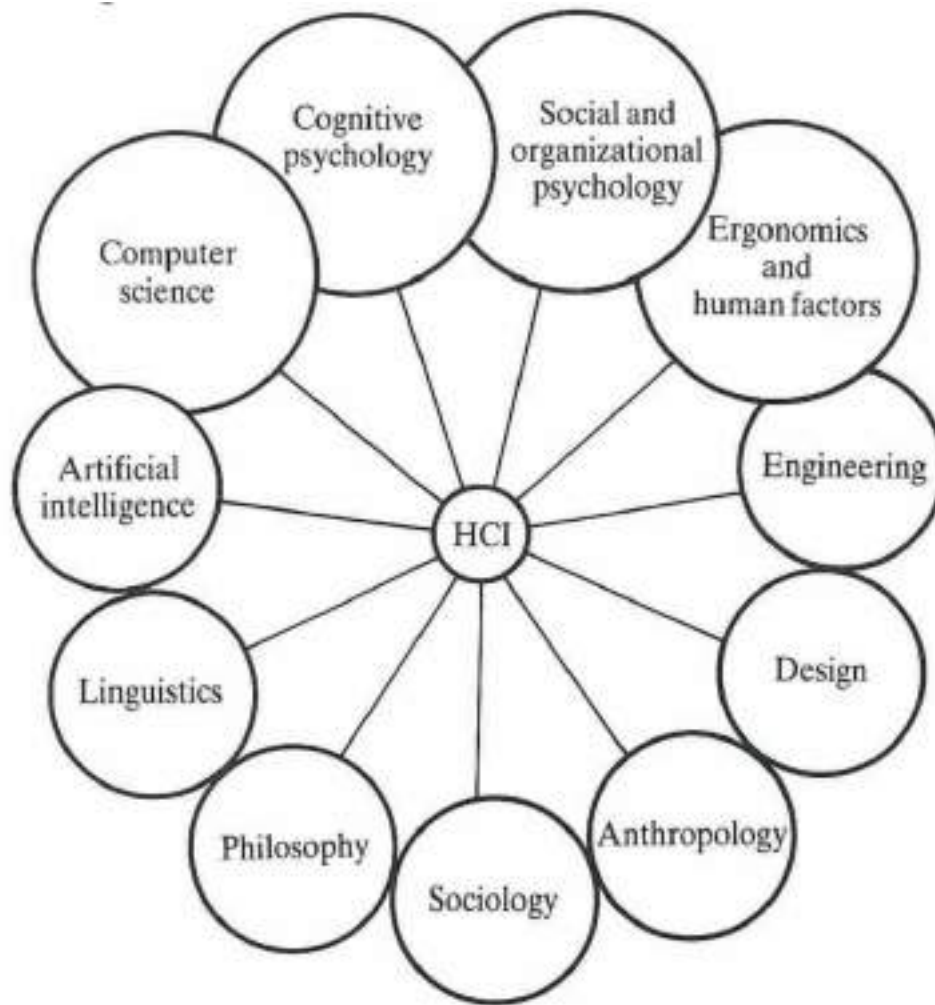


IHC is a discipline that concerns the design, evaluation and implementation of interactive computer systems for human use in a social context and with the studies of the main phenomena that surround them.

---

— **Thomas T. Hewett, 1992**  
ACM SIGCHI Curricula for  
Human-computer Interaction





Jenny Preece, 1994,  
Human-Computer Interaction,  
Addison-Wesley, 1993

# Interaction

---

Communication process between **people and interactive systems**. It is only possible when the system offers an **interface**.

Proceso de comunicación entre personas y sistemas interactivos.  
Solo es posible cuando el sistema ofrece una interfaz.

# INTERFACE

Coined term around 1880 that reverberated in 1960 being used by the computer industry.

Término acuñado alrededor de 1880 que resonó en 1960 siendo utilizado por la industria informática.

# For users, the interface is the program



Part of the system with which the user comes into physical, perceptive and cognitive contact.  
(Moran, 1983)

System image.  
(Norman, 1986)

Virtual environment for interactivity.  
(Laurel, 1993)

Designer's message to the user.  
(de Souza, 1993)



We see, then, that the interface is both a means for user-system interaction and a tool that offers the instruments for this communicative process. In this way the interface is a communication system.

---

— **Clarisse Sieckenius  
de Souza, 1999.**  
**User Interface Design,  
Cognitive and Semiotic Perspectives**





## Eight Golden Rules of Interface Design

Ben Shneiderman



## Principios de diálogo

ISO 9241:10



## Ergonomic Criteria for the Evaluation of HCI

Bastien & Scarpin



## Usability heuristics

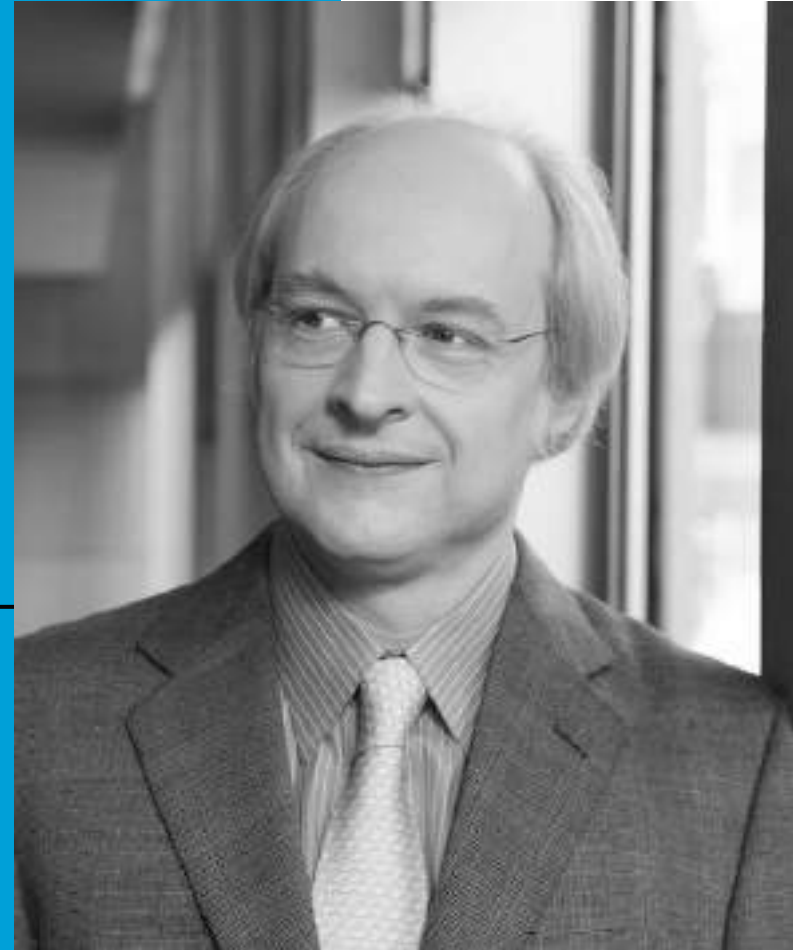
Jakob Nielsen & Molich



Usability is a necessary condition for survival. If a website is difficult to use, people leave. If the homepage fails to clearly state what a company offers and what users can do on the site, people leave. If users get lost on a website, they leave. Note a pattern here?

---

— Jakob Nielsen, 2012.  
Usability 101: Introduction to Usability



Diseño de interacción

# INTERACTION DESIGN

One of the approaches used  
to **explore problem** solving.

Uno de los enfoques utilizados  
para explorar la resolución de problemas.



Interaction Design is the art of facilitating interactions between humans through products and services. It is also, to a lesser extent, about the interactions between humans and those products that have some sort of “awareness”

---

— Dan Saffer, 2007  
Interaction Design - IxDA

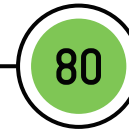
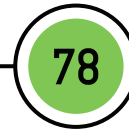


First personal computer, Alto, Xerox research Center (PARC) the first commercial system with a text editor, mouse and graphical interface.

## Computer graphics

Development of techniques for empirical analysis of human interactions. IHC assumes an important role. (Carroll, 2009)

## User-Centered Design



## Ergonomics

Map the information processing and decision-making skills of the typical user. (Santa Rosa and Moraes, 2008)

## Cognitive Engineering

Incorporation of Cognitive Psychology, A.I., Linguistics, cognitive anthropology, and philosophy of mind to articulate systematic applications. (Carroll, 2009)



## The Design of Everyday Things



Donald A. Norman

- Field of study that brings together design methodologies in which the target audience of a product or service influences the guidelines and requirements of the system.
- Term coined by Donald Norman in the article **User-Centered System Design: New Perspectives on Human-Computer Interaction.**  
(Norman & Draper, 1986)

Campo de estudio que reúne metodologías de diseño en las que el público objetivo de un producto o servicio influye en las pautas y requisitos del sistema.

Término acuñado por Donald Norman en el artículo Diseño de sistemas centrados en el usuario: Nuevas perspectivas sobre la interacción hombre-ordenador.



The philosophy behind User-Centered Design is simply this: *The user knows more.*

People who will use a product or service know about your needs, goals and preferences, and it is the role of design to discover this and design for them.

---

— Interaction Design - IxDA



# LOOKING FROM DIFFERENT CONSUMER'S PERSPECTIVES

**WHAT USERS DO?**  
BEHAVIORAL DOMAIN  
Activities, habits, processes

---

**WHAT USERS USE?**  
MATERIAL DOMAIN  
Product, services, brands

---

**WHAT USERS THINK?**  
COGNITIVE DOMAIN  
Perceptions beliefs, preferences ...

**HOW USERS FEEL?**  
EMOTIONAL DOMAIN  
Dreams, desires, aspirations...

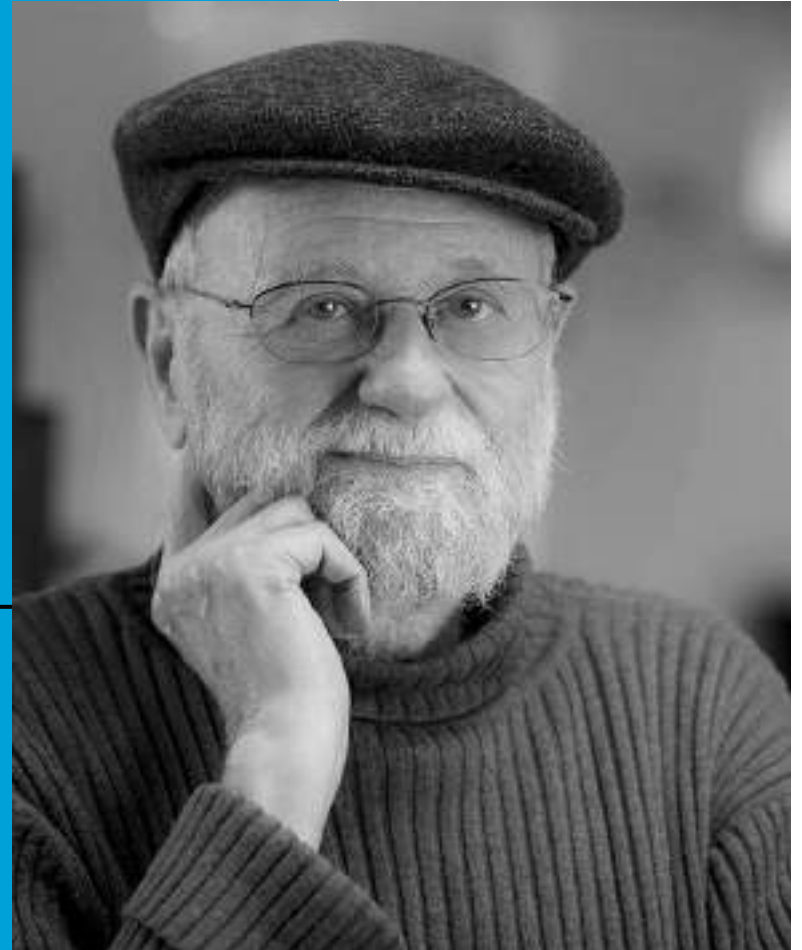




User experience encompasses all aspects  
of the end-user's interaction  
with the company, its services,  
and its products.

---

— Donald Norman, 2016  
The term "UX"





## Jakob Nielsen, 2005

### Durability of Usability Guidelines



"What was difficult for users twenty years ago continues to be difficult today."

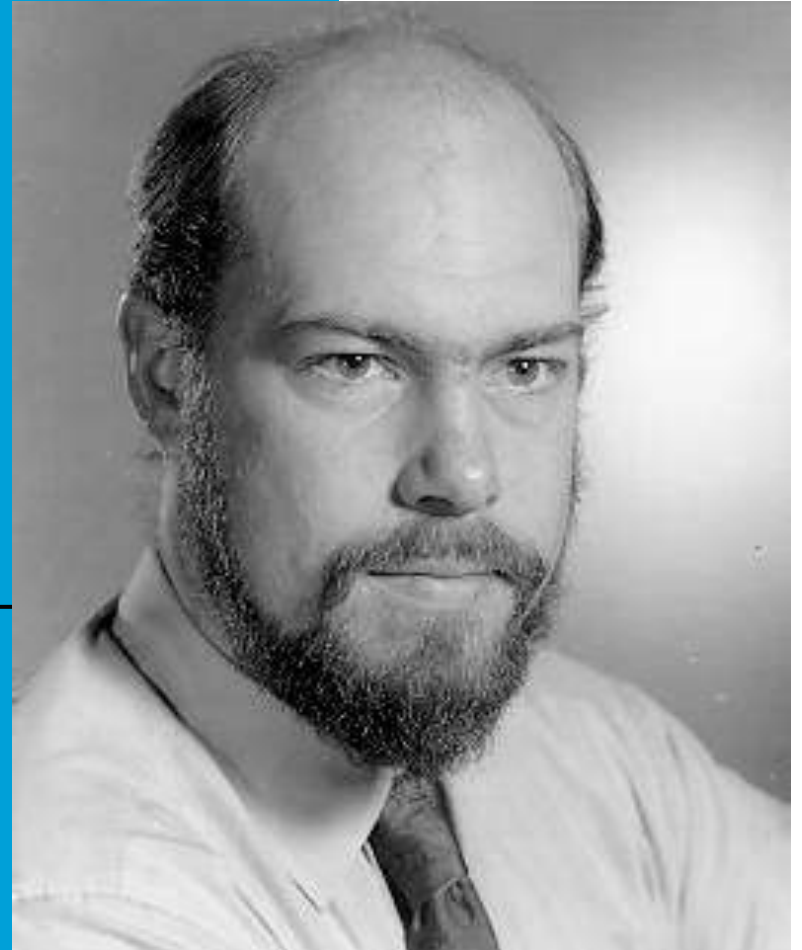




The development process  
should *start with users and their needs*,  
before any technological issue.

---

— **Wilfred J. Hansen, 1971**  
User engineering principles  
for interactive systems



# THANKS!

---

contato@uxpasp.org.br  
uxpasp.org.br

CREDITS: This presentation template was created  
by **Slidesgo**, including icons by **Flaticon**, and  
infographics & images by **Freepik**

Please keep this slide for attribution

