a few reflections upon a new profession The Human Centred Designer: Prof. Joseph Giacomin February 11<sup>th</sup> 2011







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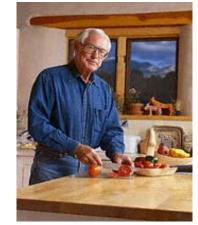


# G00gle\*\*

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The business development was guided by the physical, perceptual, cognitive and emotional characteristics of people ...















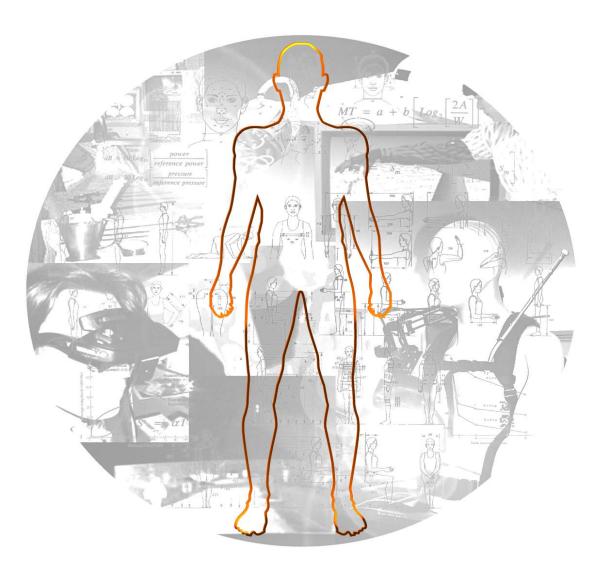




#### Why Human Centred Design?

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.

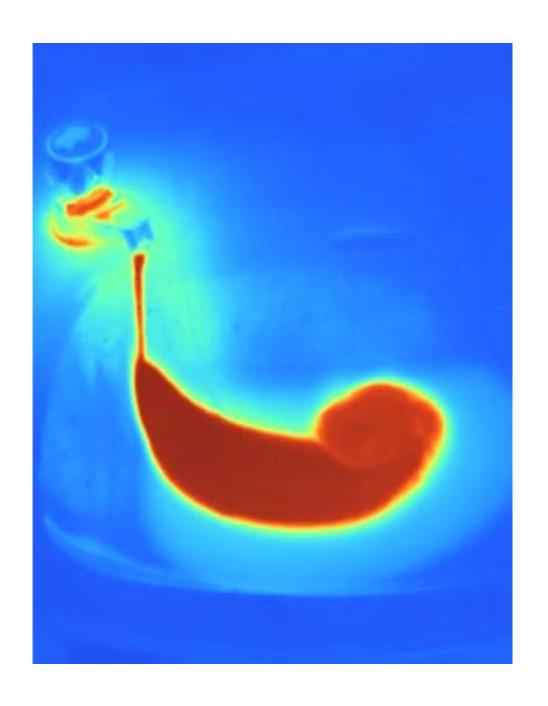


## Physically Intuitive

Sam Weller

**Cosy All The Time** 

An energy-efficient heater built into a sealed pocket within a blanket, which is recharged by placing it over a clothes horse induction unit.



#### Perceptually Intuitive

Joseph Giacomin

**Energy Sixth Sense** 

Thermal imagining display in home thermostat to help "see" the energy usage.



## **Cognitively Intuitive**

**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.



#### 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.







James Dyson



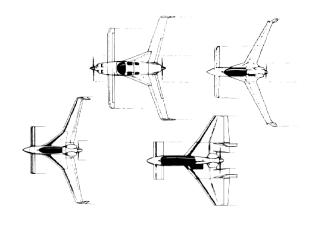


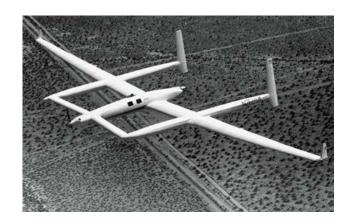




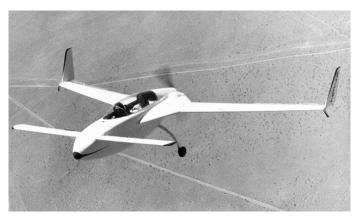


Andrian Newey















**Burt Rutan** 

#### 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...





jnd.org













#### **Augmented Cognition**

The design and evaluation of cognitive technologies which act in partnership with humans, aiding or improving human performance.

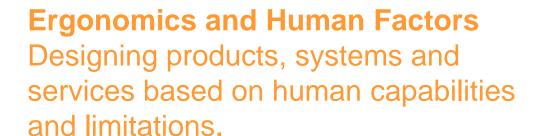
Design and Branding Strategy
Creating and developing brands
through design as a total sensory
experience.

Design Strategy and Innovation Management strategies and tools for adding value through design.















**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.

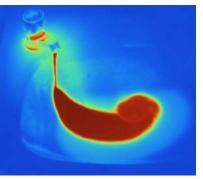












Perception Enhancement
Methods for designing products,
systems and services which aid
perception of key environmental
stimuli.

#### 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.

Assisted navigation takes the strain of reading the map.





## Putting a little bit of us into our tools.

Medical devices can inform or even diagnose.





Robots work with children.

