The Human Centred Designer: a few reflections upon a new profession

Prof. Joseph Giacomin
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1998
2001
The business development was guided by the physical, perceptual, cognitive and emotional characteristics of people ...
Why Human Centred Design?

In 2007 the Harvard Business Review identified human centred design as one of the year’s “Breakthrough Ideas”.

Eric Von Hippel of the MIT Business School noted that “70% to 80% of new product development that fails does so not for lack of advanced technology but because of a failure to understand users’ needs.”
Human Centred Design

Combines branding, business, computer science, design, engineering, ergonomics, management, philosophy and psychology to develop products, systems and services which are physically, perceptually, cognitively and emotionally intuitive.
An energy-efficient heater built into a sealed pocket within a blanket, which is recharged by placing it over a clothes horse induction unit.

Sam Weller

Cosy All The Time
Perceptually Intuitive

Joseph Giacomin

Energy Sixth Sense

Thermal imagining display in home thermostat to help “see” the energy usage.
Oliver Wooderson

Bathe Safe

Functional bath temperature monitor for helping to avoid the dangers of scalding.
Emotionally Intuitive

Tim Holley

Tio

Light switch which encourages children to reduce energy usage by becoming more expressively irritable the longer the lights are left on.
How Does This Trend Effect the Design Profession?
The Artist Designer

...applying knowledge of aesthetics, materials, mechanics and perception to achieve pleasant and enjoyable objects.
The Engineering Designer

...applying scientific and technical knowledge to achieve functional, efficient and affordable products.
The Human Centred Designer

... a relatively transparent figure who does not impose preferences on a project, but, instead, conveys and translates the will of the people in order to empower them through the final design solution. Human centred design involves techniques which communicate, interact, empathise and stimulate the people involved, obtaining an understanding of their needs, desires and experiences which often transcends that which the people themselves actually knew and realised.
Some Human Centred Design Tools...

Ethnographic interviews
Questionnaires

Day-in-the-life analysis
Customer Shadowing
Fly-on-the-wall observation

Activity analysis
Error analysis
Cognitive task analysis

Conceptual landscape
The five whys

Narration
Visual journals

Role playing
Be your customer

Personas
Scenarios

Extreme Users
Focus groups
Co-design
Some Human Centred Designers...
Augmented Cognition
The design and evaluation of cognitive technologies which act in partnership with humans, aiding or improving human performance.

Design and Branding Strategy
Creating and developing brands through design as a total sensory experience.

Design Strategy and Innovation
Management strategies and tools for adding value through design.
Ergonomics and Human Factors
Designing products, systems and services based on human capabilities and limitations.

Human Centred Design Process
Developing HCD practice and process through collaboration with a range of businesses and consultancies.

Inclusive Design
Approaches and methods for designing products, systems and services which empower people.
Information Architecture
Methods for designing products, systems and services which help people to understand complex data.

Perception Enhancement
Methods for designing products, systems and services which aid perception of key environmental stimuli.
The business challenge?

...deciding how much of “us” to put into the product, system or service.
Putting a little bit of us into our tools.

A clever flower pot can help to care for our floral friends.
Assisted navigation takes the strain of reading the map.

Putting a little bit of us into our tools.

Assisted navigation takes the strain of reading the map.
Medical devices can inform or even diagnose.

Putting a little bit of us into our tools.

Medical devices can inform or even diagnose.
Putting a little bit of us into our tools.

ASIMO can assist with many workplace tasks.
Robots work with children.

Putting a little bit of us into our tools.

Robots work with children.
Thank you.