DESIGN AS A TOOL FOR INNOVATION

Insights from the Mini-Study

Alain Quevreux - Pierre Bitard

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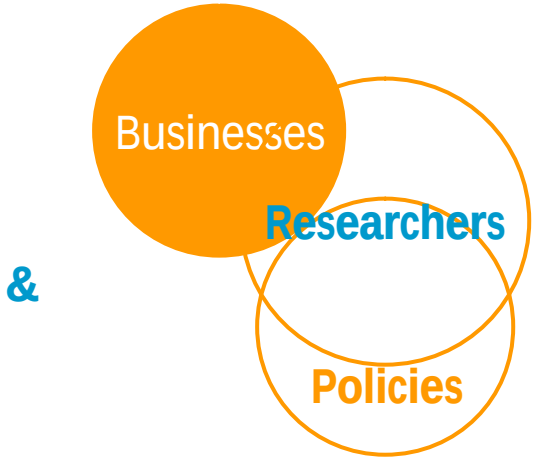
Outline of the study

1. Understandings of design : a broad definition
2. Weights, uses and impacts
3. Case-based evidence… firms and University
4. (and beyond)
5. A way forward: a consistent EU Policy Framework

Designs

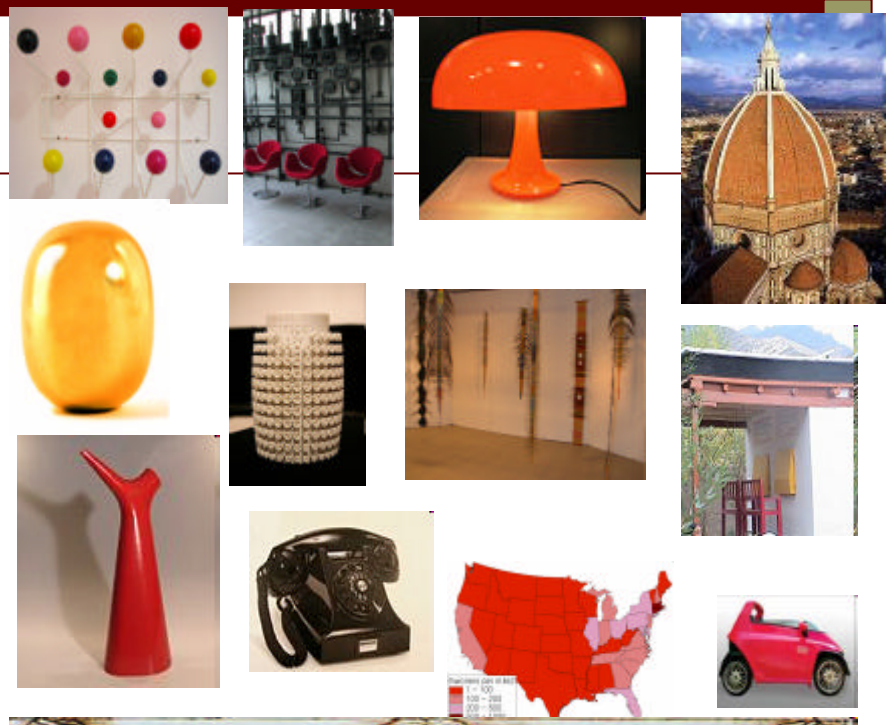
Definitions



&

From Products :

Style
+
Architecture
+
Engineering



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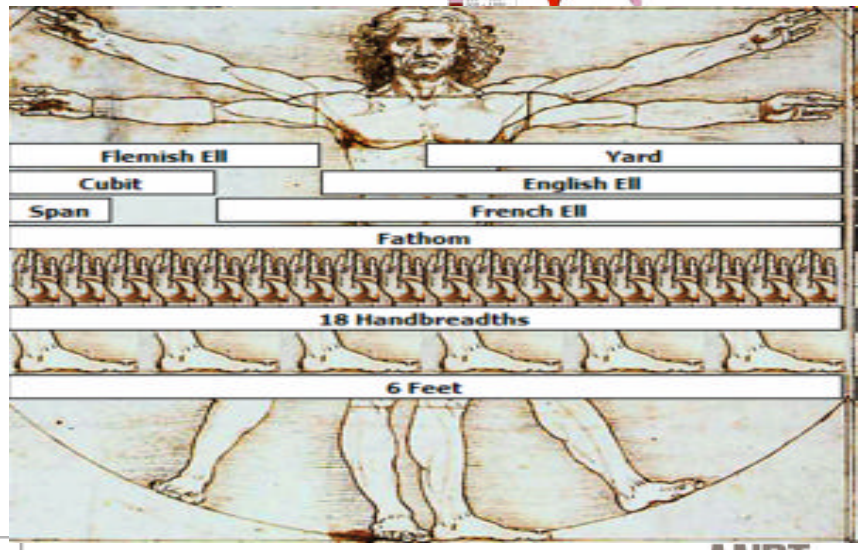


A broad definition of design (1/2)

- Le Masson *et al*. (2006) clarify the intensifying need for understanding design. Their core assumption is that understanding design is **the next step towards a better understanding of innovation itself**. In their view, R&D is mainly a statistic and economic aggregate created for measurement purposes. Furthermore, it is a measure of inputs to innovation whereas **design implies in a description of both the activities performed by people involved in design and of their capabilities**.
- Design has a three of specific features, which set it apart:
  - it involves **a collective process**, neither the whole set of ideas nor the actors of which are known from the start;
  - it is **a complex and uncertain learning process**;
  - it requires mapping, **guiding patterns** or framing.
- Also, design is a situation where **the identity of the objects that are handled is uncertain**.

A broad definition of design (2/2)

- Bruce Tether suggests a new categorisation, which notably differentiates between “research”, “design and development”, and “ancillary design”
- **Design and Development** – i.e., systematic **creative or experimental work**, carried out on an occasional or regular basis, that draws on knowledge from research and/or experience, that is directed to producing **products** (including materials and services), to **installing new processes and systems**, or to improving substantially those already produced or installed.

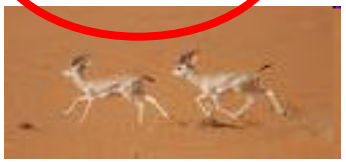
Weight, uses and impacts

Weights & uses

7% of active population in creative~design sector (extensive definition

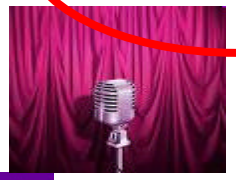
16% of total exports

Size matters



The larger the companies, the greater are both the maturity and the use of design, with the notable exception of gazelles

So does sector



MANCHESTER 1824

Micro level impacts

1. For every £100 best business design performer spends on design, turnover increases by £225.
2. Businesses that add value through design see a greater impact on business performance than the rest
3. Gazelles are nearly six times as likely as static businesses to see design as integral
4. Companies which have invested in design-related employee training or external procurement of design services achieved an additional 40% gross revenue increase – compared to companies where design activity is either constant or has decreased
5. Firms with higher design intensity have greater probability of carrying out product innovation, but are not more likely to carry out process innovation.

Macro level impacts

ANRT

Case-based evidence...

- Product/service : an **'icon', 'a manifesto'**
- Clear **product differentiation** and industry's **standard** recognition
- 'Hub-product': **bundle nature** of the product i.e. indispensable component of the **business model**
- **Design represented** at company's **highest decision level**
- **Worldwide distributed design-teams**
- 'Global design' is ready-made **platforms**, inclusive eco-efficient features, **experience designed product**
- Explicit design **philosophy-in-use** which relies on **multi-disciplinarity** in design teams and **people-focused**
- **Open-innovation**, wealth of various collaborations, worldwide with universities, research centres, consulting and clients
- Extended model of open-innovation i.e. a mix of '**design crowdsourcing**' and '**user-generated design**'

EDUCATION AND TRAINING

- The creation of the « Innovation university » (Aalto university – Helsinki)

A competence merger between:

- Economists (Helsinki School of Economics
- Art designers (University of Art and Design - Helsinki
- Engineers and technologists (Helsinki Technology University)

Those are the key components for Aalto Univerity to fulfill its mission to employ research and education to support the success of Finland in the international economy

...and beyond : 5 lessons for policymakers?

1. Design policies endorsed **at higher levels**
2. **Early users'** commitment as **co-designers**
3. Contributing to the definition of widely used **standards**
4. **Open innovation**: **better support** to internal and external **collaborations in design**; better learning processes for both companies and (especially) universities to **manage design rights**
5. Best policies as "**manifestos**": EU level adequate level to communicate and impose on "a **European design label**"

Innovation through design initiative

The pieces of the puzzle

1. Extensive definition, indicators and monitoring of market developments

2. Competitiveness and profitability first: differentiation strategy of firms, anticipating the users needs

3. Design awareness raising initiatives: design remains too narrowly linked to creative industry

4a. Actions on education for design (Design and innovation communities)

4b. Actions to promote open innovation and users interactions

A consistent EU policy framework

OR
a renewed approach of innovation policy ?

- Towards a global European design policy geared to the intangible / knowledge based economy?
  - Innovation by design
  - Open innovation
  - User centred innovation incl on line communities
  - Finance and Fair value of intangible assets
  - Education designed for interactions between economy, Arts and engineering