

European Concept strategy for Product Innovation

After Cardiff Meeting 16-17 January 2008

Alessandro Sciolari

ASSOKNOWLEDGE Confindustria Servizi Innovativi e Tecnologici, Rome, Italy

1 Introduction

“European Concept” is a new initiative that aims at the identification of market segments and needs for products and services innovation in today globalized markets [1]. It aims to create consensus on a European Brand for new products/services enabling industries to satisfy user’s expectations and to value creation. This paper will introduce to this European initiative, focusing:

- the new methodology to design innovative value propositions and to set the European brand for new HVA products/services.
- a governance for the initiative among stakeholders (bibl Brussels 8 september, Manufuture Porto Conference, Ws High-tech manufaring, Cardiff 16-17 january, A. Sciolari: Topic 5: Networked Production in “Strategies for Global Manufacturing” – A European View of IMS, 15-16 November 2007, ETHZ, Zürich)
- the three pillars of the strategy to be followed by a priority list of topics for R&D programmes.

Value propositions are key components of the products/service market success, addressing perceived values, total quality, implementation design, new competitive advantage essential for the development of new products/services.

The objective of the European Concept initiative is going beyond selling propositions that operates on the tangible products in view of a Brand European products/services inside the global markets.

This European strategy for “New Added-value products and product/services” has been described in the Strategic Research Agenda [2] of the ManuFuture Platform.

European Concept aims to pro-actively create the basis for a “new understanding of the function of products and services” facilitating “the industrial adoption of new business models” [2].

European Concept can be regarded in medium term as a significant contributor to the European strategy for advanced manufacturing systems in the internationally wide system, representing an emerging R&D area dedicated to products/services forum for action and international cooperation.

2 PRODUCT INNOVATION APPROACH

Product Design New approach is focused on Value propositions based on:

1. user needs (explicit, non explicit, indirectly connected)
2. new technologies and innovative services for identifying new modalities to satisfy users expectations
3. individual behaviour / observation.

New Value propositions -targeting users' needs through perceived value-need to be:

- Innovative
- Highly technological
- Integrated (foster innovative services + tangible goods + intangible features)
- Multipurpose.

The essence of “European Concept” is strengthening the culture of detecting and analyzing the users' needs, so that European industry can take advantage from the new global market opportunities.

The short term product approach of the European Concept initiative supports focus on the placement of today's products (or part of them) in new markets (Figure 5).

- by disassembling existing products (a , b , c)
- by adding value to each component (a++ , b++ , c++)
- by delivering new integrations (a++) (b++ , c++) etc.

The short term objective of the initiative implies:

- Market segments' needs identification and
- Technology state of the art.

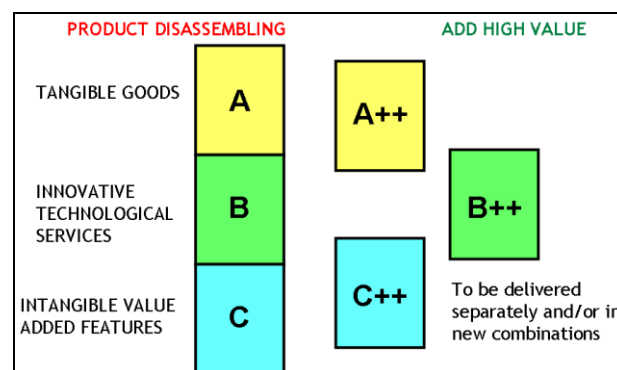


Figure 5: Product approach.

Particularly, integrated value proposition for innovative services including the product, as a tangible good, will enable to meet the expectations of a user and consequently satisfy his needs.

3 EUROPEAN CONCEPT INITIATIVE

The “European concept” initiative has the high level objective of enable a response along the product value chain of relevant European sectors. The mission is the collective creation of the “european brand” for new products/services.

The two research objectives to support product/service innovation life cycle oriented are:

- research & development in design and customization enabling technologies for product/service life cycle and the european robust brand in medium term

-research & development of emerging manufature long term technologies.

The business scope aims to boost product/service innovation in product industries, leveraged through the creation of integrated value propositions along the product life cycle that:

- satisfy articulated and complex users needs
- are sustainable (environmental, social, economical)
- are conceived to acquire new markets
- are delivered separately and/or in new combination

This response is to integrate actual goods with services and intangible features able to satisfy complex needs (Figure 3).

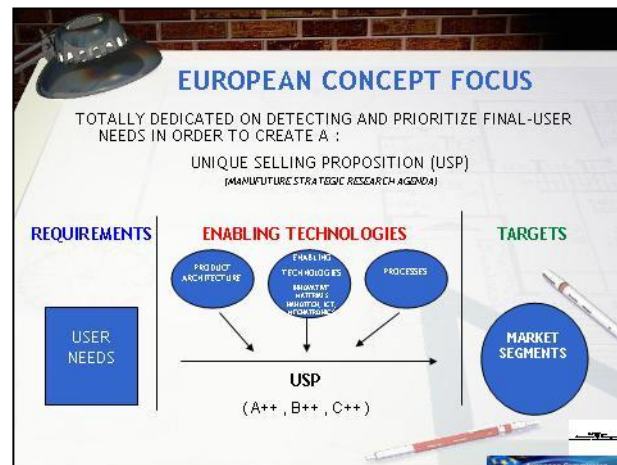


Figure 3: The Value Proposition response.

To this end, the initiative supports:

- in long term, the creation of a global platform integrated system to connect the needs expressed by the different world market segments and the design of competitive, technological issue with sustainability and regulatory drivers;
- in short term, the modelling of the representation of consumers oriented market segments' needs for the design of innovative value

propositions. This description includes the new enablers such as rules, sustainability issues, knowledge management, networking, education, benchmarking, communication

4 THE EUROPEAN CONCEPT STRATEGY

To support successful product/service industries collaborative r&d, efforts should concentrate on three R&D pillars:

First pillar “products/services intelligence” dealing with acquisition/input methods: In particular regards:

- data intelligence-Ict methods and tools
- segments and needs identification
- horizontal technologies for product/services life cycle (customization, virtual reality, reverse engineering)

Second pillar “products/services advanced design” dealing with control methods: In particular regards:

- advanced technological services (new sales methods)
- Q.f.d. Methodology (perceived & given quality)
- end user customization (cad design and prototyping)
- european brand (rules,standards,patterns, rights)
- intangibile value added features (sustainability & brand)

Third pillar “products/services business models” dealing with realization/output methods: In particular regards:

- product/servicenetworking and trading practices
- multilocalized enterprise
- sistem integration methods
- globalized governance models (new sales)
- tangible goods into olistic services methods and tools

Each pillar requires the definition of

- priorities
- Time horizon
- Topics description
- road map
- Consultation workshops.

5 GOVERNANCE

A simple organization with two boards and staff.

1- Steering committee with the tasks of:

- decisions
- final delivery of documents(road maps, priorities, time horizon,etc)

- 2- Support Clusters composed by stakeholders providing:
- needs from industries
 - herarchization of priorities
 - market analysis
 - technologies & capabilities from industries

Staff has role of overall coordination and interface such as:

- Programme interface with Manufuture platform(hlg, support group, mirror group, industrial group)
- Product interface with other platforms, other working groups and other international entities
- Business interface with sustainable & consumption actioun plan and working groups
- International programmes

The schematic phases of the “European Concept” initiative are reported in Figure 4.



Figure 4: The European Concept phases.

5.1 Interface role with Manufuture

The European strategy for new added-value products and product/services has been developed by the ManuFuture technological platform in the Strategic Research Agenda (SRA) [2], published in 2006, that states:

- “Every product ...also requires a USP (Unique Selling Proposition) in order to avoid the need to compete on cost alone”
- “It is essential that European Companies be able to understand and satisfy the needs of customers”
- “The business focus will shift from simply designing and selling physical products to selling a system of products and services “...The provision of Product/services...takes into account the whole life cycle...”

From above statements derives the elements that support the positioning of European Concept initiative within the Pillar 1 “New added-value products and product/services” of the goal “Make/Delivery of HVA Products/Services” [4].

The ManuFuture strategy has also defined the following priorities:

- 1st adding value by customization of products and transformable production;
- 2nd adding value by integration of enabling technologies and networking;
- 3rd manufacturing of and for non-traditional technologies.

The ManuFuture High Level Strategy refers to the statement of the ManuFuture Vision 2020 document that says: “Manufacturing is likely to become increasingly service-intensive. The service orientation and the increasing customer expectations have consequences for the competitive organisation of production, value-chain management and customer relationships, as well as the service elements themselves” [3].

Referring to whole products/processes life-cycle, European Concept focus particularly those processes that act now on the tangible products in view of the industrial transformation towards the intangibles (products/services) to satisfy new consumers and societal needs. European Concept can provide a significant contribution to the European strategy for market and growth carried on by the Manufuture platform according to the time plan reported in Figure 9.

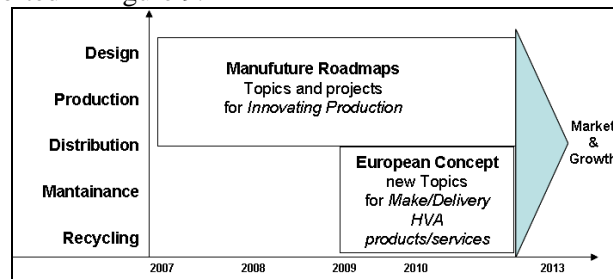


Figure 9: Product LC innovation time plan

6 Methodology

6.1 Market segments' needs identification

The methodology offers the steps for identification for:

- Market segmentation
- Needs' identification
- Needs weighting
- Stakeholder analysis
- Demand analysis
- Sector analysis

The activities are reported in Figure 6:

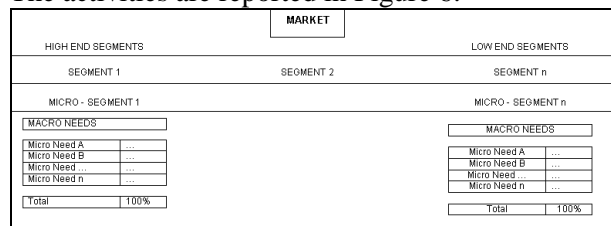


Figure 6: Market segmentation.

6.2 Technology state of the art

In order to identify new applications for new value propositions, that satisfies new industrial needs, it is necessary to analyse, identify and study the life-cycle of different technologies (Figure 7).

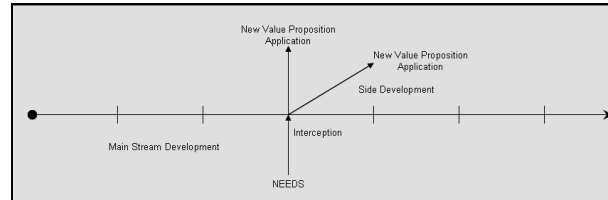


Figure 7: Technology life-cycle.

7 OVERALL IMPACT

The European industrial system should face the new opportunities offered by the globalization with new products development strategies. Primary aim of the "European Concept" methodology is to strongly support the industrial system in enlarging its vision.

In particular:

1. Taking into account the large emerging market segments of low-end buyers, that representing millions of new consumers.
2. Considering also new products as integrated value propositions made of innovative services and tangible goods both of them not necessary produced in Europe. European companies should concentrate their production activity and relevant investments on the macro value added production phases. The production design phase is certainly one of them.
3. Helping the European companies to re-positioning in the global market, in order to supply integrated value propositions, able to satisfy those articulated and complex consumers' macro-needs. In practice, supporting them abandoning the logic of production and sales of goods and services, and instead entering into the logic of production/integration of advanced services including high technological goods;
4. In such prospective high-tech goods must be intended as a tool of a broader mix of advanced integrated services;
5. Assisting the European firms to by-pass the reductive logic according to which knowledge is a tool for producing goods/services.
6. The knowledge, which several companies hold, can and must be intended to be a product itself. Such knowledge shall, therefore, be proposed and sold directly to the market;
7. Supporting those European firms that are no longer competitive, in respect to goods produced by emerging countries, in re-positioning on the global market by selling its know-how and those technologies, developed through the years by integrating those assets in a collaborative mix conceived to add value to both seller and buyer;

8. Facilitating those European firms to learn opportunities offered by the global market, by participating to international relational contexts, where to learn needs proper of different segments;
9. Rendering the Research and European University System known to be fragmented and often separated from the needs of the users to be part of an integrated collaborative system linked with the needs of the market;
10. Making those European firms involved in the project to understand that they belong to a new and broader system, (in respect to the one they were convinced to belong to, because of their products, category, and dimensions of the market in which they operate) capable to satisfy new advance and complex needs;
11. As an example, a university does not consider a manufacturing company about to exit the market, (since not competitive with its products anymore), as a possible competitor, on a knowledge aspect that the firm has developed in years of operation.

8 CONCLUSIONS

The European industrial system should face the new opportunities offered by the globalization by developing new products development strategies. The "European Concept" approach aims to support the industrial system in focusing its business vision. "European Concept" is the brand for innovative value propositions designed in Europe as advance technological answers to the world user's needs. In particular: taking into account the large emerging market segments of low-end buyers; considering new products as integrated value propositions made of innovative services and tangible goods both of them not necessary produced in Europe; helping the European companies to re-positioning in the global market, in order to supply integrated value propositions, able to satisfy those articulated and complex consumers' macro-needs.

Taking that "Apart from aesthetics, design can contribute significantly to utility value, and is often a decisive factor when choosing between different options. Although design is already a strongpoint of many European products, the EU needs to leverage its strengths in this area, since other countries are not lagging behind in technological innovation" [2] the European Concept will act as a Working Group of the ManuFuture Technological Platform supporting its activities.