INNOVATION IN DESIGN, TECHNOLOGY, AND MARKETING



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Francisco Raya Marketing and Product Manager at Ceracasa, Spain *This panel debate proposes a reflection from different perspectives, enabling us to analyze the current situation as a whole and to formulate possible future solutions.*

Nowadays innovation or the launching of new products and services destined to improve people's lives must begin by considering new factors and values, which, over and above appearance and functionality, need to ensure that environmental equilibrium is maintained and people's lives are improved overall – what is known as universal design, achieving commercial competition in a globalized world, using economic energy resources and new technologies, and meeting the new expectations of users.

Within this scenario, innovation often involves coming up with a product which looks conventional, but which offers a new function owing to its technology, for example products that combat the effects of pollution or communication strategies in which the benefits perceived by the user are not associated directly with the product but rather how it affects the immediate environment. Or it involves designing products whose aim is aesthetic innovation, following the trends in vogue in the habitat and architecture.

But each of these areas: technical development, communication or aesthetic solutions, has its own way of conceiving innovation, which each of the specialists that make up this panel will explain.

Also real cases which clearly illustrate innovations aimed to satisfy people's specific needs have been analyzed. We have called these needs "Rising Values" and they can be individual or collective, and fulfil the expectations of an individual, or a collective or group of citizens.

We have grouped these values into five sections:

1- Health

- 2- Effectiveness, simplicity and life enhancement
- 3- New experiences
- 4- Environmental equilibrium
- 5- Sensory perception

The examples grouped in the following matrix will enable the different panellists to hold a discussion, with the aim of determining future approaches that are not currently being exploited and which could entail an innovation for the industrial floor and wall tile sector.

	AESTHETICS	TECHNOLOGY	COMMUNICATION
Health	Chromotherapy	Inax ecocorat	Ikea
Effectiveness simplicity and life enhancement	U-lat	The two seconds tent	Ceracasa, The happy attitude, Car
New experiences	The ocean fishbowl	New textiles	The screen printing kit for personalizing clothes
Ecological equilibrium	"With our feet on the ground"	The ionic washing machine	Evolutiva
Sensory perception	The Helen Hanlyn foundation	Domotics	Theo Jansen

1. HEALTH

1.1. FROM THE AESTHETIC PERSPECTIVE

As examples of industrial products that improve our health through aesthetics there are numerous products which, based on chromotherapy, a science of health enhancement through colour, have been proposed in recent years by various industrial sectors. They range from changing light systems to baths that change the colour of the bathwater or the bathtub itself by means of an LED system of programmable colours. One example is the LTT Illuminated bathtub designed by Jan Puylaert.

This bathtub is made of polyethylene and has an LED network of programmable colours inside it, so we can choose the atmosphere that best suits our mood.

1.2. FROM THE TECHNOLOGICAL PERSPECTIVE

The company INAX presented the "Inax Ecocarat" project, which it calls "Breathing tiles", at the CERSAIE 2004 Exhibition. These tiles have three functions: they eliminate unpleasant smells, control humidity, and absorb harmful substances.

1.3. FROM THE COMMUNICATION PERSPECTIVE

According to the innovation department of IKEA: Good design is not possible without innovation or creativity. And this means doing research on how society is changing and its consequences, and how new concepts can be created for the home. For instance, they study the consequences of introducing new technology into the home and how to establish new communication channels, and to do this technicians work with consumers, using different methodologies or activities. One of these consists of organizing workshops in various design colleges around the world and asking students: How will we behave in the future in the domestic environment, how will we sit, eat and sleep, and what will we have in our living rooms of the future?



Figure 1.

One of the projects derived from this methodology is that proposed by Lucas Palczewski with the slogan Gym Canapé. This student analyzed how we use our living rooms nowadays and reached the conclusion that in many cases we use this domestic space very little, given that most of the time we only use it in the afternoon and evening, and not in the morning. Another of the conclusions he reached was that we do no physical activity in the living room, either because we lack the time or because there is not enough room. This is why he designed a new sofa concept, which offers comfort when we sit down to relax, read or watch TV, but can also be converted into a piece of gym equipment in just a few seconds.

2. EFFECTIVENESS, SIMPLICITY AND LIFE ENHANCEMENT

2.1. FROM THE AESTHETIC PERSPECTIVE

In collaboration with the furniture company Punt Mobles and ALICER, Tau ceramics recently completed the "U-lat" project, which it presented simultaneously at the Casa Pasarela 2006 show and Cevisama 2006 trade fair. This project conceives ceramics in the same way as any other material designed for habitats, in other words it has to blend harmoniously with other materials in a confined space.

The idea behind this project is the creation of a mini-apartment, in which functionality and comfort are guaranteed. The name U-lat refers to the term for an emergent social relationship: LATs (Living Apart Together), a new way for people to live as a couple, without renouncing their independence.

Ceramics are used in different areas of the apartment, demonstrating their versatility and adaptability. They blend in with other products and materials, showing that their applications are no longer strictly relegated to the bathroom and kitchen.

The result is a diaphanous and functional 50m² apartment, adapted to the taste and aesthetics of the consumer the project is targeting.

The project also incorporates **Sustainability** and **Universal Design** criteria to ceramic tiles in order to improve their performance.



Figure 2.

FROM THE TECHNOLOGICAL PERSPECTIVE

2.2. FROM THE TECHNOLOGICAL PERSPECTIVE

An example of simplification and life enhancement is provided by the Décathlon Quechua brand tent, whose name Two Seconds refers to the time it takes to put up. The idea consists of throwing the tent into the air and, when it falls to the ground, it is ready to be fixed in place, owing to an organized system of internal fibreglass rods.



Figure 3.

2.3. FROM THE COMMUNICATION PERSPECTIVE

According to market research conducted by the company Faurecia, women are the most demanding clients. As well as demanding the same as men in terms of performance, prestige and style, they also expect vehicles to offer storage solutions, be easy to get in and out of, have good visibility, require minimal maintenance and be easy to park...and it must be possible to customize the car in order to adapt it to their personal taste and fashion sense. The Happy Attitude prototype by Faurecia is inspired by the concept of industrial or mass customization and the world of fashion, and it makes wider use of fabrics to offer multiple variants for each model.

To keep costs low automobile manufacturers standardize the invisible parts of different vehicles and personalize the visible parts to appeal to the end user's desire for individuality. Happy Attitude has a textile dashboard with various digital images, which it prints out using a low-cost printing system to produce individual images.



Figure 4.

Another example of innovation in the communication of products that simplify and enhance our lives is the Ceracasa EMOTILE project, which uses *inkjet* technology to provide a new service that allows the user, architect, interior designer or homeowner to buy a product with the graphic image of his choice. This project has been backed by a communication campaign that has enabled the product to reach the end client.



Figure 5.

3. NEW EXPERIENCES

3.1. FROM THE AESTHETIC PERSPECTIVE

These are products that permit us to experience new sensations and engage in new ways with the object in question, which in some cases becomes a playful or creative element, or in others surprises us with its hidden capacities. This is the case with the domesticated Landscape project by B. Graindorge, who designed a large fish bowl, which is a replica of an ocean with its ocean floor and currents. This product aims to introduce nature into the domestic environment in a realistic way, in which contemplation offers us a scenario more real than that afforded by the usual fishbowl.



Figure 6.

3.2. FROM THE TECHNOLOGICAL PERSPECTIVE

New textile dyes inspired the designer Madeleine Montaigne to create a tablecloth with an invisible pattern that becomes visible when a liquid is spilt on it, surprising guests with its figurative cookery motifs.



Figure 7.

3.3. FROM THE COMMUNICATION PERSPECTIVE

This is a project in which the product is sold over the Internet. The product is a box which contains a complete screen printing kit for personalizing clothes or any object of personal use. The box containing this small printing laboratory has the instruction manual printed on it, facilitating use of the kit, which includes everything from the developer to printing inks.



Figure 8.

Figure 9.

4. ECOLOGICAL EQUILIBRIUM

4.1. FROM THE AESTHETIC PERSPECTIVE

Nature has always been and still is an inexhaustible and stimulating source of inspiration for creators and designers. Nowadays we continue to look for connotations

of nature in our immediate surroundings and, although until recently nature was transformed to make it functional, now it is no longer enough for us to surround ourselves with graphic images inspired by natural themes because what we need now is greater intimacy with nature and to feel we are respectful towards her.

Architects and designers coincide in their use of vegetation in its most natural, living state, using it for everything from wall facings to moss walls or lawn lamps, which change their appearance with the passage of time, as nature does.

The ALICER proposal, **"With our Feet on the Ground"** attempts to integrate vegetation into a paving design consisting of hydraulically cut circular pieces of fired clay. The project aims to serve as an alternative both for home exteriors and interiors.



Figure 10.

Figure 11.

4.2. FROM THE TECHNOLOGICAL PERSPECTIVE

This washing machine manufactured by Samsung can wash ten kilos of clothes in one go. Owing to its *Silver Nano Health System* technology, clothes are cleaned even at low temperatures. The system emits silver ions which have the ability to destroy germs and bacteria. Consequently, at temperatures above 30 °C the results are similar to those achieved at a temperature of 90 °C, but without damaging clothes and saving time and energy.



Figure 12.

This light conduit, manufactured and designed by Velux, conveys natural light to dark spots in a house, where it is not possible to install a roof window. The pane of glass is located at the same level as the roof, enabling it to be fully integrated as part of the roof structure. It offers the same aesthetic and watertightness standards as a roof window and permits savings on energy by substituting solar for electric lighting.



Figure 13.

4.3. FROM THE COMMUNICATION PERSPECTIVE

Evolutiva Project:

Evolutiva is a network constituted by a series of companies from the entire ceramic sector value chain and united by an active interest in establishing a respectful commitment towards society and the environment.

The principal objective of the project is to foster a series of work approaches in research, design, development, manufacturing and promotion amongst all the companies linked to Evolutiva. This will result in products and processes that respect the environment and society by addressing the entire product life cycle. Its aim is to make Evolutiva, created by various companies in Castellón, a leading brand which offers more hopeful prospects and collaborates to lay the foundations of a better future.





Figure 14.

Figure 15.

5. SENSORY PERCEPTION

5.1. FROM THE AESTHETIC PERSPECTIVE

The Helen Hamlyn foundation has been working for 20 years to improve life for the over 50s. Since its beginnings it has collaborated closely with the Royal College of Art in London. Currently 15 young designers who graduated from the Royal College of Art are working for the foundation, dedicating one to two years to developing design projects related to the enhancement of day-to-day living. Projects related to the bathroom theme are currently under development, in collaboration with the company Ideal Standard Europe.

The designer Julie Mathias, who works for the foundation, is convinced that good design is necessarily linked to a positive personal experience. Her project has been completed after observing and studying 10 people ranging from 50 to 70 years of age over a period of time. Subsequently, she embodied her findings in 4 different bathroom settings. One of them is based on her observation of a specific user called Monseur Silvaneson. This man had never used a conventional bath or shower, given that his way of showering had always consisted of pouring buckets of water over himself. The concept of the shower tree emerged from this idea, a solution which improves the aesthetics and functionality of a small bathroom, converting it into a space that is closer to nature by changing the basic bathroom elements of the bathroom into a tree, whose branches supply hot and cold water, soap, shampoo, conditioner, etc.



Figure 16.

5.2. FROM THE TECHNOLOGICAL PERSPECTIVE

The technological contribution to this section, based on the search for pleasure via the senses, is undoubtedly provided by home automation, which concerns itself with humanizing technology in order to satisfy people, offering them a habitat which responds to the needs of the moment.

There are many examples to illustrate this section, including a system integrated into a ceramic floor tile which enables electrical devices in the home to be switched on and off at a touch.



Figure 17.

Figure 18.

5.3. FROM THE COMMUNICATION PERSPECTIVE

This section, in which we need to analyze a product that provides sensory enjoyment to the user via communication, questions how we should envisage new communication strategies which go beyond providing clear information about a product and create a satisfactory or exciting experience that will have an impact on the person receiving it. The BMW car commercial presents one of Theo Jansen's works based, according to the author, on kinetic art. It consists of large structures that move around the beach, propelled by complex cog mechanisms and pulleys, as if they were living creatures that move at will, the sight of which captures the spectator's imagination.



Figure 19.