

## **Hidden Consumer Needs and New Product Development**

**Helen Bruce, Cranfield School of Management  
Cranfield University  
Cranfield  
Bedfordshire  
MK43 0AL**

**Email: Helen.Bruce@cranfield.ac.uk**

**Supervisors: Prof. Keith Goffin and Dr. Marek Szwejczewski**

**Supervisor' email addresses:  
keith.goffin@cranfield.ac.uk; marek.szwejczewski@cranfield.ac.uk**

**19th EDAMBA Summer Academy**

**Soreze, France**

**July 2010**

## **Abstract**

This paper outlines my proposed research into the identification of hidden consumer needs through market research activities, in support of new product development. Multiple research methods will be applied concurrently in a comparative study which seeks to develop conclusions regarding the most effective technique or combination of techniques for identifying hidden consumer needs. The rationale for the research is described and the proposed research methods for inclusion within the study are discussed. An analysis of the philosophical implications of my proposed research is presented, which identifies an overriding relativist orientation within my approach.

## **Keywords**

Consumer needs, hidden needs, market research, consumer research, new product development, consumer behaviour, multiple methods

## Research Background & Purpose

A key aspect of innovation is *new product development*, which involves the design and launch of new products and services. Described as “one of the most important issues in business research” (Hauser et al., 2006, p. 687) the development of new products creates revenue (Cooper and Edgett, 2008), growth (Griffin et al., 2009) and is a key driver of profit (Veryzer Jr., 1998). Markets with infrequent or unsuccessful new product development may experience declining profitability as competing products’ features and benefits become indistinguishable over time and the resulting reliance on price-based differentiation creates a downward pressure on retail prices, ultimately reducing profit margins.

Successful new products and services are those which meet a specific consumer need (Griffin et al., 2009; Leonard and Rayport, 1997) and a robust understanding of the needs of target consumers is therefore required to ensure newly developed products accurately reflect key consumer requirements. The market research methods of surveys and focus groups are commonly employed in investigations of consumer needs which aim to generate insights in support of innovation projects (Goffin and Mitchell, 2005). However, these research techniques are believed to be ineffective in the identification of more subtle and subconscious needs, which may be unrecognised by the consumer or difficult to articulate (Deszca et al., 1999). This results in a series of *hidden consumer needs*, which remain unidentified by traditional market research methods (Goffin and Lemke, 2004; Goffin and Mitchell, 2005).

The identification of consumers’ hidden needs has the potential to stimulate the discovery of new opportunities for product development (Deszca et al., 1999; Leonard and Rayport, 1997) by highlighting newly recognised and previously unfulfilled needs for products to meet through tailored functional specifications and user benefits. The potential therefore exists to drive more frequent and successful new product development through the identification of these hidden needs, thereby protecting markets against the detrimental dynamics which result from its absence or failure. However, there exists within the literature a lack of clarity surrounding the most effective research techniques for identifying hidden consumer needs. As described above, the traditionally employed survey and focus group methods are believed to be ineffective when applied to this goal. Alternative methods such as ethnographic market research (Matthing et al., 2004; Rosenthal and Capper, 2006), repertory grid interviewing (Goffin and Lemke, 2004) and lead user studies (von Hippel, 1982) have been advocated within the innovation literature as viable alternatives to traditional market research techniques in eliciting hidden needs. However, the evidence for the effectiveness of these techniques

is far from robust and to date a direct and formal comparison of market research methods has not been carried out within the context of hidden needs identification for new product development.

The purpose of my PhD is therefore to investigate the comparative effectiveness of a series of market research methods in identifying hidden consumer needs, specifically at the idea generation stage of new product development, with a view to developing conclusions regarding the most effective technique or combination of techniques. Within the context of this study the term 'hidden needs' refers to an individual's needs or drivers for consumption, where those needs are subtle, subconscious or unconscious. 'New product development' describes the process of designing and launching new products to market, where the products represent novel solutions to an existing or newly identified need. These products can be distinguished from incremental developments, such as new colours, sizes or variations of an existing product where the overall functionality and customer benefits remain unchanged. By focussing on this specific context my aim is to generate knowledge of interest to both academic and practitioner communities by addressing the current gap in the literature surrounding techniques for hidden needs identification and providing some recommendations for industry best practice in market research for new product development.

### **Methodological Implications**

This study will employ multiple research methods in a concurrent manner. The methods to be included have yet to be determined. However, guidance for the research design is being sought from within the domains of literature which inform the area of interest: innovation, market research and consumer behaviour. The innovation and market research domains describe previous investigations into consumer needs in support of new product development, in which the needs in question, although described using alternative terminology such as 'latent' (Matthing et al., 2004), 'tacit' (Rosenthal and Capper, 2006) and 'unarticulated' (Leonard and Rayport, 1997) rather than 'hidden', meet the criteria for this study as they represent subconscious consumer requirements. Studies of this nature have employed ethnographic research techniques (Matthing et al., 2004; Rosenthal and Capper, 2006), repertory grid interviewing (Goffin and Lemke, 2004) and lead user methods (von Hippel, 1982) and these research methods may therefore be included within my research.

The consumer behaviour literature provides further research techniques for potential inclusion. Of particular interest are those which have been successfully applied to the illustration of cognitive theories of consumer behaviour. The cognitive perspective assumes that a series of subconscious cognitive processes driven by a consumer's personal knowledge, beliefs and values, influence their

actions, including those relating to consumption (Baker, 2002; Jenkins, 2002). Cognitive theories are of relevance to this research as they describe drivers for consumption behaviour and product choice which are similar to hidden consumer needs in their subconscious nature. Due to these similarities between the phenomena of interest in cognitivist consumer behaviour studies and my research, the techniques employed in highlighting the underlying cognitive mechanisms could be successfully applied to the investigation of hidden consumer needs.

Specific theories within the cognitivist school of thought include the personal construct theory (Kelly, 1955) and the means-end chain theory (Gutman, 1982). Personal Construct theory describes a set of subconscious rules (constructs) against which humans assess situations, people and objects, including products which are eventually selected or rejected (Kelly, 1955). The means-end chain theory (Baker, 2002; Gutman, 1982), specifically links consumers' underlying values to their product choices. Both personal construct and means-end research involves the use of repertory grid interviewing and laddering techniques (Goffin, 2002; Baker, 2002) in the production of cognitive maps (Baker, 2002; Jenkins, 2002), which seek to illustrate the causal relationships between drivers for consumption and product choice. Consequently the potential exists to apply these techniques within my study.

In addition to the cognitivist theories, a further consumer behaviour perspective describes consumption as a form of discourse (Roberts et al., 2005), and previous studies have illustrated the benefits of a co-creation approach to new product development (Dahlsten, 2004). This entails the capturing of target customer requirements through their direct interaction and involvement in the product development process. Co-creation represents a further potential method for inclusion in my research. Table 1 illustrates the full range of methods under consideration and the rationale for their potential inclusion.

*Table 1: Research Methods for Possible Inclusion*

<b>Method</b>	<b>Rationale</b>
Surveys	Traditionally applied methods enabling a comparison of the benefits of alternative, non-traditional methods.
Focus Groups	
Ethnographic studies	Methods previously applied to the investigation of hidden consumer needs in support of new product development.
Lead User Studies	
Repertory Grid Interviewing	A method previously applied to hidden needs investigation in support of new product development AND to the development and application of cognitive consumer behaviours which link subconscious drivers to consumption and product choice.
Co-creation	A method applied to the successful capturing of consumer needs throughout the product design and development process.

It is anticipated that a selection of the research methods in Table 1 will be employed within my project. The chosen methods will be incorporated into a case-study methodology, in which the individual cases may consist of groups of customers of sponsoring organisations, current users of different product categories or participants of a specific activity with which a product is associated. Each case will incorporate the use of all the selected research methods.

### Philosophical Implications

The philosophical framework applied to the analysis of my proposed research is that developed by Mark Easterby-Smith et al. (2008). Three ontological positions are defined within this framework: representationalist, relativist and nominalist, distinguishable by their associated views of reality, specifically their respective assumptions regarding the notions of truth and fact. Table 2 describes the three ontological positions and their associated epistemologies.

Table 2: *Ontological and Epistemological Framework (Easterby-Smith et al., 2008)*

<b>Ontology</b>	<b>Representationalism</b>	<b>Relativism</b>	<b>Nominalism</b>
Assumptions regarding Truth	Single truths exist, knowledge of which requires verification of predictions.	Many truths exist and a single view can only result from a consensus of these multiple viewpoints	There is no universal truth. The meanings that people construct are what's important.
Assumptions regarding Facts	Concrete facts exist and can be accessed.	Facts exist, but are obscure and cannot be easily accessed or measured directly	Facts are created by people through their experiences.
<b>Associated Epistemology</b>	<b>Positivism</b>	<b>Relativism</b>	<b>Constructionism</b>

From an ontological perspective my proposed research is underpinned by two key assumptions. Firstly, it is assumed that consumers possess distinct hidden needs which can be identified and defined. This implies that specific facts regarding the needs of target consumers can be identified, but due to their hidden nature they are obscure and not easily accessed. This relates to a relativist ontology within Easterby-Smith et al's (2008) framework. Secondly, it is also assumed that consumers will have idiosyncratic and personal requirements, implying the presence of multiple truths regarding customer needs. This and the further assumption that these multiple viewpoints can be combined to form a consensus with the capacity to drive new product development also implies a relativist ontology.

Easterby-Smith et al.'s (2008) framework in Table 2 also distinguishes three epistemologies which differ in their assumptions regarding the most appropriate means of enquiry into the reality defined

within their corresponding ontology (Easterby-Smith et al., 2008). The positivist and relativist epistemological approaches share a common assumption that reality exists independently of the researcher and their involvement in that reality. The researcher is therefore able to identify the features or facts of interest within that reality. Where these perspectives differ however, is in the ease with which the information can be accessed. Unlike the positivist approach which assumes that information is readily observable and measurable, the relativist epistemology assumes that patterns of human behaviour exist, but these elements of reality are difficult to access. My research approach assumes that hidden consumer needs exist irrespective of any investigation into their nature and as such reflects both the positivist and relativist approach. However, due to the subconscious nature of these needs my approach also assumes that they are difficult to access, thereby reflecting a relativist epistemology.

From a methodological perspective my proposed use of multiple research methods poses a challenge to the philosophical coherence of my research design due to the differing ontologies and epistemologies associated with diverse research techniques (Easterby-Smith et al., 2008; Blaikie, 2007). The adoption of an overriding case study methodology will address this philosophical challenge however, as the inherent flexibility of case-study research enables the reflection of a variety of ontological and epistemological positions. (Easterby-Smith et al., 2008). For example, Eisenhardt's (1989) approach to case-study research adopts a relativist orientation (Easterby-Smith et al., 2008) and employs mixed research methods in order to provide a richness of data regarding the phenomenon of interest (Eisenhardt, 1989; Eisenhardt and Graebner, 2007). My research approach will involve multiple methods in order to gather data from which conclusions regarding the most effective means of identifying hidden consumer needs can be drawn. As such my proposed approach to case-study research reflects Eisenhardt's (1989) relativist orientation and is therefore coherent with my underlying ontology and epistemology.

## **Conclusions**

This paper has described my proposed research into the relative effectiveness of market research methods in accessing hidden consumer needs in support of new product development. A potential case-study methodology has been outlined and the philosophical implications of my research have been discussed, highlighting a philosophical coherence within my research design.

## References and Bibliography

- Baker, S. (2002), "Laddering: Making Sense of Meaning", in Partington, D. (ed.) *Essential Skills for Management Research*, Sage, London, pp. 226-253.
- Blaikie, N. (2007), *Approaches to social enquiry*, 2nd ed, Polity Press, Cambridge.
- Dahlsten, F. (2004), "Hollywood wives revisited: a study of customer involvement in the XC90 project at Volvo Cars", *European Journal of Innovation Management*, vol. 7, no. 2, pp. 141.
- Deszca, G., Munro, H. and Noori, H. (1999), "Developing breakthrough products: Challenges and options for market assessment", *Journal of Operations Management*, vol. 17, no. 6, pp. 613.
- Easterby-Smith, M., Thorpe, R. and Jackson, P. R. (2008), *Management research : an introduction*, 3rd ed, Sage, Los Angeles.
- Eisenhardt, K. M. (1989), "Building Theories From Case Study Research", *Academy of Management. The Academy of Management Review*, vol. 14, no. 4, pp. 532.
- Eisenhardt, K. M. and Graebner, M. E. (2007), "Theory Building from Cases: Opportunities and Challenges", *Academy of Management Journal*, vol. 50, no. 1, pp. 25.
- Goffin, K. (2002), "Repertory Grid Technique", in Partington, D. (ed.) *Essential Skills for Management Research*, Sage, London, pp. 199-225.
- Goffin, K. and Lemke, F. (2004), "Uncovering your customer's hidden needs", *European Business Forum*, , no. 18, pp. 45.
- Goffin, K. and Mitchell, R. (2005), *Innovation management : strategy and implementation using the Pentathlon Framework*, Palgrave Macmillan, Basingstoke.
- Griffin, A., Price, R., Maloney, M., Vojak, B. and Sim, E. (2009), "Voices from the Field: How Exceptional Electronic Industrial Innovators Innovate", *The Journal of Product Innovation Management*, vol. 26, no. 2, pp. 222.
- Gutman, J. (1982), "A Means-End Chain Model Based on Consumer Categorization Processes", *Journal of Marketing*, vol. 46, no. 2, pp. 60-72.
- Hauser, J., Tellis, G. J. and Griffin, A. (2006), "Research on Innovation: A Review and Agenda for Marketing Science", *Marketing Science*, vol. 25, no. 6, pp. 687.
- Jenkins, M. (2002), "Cognitive Mapping", in Partington, D. (ed.) *Essential Skills for Management Research*, Sage, London, pp. 181-198.
- Leonard, D. and Rayport, J. F. (1997), "Spark innovation through empathic design", *Harvard business review*, vol. 75, no. 6, pp. 102.
- Matthing, J., Sanden, B. and Edvardsson, B. (2004), "New service development: learning from and with customers", *International Journal of Service Industry Management*, vol. 15, no. 5, pp. 479.
- Roberts, D., Baker, S. and Walker, D. (2005), "Can we learn together? Co-creating with consumers", *International Journal of Market Research*, vol. 47, no. 4, pp. 407.

- Rosenthal, S. R. and Capper, M. (2006), "Ethnographies in the Front End: Designing for Enhanced Customer Experiences", *The Journal of Product Innovation Management*, vol. 23, no. 3, pp. 215.
- Veryzer Jr., R. W. (1998), "Key Factors Affecting Customer Evaluation of Discontinuous New Products", *Journal of Product Innovation Management*, vol. 15, no. 2, pp. 136-150.
- von Hippel, E. (1982), "Get New Products from Customers", *Harvard business review*, vol. 60, no. 2, pp. 117.