

Changing the change

Design Visions, Proposals and Tools

An international conference on the role and potential of design research in the transition towards sustainability

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THE EVOLVING ROLE OF DESIGN: Opportunities and challenges for the Australian packaging industry towards sustainable design.

Abstract

This paper will discuss and evaluate the current role of [industrial/product] designers in the effective development of sustainable packaging for the Australian food and beverage industry.

The research is [mainly] using the Australian Food and Beverage Packaging Industry context (65-70% of the total packaging produced in Australia [PCA 2001]) as a case study. The findings described in this paper are based in a range of interviews with experts among the packaging supply chain as well as in a series of Round Tables held by the Sustainable Packaging Alliance (SPA) to validate results and to be used as reference to determine how transferable they are for other regions in the world.

Packaging plays a fundamental role in our society as it performs essential functions often disregarded such as content, protect, preserve, inform as well as ensure safety and healthy requirements and ultimately reduce the spoilage or damage of products along the supply chain (Design Council, 1997). Moreover, packaging is a strategic tool for product positioning in the marketplace and packaging designers are required to be able to develop cost-effective packaging balancing all the requirements of each segment of the supply chain (Rosner et. al. 2006, p.46). However, products associated to the packaging industry have been a main focus in the global sustainable debate as they are perceived as principal users of material resources, energy as well as waste generator. As a result, an increasing range of governmental regulations, initiatives and agreements (voluntary and mandatory) as well as environmental policies, regulations and standards associated with product-packaging's end-of-life management have been introduced.

In 1999 the National Packaging Covenant (NPC) was first introduced as a voluntary agreement between all levels of government in Australia and the packaging industry to address the environmental impact of consumer packaging in a coordinated way. The agreement was based on the principles of shared responsibility through product stewardship. A general objective of the NPC is to minimise environmental impacts resulting from the disposal of used consumer packaging. One of the recommendations of the NPC is through better design and planning processes make possible the reuse and recycling of products (NPCC 2005). More recently, other global initiatives have been released, such as the *Wal-Mart environmental scorecard*, developed to encourage suppliers to work towards continuous improvement and assist buyers to select packaging with reduced environmental impact (Wal-Mart, 2006).

However, legislation cannot work in isolation as the packaging is constraint by other inputs of the supply chain (manufacturing process, cost, retail format, etc). Typically the packaging development responds to a brief written, in most of the cases by marketers, where the role of the designer is limited. Designers

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rarely have the profile or context to be involved in decisions early in the development process (ISO 2003). This research aims to identify the gaps and limitations in the decision-making processes for designing sustainable packaging currently used within organisations. Therefore assessing the roles and responsibilities of those involved in the design and development processes of packaging systems throughout the supply chain has been assessed in this research to be able to will point out to key opportunities as well as specific challenges for Australia towards sustainable packaging design. In this way, produce the refinement of a framework for those in the product-packaging development process to use as an integral tool in the development of sustainable packaging systems.

The central argument of this paper is that the designer, while being a fundamental link between producers and consumers (UNEP 2004) could influence the development as well as commercialisation and consumption practices encouraging sustainable packaging. It is widely recognised the relevance of incorporating this type of decision-making in early stages of the product development when packaging designers in coordination with other professionals could potentially have a greater opportunity to address environmental pressures and as a result develop effective sustainable packaging systems (Lewis & Gertsakis 2001, 16). Therefore, it is necessary to come across with new perspectives on the development of packaging solutions where designers, engineers and marketers are fully aware of the context in which a "problem" is situated to be able to respond to it in an appropriate way (Walker 2006, 31).

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