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PACKAGING

The practice of packaging goods dates back to pre-industrial society, where packaging was commonly used for cereals, teas, and oils, although arguably the origins of packaging date back further than this. Around 300 BC, the Phoenicians invented the glass blowpipe, which was used to inflate glass into a hollow shape. The glass bottles that were produced using these blowpipes were some of the earliest forms of packaging and were critical to the containment of fluids, which otherwise obviously could not be transported or handled. Today, many different types of packaging exist, including paperboard cartons and boxes, metal cans, and plastic and glass bottles and jars, to name a few. Whatever type of packaging is used for a particular product, it must be effective in performing three key functions for the product and consumer: protection, containment, and identification. In some respects, protection and containment are the most basic functions of packaging, and those that originally made packaging necessary to handle and transport goods; however, today it is perhaps the identification and communication aspects of packaging that are of greatest importance to consumer culture.

The importance of packaging increased greatly during the nineteenth century, particularly in the United Kingdom and the United States, as goods began to be produced and sold on a larger scale, thus requiring packaging for protection during transportation. This importance increased toward the end of the nineteenth century, with the introduction of trademarks for the purposes of identifying goods, with packaging being used as a device to carry such identifying markings on goods. During the twentieth century, the importance of packaging increased further due to the growing importance of brands, trademarks, and advertising to consumers and their choices.

The use of packaging by consumers to identify different brands and products makes packaging a key tool for organizations, as it can be used to influence consumers’ purchasing behaviors. Indeed, as far back as the 1950s, E. Ditcher identified the important effects packaging could have on consumers, describing it as a “silent salesman,” and in the modern supermarket retail environment in which consumers purchase so many goods, this ability of packaging to sell the product and gain consumers’ attention is of great significance, as discussed in the following section. However, while packaging is of critical importance, it has received relatively little attention in the academic literature, and there is a need for research into this topic.

Contemporary Relevance of Packaging

Packaging is used in many product categories and industries; around 75 percent of all finished goods require packaging. However, it is of particular importance in the fast moving consumer goods (FMCG) industry, where it plays a key role in product success. The FMCG industry consists of three sectors: food, drinks, and household goods (such as
shampoo and household cleaning products). While packaging is of key importance to the success of products within the FMCG industry as a whole, it is of particular importance in the food and drinks sectors due to its role in preserving food and preventing risks of contamination. The importance of packaging in the FMCG industry today has largely developed through the growth of supermarkets as the main retail outlet where consumers purchase these goods. For example, Leon Schiffman and Leslie Kanuk, as far back as the 1990s, noted that in modern crowded supermarkets, consumers are frequently exposed to thousands of products and all kinds of other stimuli; however, the consumer perceives only a small number of the total stimuli, and therefore, according to Rod Sara, the marketer may have less than one second to get the customer’s attention. The growth of supermarkets and hypermarkets has therefore made packaging an important part of consumer culture.

A number of cultural changes have affected packaging, its importance, and some key packaging developments. Cultural changes in recent years have seen increasing shifts toward healthful eating among consumers in developed countries; likewise, there is also evidence of growth in products that are organic and ethical. These changes have further raised the importance of packaging to consumers, who are paying increasing attention to label information as a result of their concerns about health and nutrition. For example, drink manufacturer Innocent used the labeling on its smoothies, which is relatively simple and portrays the outline of a fruit that is made to look like it has eyes and a halo, to portray its products as being simple and pure. The company also made improvements to the packaging itself to enable the fresh fruit product to achieve a long shelf life beyond what would have previously been possible for a mixed fruit juice–based product. This highlights that both the material purpose of the packaging and the visual cues to the consumer are of critical importance.

Changes in modern culture have seen consumers placing greater emphasis on the environment, notes Gerard Prendergast and colleagues, and this has also affected packaging. Indeed, many organizations have switched to recyclable packaging in recent years. Likewise, product manufacturers have also been switching their emphasis toward reducing packaging on products, in response to consumers becoming more aware and concerned about environmental issues and the reduction of waste. Consumers are becoming increasingly dissatisfied about the extensive, and sometimes excessive, use of packaging (British Market Research Bureau [BMRB]/Mintel International Group 2006). However, despite these negative perceptions and the negative press packaging has received, packaging plays key roles for products and consumers, particularly with respect to its role in protecting products. The role of packaging in protecting products provides some justification for the prevalence of packaging, particularly in the food and drinks industry where it is key to reducing food waste by increasing product shelf life and preventing spoilage. However, consumers’ awareness of these benefits of packaging is still relatively low; thus, many continue to have negative perceptions of packaging.

**Significance**

Packaging’s three key functions of protection, containment, and identification are all of critical importance to consumers. While it is tempting to focus on the communication and identification elements of product packaging, the importance of effective containment and protection must also be recognized. For example, consumers can become frustrated by poorly designed packaging that is hard to open, packaging that breaks or splits when it is opened, or packaging that will not effectively reseal. Thus, effective packaging design can be key to consumer satisfaction, loyalty, and consumption choices. In addition, when one considers the growth of the packaged food sector, particularly packaging that allows food to be microwaved or oven cooked in it, it is possible to see the key role of packaging in improving convenience for the consumer.

Arguably, more important than the convenience packaging can offer to the consumer is the protection it can provide. For example, in the 1990s, producers and retailers experienced commercial terrorism in their own stores, with a number of consumer claims based on products being tampered with prior to their purchase, which led to an increase in the use of tamperproof packaging. Baby food was a particular target, and manufacturers such as Cow & Gate and Heinz were pioneers in developing tamperproof packaging. Their food products are now sold with tamperproof packaging,
such as jars featuring pop-up disks showing when the jar has been opened, warning consumers not to purchase the product. Similarly, in the United States in the 1980s, the painkiller Tylenol saw sales collapse after some of these drugs were deliberately contaminated with the toxic chemical cyanide; this brand was rescued with the introduction of tamper-proof packaging.

The role of packaging in identifying products and communicating with the consumer can be critical to gaining consumers' attention and influencing their consumption behavior. In this respect, packaging represents an important opportunity to convince shoppers and influence their purchase decisions at the point of sale. Indeed, Carl McDaniel and R. C. Baker have suggested that packaging represents the final opportunity to convince buyers to purchase a particular brand. Thus, packaging is of great significance to the consumer and clearly affects their consumption behaviors. For example, Bo Rundh found that Absolut vodka’s success in becoming the second largest brand in the vodka market was in part due to its unique packaging design, including both the bottle and labeling.

Packaging's role in communicating with consumers spreads beyond its ability to influence their purchase decisions, as packaging and its design can also help consumers to make brand associations. For example, the packaging of a food product can provide consumers with cues about the quality of a potential purchase prior to their consumption of the product. Therefore, according to William R. Green, packaging can affect consumers' evaluations of key aspects of a product, such as product quality, and can be of significant importance to the perceived positioning of products. In the case of the wine industry, for example, the packaging of wine is considered to provide a key cue contributing to defining the consumers’ expected quality of the product. For example, wines packaged in bottles with flatter bottoms and taller, thinner necks tend to be associated with lower value, less traditional wines by consumers.

The importance of packaging to consumers' perceptions of products and their positioning show that, as far as the consumer is concerned, the product and its packaging are inextricably linked. Indeed, Olga Ampuero and Natalia Vila suggest that the concept of product positioning actually originates from packaging, as aspects such as size, color, and shape are used by consumers to assess products and compare them to competitors.

Chris Simms

See also Advertising; Branding; Design; Environmental Social Sciences and Sustainable Consumption; Planned Obsolescence; Reuse/Recycling; Supermarkets; Waste

Further Readings


PARTICIPANT OBSERVATION

See Anthropology; Autoethnography; Ethnography; Methodologies for Studying Consumer Culture; Methods of Market Research; Multisited Ethnography

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Appendix 3.1: Importance of a Structured NPD Process

Considering the importance of new product development, and the complex nature of the business activity, effective structuring of the process is critical to its effective management. An effectively structured process can have a beneficial effect on new product success (Griffin, 1997; Parry, 1996); this structure is necessary at most the key stages in NPD, including idea generation and evaluation (Kotzbauer, 1992), development (Parry and Song, 1994), and introduction (Schmalen and Wiedemann, 1999). An effectively structured process can play an important role in reducing risks and uncertainties (Allen, 1985), in particular relating to consumers, competition, and resources (Moenaert and Souder, 1990).

Whilst it is clear that NPD is of key importance to many organisations, and that an effectively structured process is required to do this, it seems that it is not a simple activity for organisations to master. This is particularly the case where high levels of innovation are being targeted. Sowrey (1989) highlights one particular quote that highlights this issue well, from A.C.Neilsen Co. Ltd, which states that of all marketing’s varied tasks, the “…..most difficult is the finding, testing, and launching of profitable new products”. Indeed, there is a great deal of evidence to support the difficult nature of optimising this complex activity, and the fact that organisations still struggle to effectively manage it, and the significant challenge it represents:

- Commercial success rates of new products are still relatively low (Craig & Wheelwright, 1993; Craig & Hart, 1992; Booz, Allen & Hamilton, 1982; Cooper, 2001; Tucker, 2002; Judson et al. 2006). Typically, failure rates range between 50 and 70%, although there is a great deal of variation: with some studies suggesting rates from 40% to as high as 90% (Judson et al. 2006). Furthermore it seems that in consumer markets, rates are particularly low (Brockhoff, 1999; Urban & Hauser; 1993; Crawford, 1987).

- Citing a number of studies, Koudal & Coleman (2005) suggest that only around 15% of product ideas make it to the market.

- From 1990 to 2004, new product sales have fallen from an average of 32% to 28% of total company sales, based on a Product Development Management Association Foundation study (cited in Cooper, 2005).

- Over this same period, organisational profits derived from new products also fell, from 33.2% to 28.3% (Cooper, 2005).

- There is also some concern that companies in the more developed world may be overtaken by more ‘nimble’ Asian competitors, who will become
increasingly successful (Business Week, 2005): a large part of this likely success is regarded as thanks to the proficiency of their NPD activities. There are many other indications of the complexities of new product development, including development times being too slow, and costs high (Ozer, 2004; Hutlink et al. 2000). Indeed, the issue of slow development times provides some indication of the importance of speed and timeliness in NPD (Cooper et al., 2004; Hutlink et al., 2000; Davis, 2002; Cooper, 1988b; Cooper and Kleinschmidt, 1994), which further highlights the importance of organisations being able to effectively manage the process to guard against issues and pitfalls, whilst ensuring that the outputs of the process reach the market in the optimal time frame. For example, whilst first-to-market advantages have been questioned by some, they nevertheless highlight some significant advantages of ensuring timeliness in new product development (Lieberman & Montgomery, 1988, 1998).

It is clear that new product development is a critically important activity affected by many complex factors and issues. Considering all this, the fact that NPD remains a risky and uncertain business activity (Ozer, 2004) is perhaps unsurprising, but organisations must aim to optimise their processes nonetheless. Indeed, there is evidence that NPD is becoming recognised as a critical activity (Maddox, 2005), and being prioritised within organisations (Day et al., 1992). Therefore, the process itself can play a key role in the long term success and survival of such organisations; in this respect, a wide variety of models have been developed that aim to identify and effectively structure the NPD process and its key stages, to aid in effective management. These models will be discussed in the following sections of this chapter.
Appendix 3.2: First Generation Models of NPD

Appendix Figure 3.1: technology/science push model

Basic science → Development → Manufacture → Marketing

Appendix Figure 3.2: market/need pull model

Market need → Development → Manufacture → Sales
Appendix 3.3: Key Success Factors in NPD


Arguably the most comprehensive overview of the literature on key success factors in NPD is provided by Ernst (2002), sighting some 121 articles. This study identifies a wide variety of factors of greatest importance to organisations, which can largely be divided up into those that can and cannot be ‘managed’ (Ernst, 2002) by the company. In this respect, it seems that, based on the many articles sighted by Ernst, a total of eight factors can be identified as of critical importance to the success of new product development. Four of these are identified by the work of both Cooper and Kleinschmidt (Cooper, 1979, 1980, 1983, 1984, 1986, 1988, 1990; Cooper and Kleinschmidt, 1987; cited by Ernst, 2002: p8):

1. Clear definition of the product before development begins (including defining the target market and the product concept).
2. High quality of preparatory project work to define the product and evaluate it.
3. Orientation of the new product development process towards the demands of the market.
4. A high quality and well-structured NPD process.

The factors identified above can be broken down in terms of whether they are largely internal to the firm, and how the process is managed (factors one, two and four), or involve coordinating external elements and therefore relate to the inclusion of external information into the process (3). Interestingly, inadequacies in pre-development activities have been extensively linked to failure (Cooper, 1993; Cooper & Kleinschmidt, 1986, 1987; Davis, 1993; Dyer, Gupta, & Wilemon, 1999; Song and Parry, 1996), and consumer testing seems of particular importance (Dahan and Hauser, 2001; Rudder et al., 2001).

Whilst the list of factors above is relatively comprehensive, the wider literature has identified a number of others critical to NPD success. However, before discussing these, it is worth briefly elaborating further on one of the factors above.

The third factor identified above is that of market orientation in the new product process. Market orientation generally refers to a company’s understanding of the
needs of customers and what they value; and integrating this into the new products process, the wider marketing literature also suggests that market oriented firms may also possess capabilities in market sensing, and understanding competitors as well as customers (Day, 1990). Being market orientated in new product development should ensure both customer needs and the information gathered are incorporated throughout the process, and therefore be continually updated (Rothwell et al. 1974). The main pillars of this process can be summarised as follows (Grunert et al., 1996; Lord, 2000; Urban and Hauser, 1993; van Trijp and Steenkamp, 1998):

- The needs of the consumer should be the starting point of the process.
- The aim of new product development should be the fulfilment of customer needs and realising customer value.
- Sales and customer satisfaction will only be achieved if the consumer’s needs are met (which requires their identification and a process that will fit the product to these needs).

Market orientation in the new product process has consistently been highlighted as key to new product development (Atuahene-Gima, 1995; Souder et al. 1997). In particular, it can enable a company to integrate the needs of customers (Schmalen and Wiedemann, 1999; Parry and Song, 1994), whilst providing indications and estimations of market potential (Balbontin et al. 1999), and an understanding of their competitors (Calantone and diBeneditto, 1988). Thus it is clearly of value to successful new product development.

Whilst each of the factors discussed above are key to success, it is also important to note some additional important findings of other researchers. Ernst suggests that four other factors are of critical importance to the success of organisational NPD activity:

1. Organisation, incorporating: strong responsible product leadership, an empowered project team, commitment of the leader and team members, intensive communications, and cross-functional cooperation.
   - The cross-functional teams particularly need to include members of marketing, R&D and production staff (Song et al. 1997).
   - The project leader must be strong and responsible, playing a key role in the process. They therefore need to be qualified (Balbontin et al. 1999), command authority (Schmalen and Wiedemann, 1999), and provide the project with the required attention (Cooper and Kleinschmidt, 1995).

2. Culture. This type of ‘Entrepreneurial climate’ largely consists of: employees able to structure some of their ‘working’ time for projects based on their own
ideas and interests, support for unofficial projects (even if they have been stopped by management), venture capital within the organisation for work on creative ideas (Cooper and Kleinschmidt, 1995). It may also include the acceptance of risk taking behaviours (Voss, 1985).

3. Role and commitment of senior management, including setting aside appropriate levels of funding. This includes their willingness to devote sufficient resources to new product development (Cooper and Kleinschmidt, 1995), and funding wider than the R&D budget, to include areas such as market research and new product introduction (Balbontin et al. 1999; Cooper, 1984).

4. Strategy and a strategic focus for NPD projects to work towards, incorporating: clear goals and objectives for the business’ entire new product efforts, communication of the role of products in achieving the goals, clearly defined areas of strategic focus, and a long term focus (Cooper, 1998).

These factors clearly expand far wider than many of those identified by Cooper and Kleinschmidt, which focus more on the process itself than wider organisational structure, culture, and management. They therefore highlight the role of the wider management of the organisation in new product success. This wider focus reflects the literature on innovation, which is obviously a connected field. For example, Trott (2008) identifies nine organisational characteristics facilitating innovation: growth orientation, vigilance, commitment to technology, acceptance of risks, cross-functional cooperation, receptivity, slack, adaptability, and a diverse range of skills. Clearly, to some degree, there is an overlap in areas such as cross-functional cooperation and a diverse range of skills. These wider managerial and cultural factors are critical to new product success, as it is a people process (Rubenstein, 1976) in which the individual is key (Martins and Terblanche, 2003). Factors such as these will affect their determination and motivation.
Appendix 5: Paper on Packaging Opportunity Identification, published in Marketing Theory

Packaging development: A conceptual framework for identifying new product opportunities

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Abstract
Packaging plays a key role in product success, particularly in the fast moving consumer goods industry (Wansink and Huffman, 2001) and can affect consumers’ purchasing decisions at the point of sale (Sara, 1990). However, relatively little has been written about packaging in the marketing literature (Johnsson, 1998; Saghir, 2002; Rundh, 2005). The purpose of this paper is to provide a theoretical framework with which to examine how packaging contributes to marketing in general and new product development (NPD) in particular. The paper reviews the literature and develops a unique framework that can be used to evaluate more fully the needs of all parties that are relevant to the development of packaging, including members of the distribution channel. This framework aims to provide new insight into the creation of new product opportunities through packaging development in a more systematic way than has been evidenced in the past.

Keywords
fast moving consumer goods, new product development, packaging, packaging development, product management, supply chain

Introduction
Past research in marketing and business in general has largely failed to recognize the contribution packaging can make to a product and more widely to business. Packaging surrounds and protects products, from manufacture through to the final consumer, and in some cases the packaging can
actually enhance the product itself during this lifecycle. Without packaging, handling the core product and marketing it to the consumer would be difficult, inefficient and costly. In modern society packaging is both pervasive and essential. Yet, despite the important roles packaging plays, it is often viewed negatively and regarded as a necessary evil or an unnecessary cost. Arguably the environmental lobby has targeted packaging as being particularly pernicious. These negative views of packaging often arise because the important roles it plays, particularly protecting, containing and identifying products (Frey and Albam, 1948; ILDM, 1993; Stewart, 1996; Issues Paper, 1997; Ampuero and Vila, 2006), are often not known or not fully understood. This lack of awareness should not detract from the fact that packaging is a critical marketing tool (Rundh, 2005), which plays a key role in consumers’ product choices and perceptions (McDaniel and Baker, 1977; Prendergast and Pitt, 2000; Wells et al., 2007). Yet within the mainstream marketing literature, packaging has received relatively little attention (Johnsson, 1998; Saghri, 2002; Rundh, 2005), and theory in this area is lacking. The purpose of this paper is to provide a theoretical framework through which ideas for new packaging can be generated, as well as articulating the key importance of packaging.

Packaging is of greatest significance as a marketing tool within the Fast Moving Consumer Goods (FMCG) industry, which is an important industry in terms of economic activity. For example the UK FMCG industry is responsible for £125 billion of consumer expenditure and contributes more than 8 per cent of GDP (Bourakis and Weightman, 2004). This is a highly competitive industry dominated by both international brands and retailer own-label brands. Within the FMCG industry, NPD is a major activity of FMCG brand owners; in fact over a thousand new products appear each month on the shelves of British supermarkets (Nancarrow et al., 1998), and retailers’ development volumes alone are typically measured in thousands per annum (Francis, 2004). However, while NPD has received a great deal of attention in the literature, due to its importance as an organizational activity (Wheelwright and Clark, 1992; Crawford, 1994) and vital contribution to generating new opportunities (Mandry, 1973; Cooper and Kleinschmidt, 1986; Flint, 2002), relatively little has been written about NPD within the FMCG industry. The literature that does exist in this area is mainly derived from consultants rather than empirical research (Grunert et al., 1997; Francis et al., 2006). Likewise, the limited research that has been undertaken into NPD in the FMCG industry (for example Morris, 1993; Rudolph, 1995; Rudder et al., 2001; Francis et al. 2008), has focused on the development of the core product itself, and offers little insight in terms of the development of new packaging and how new opportunities can be created in this respect.

In this paper we argue that new conceptual thinking is required for the generation of new product opportunities through packaging. The existing new product development literature is dominated by empirically based research, with limited theoretical development taking place. Furthermore, the literature misses the mark with regards to packaging development, due to its focus on the consumer, as it fails to fully account for the packaging’s unique nature as a core part of the product, and its critical roles for FMCG products. When the generic new product development literature is considered with regard to the development of new packaging, it fails to provide an adequate conceptualization for packaging in a number of respects, and this creates a need to expand the domain of enquiry within NPD to capture a greater number of product ideas.

**NPD: Packaging and idea generation**

This paper focuses on idea generation, the first stage of product development: a critical part of the so called ‘fuzzy front end’ of NPD. The importance of idea generation is clearly highlighted in the literature, for example Sowrey (1989) cites Mandry’s study of ‘innovative companies’, and
points out that these companies averaged 65 ideas each in a year, while ‘non-innovative’ companies averaged 35 ideas. The literature also suggests that one of the characteristics related to those organizations’ that are good at new product development is their ability to generate new ideas (Mandry, 1973; Cooper and Kleinschmidt, 1986; Flint, 2002). However, the generation of new ideas is often a difficult task for organizations (e.g. Sowrey, 1989). It is clear that this is a critical element of the NPD process, but one with which many organizations struggle. When it comes to packaging it is clear that this issue is particularly pertinent, as Ahmed et al. (2005) highlight that ‘if packaging is a critical component of one’s marketing mix, one needs to have a pipeline of packaging ideas and concepts in development. But many brands do not have such type of system in place.’ (2005: 262).

This clearly indicates the need for a method of generating new packaging ideas. This need becomes particularly evident when one considers that the lack of such a method often leads firms to focus on cost-saving designs (Ahmed et al., 2005), which results in both limited new packaging demand side progression and margin erosion (Richmond, 2004). Furthermore, it seems that FMCG firms may not currently be exploiting the opportunities packaging can provide, as there is some evidence that they do not even consider packaging until relatively late in the NPD process (McFie, 1994; Francis et al., 2008). Indeed, considering the importance of packaging to FMCG products and their success, it may be that the lack of an effective packaging development system is contributing to notably high product failure rates (Rudolph, 1995) and low chances of new product success (Buisson, 1993; Rudder et al. 2001), which are both issues of high cost to this industry (Morris, 1993). Consequently, packaging and the opportunities it provides to improve performance in these areas are arguably considerable. However, within the mainstream marketing literature, relatively little research has been undertaken into packaging (Rundh, 2005), or the role packaging plays in NPD (Johnsson, 1998; Saghiri, 2002), and there is a clear absence of debate in this area. Within the current literature it remains unclear how packaging development should be integrated into the NPD process, and how new ideas should be generated. In fact, while there is overwhelming evidence of the importance of packaging within NPD and the product innovation process (e.g. Olson et al., 1995), when it comes to packaging the product it seems that the marketing literature has largely overlooked packaging.

The aim of this article is to fill this gap in the literature, through the development of an effective theoretical framework for the generation of new packaging ideas. The following sections review the literature on packaging, highlighting its importance to a number of marketing disciplines, and subsequently propose a new theoretical approach. A number of propositions are developed that underpin the conceptual framework. This links the key role of packaging both to the consumer, and throughout the supply chain, to the development of new opportunities. This provides a unique conceptual framework from which to view packaging development. In addition, it promotes a more holistic approach to packaging development, through the incorporation of the different levels of packaging that are required for many products, thus providing the opportunity to generate further ideas for new packaging solutions.

*Marketing perspectives on packaging*

A number of definitions of packaging have evolved in the literature (Frey and Albaum, 1948; ILM, 1993; Stewart, 1996; Issues Paper, 1997; Lee and Lye, 2002; Ampuero and Vila, 2006). While subtle differences exist between these definitions three key roles of packaging with regard to the product have consistently been highlighted; these are: protection, containment and
identification; although it is clear that the latter role can also be expanded to include packaging’s ability to communicate with the consumer.

Rundh (2005) discusses the multiple facets of packaging as a marketing tool; he identifies the key relevance of packaging to a number of aspects of marketing, including pricing, marketing communications, and distribution (Table 1). More widely within the literature it is clear that packaging is relevant to, and spans the boundaries of, a number of marketing disciplines:

- The marketing communications literature has provided insights into packaging’s ability to communicate with consumers (Nancarrow et al., 1998; Underwood and Ozanne, 1998); how it can influence consumers’ perceptions and evaluations of products (Dick et al., 1996; McDaniel and Baker, 1997; Raghunbir and Krishna, 1999; Rettie and Brewer, 2000); and how it can be used to gain their attention (Underwood et al., 2001). Indeed packaging has a powerful effect on consumers at the point of sale (Welles, 1986; Phillips and Bradshaw, 1993; Grossman and Wisemblit, 1999; Prendergast and Pitt, 2000; Wells et al., 2007) and can hence improve product sales (Sara, 1990; Beharrell, 1994; Garber et al., 2000; Silayoi and Speece, 2004).

- The brand management literature highlights packaging’s importance as a brand tool (Underwood and Klein, 2002; Underwood, 2003) and to differentiate products in the eyes of the consumer (Wells et al., 2007).

- The distribution management literature has focused on packaging’s key role within the supply chain and as a logistics tool (Johnson, 1998; Bjarnemo et al., 2000).

- The importance of packaging in terms of the organization’s environmental responsibilities and commitment to sustainable marketing has also been documented in the literature. This highlights that packaging’s traditional key roles must be balanced with these new environmental concerns (Kassaye and Verma, 1992; Prendergast and Pitt, 1996). Indeed, in the coming years there is likely to be an increasing emphasis on this aspect of packaging within the literature, particularly with new government initiatives increasingly placing the responsibility of disposal and waste on the brand owner.

By drawing together this diverse literature on packaging it becomes possible to develop a clearer understanding of the powerful nature of packaging as a marketing tool, and to recognize that packaging is a critical part of the product offering that should be highly regarded within all areas of marketing. Figure 1 attempts to conceptualize this by illustrating the different disciplines of the marketing literature that packaging covers. While packaging is associated with many key aspects of marketing, it is most strongly associated with the product; indeed packaging is sometimes integral to the product; for example, bottled water, which in many respects is defined by the bottle itself. In fact, the literature even suggests that as far as the consumer is concerned, in the case of low involvement purchases such as FMCG products, the packaging can effectively become the product (Silayoi and Speece, 2004). The development of new packaging ideas should therefore be central to the new product development process.

In the context of the FMCG industry, packaging has a unique role to play as part of the product, due to its relevance to the key five disciplines of the marketing literature (identified in Figure 1). However, the impact of the unique role of packaging on the development of new packaging has not been fully addressed within the existing new product development literature, largely due to the lack of attention the FMCG industry and in particular packaging have
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<th>Functions of packaging</th>
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<td><strong>Packaging protects</strong></td>
<td>Physical distribution and storage. Product quality</td>
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<td>Packaging must be able to withstand robust physical handling during distribution so</td>
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<td>that the goods are received by consumers in the same function they left the factory</td>
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<td><strong>Packaging preserves</strong></td>
<td>Physical distribution and storage. Product quality</td>
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<td>There is a form of packaging that will preserve each product from deterioration</td>
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<td><strong>Packaging facilitates distribution</strong></td>
<td>Physical distribution and storage. Supply chain management</td>
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<td>that goods reach their destination in optimum condition</td>
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<td><strong>Packaging promotes customer choice</strong></td>
<td>Promotion and selling. Marketing communication</td>
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<td>Packaging enables and promotes brand identification and competition</td>
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<td>contains, leaving the consumer to choose which product is best suited to his or her</td>
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<td><strong>Packaging helps contain prices</strong></td>
<td>Physical distribution and storage. Promotion</td>
</tr>
<tr>
<td>Consumer goods would be more expensive if it were not for cost-effective packaging.</td>
<td></td>
</tr>
<tr>
<td>The packaging of products in packs of various sizes allows the consumer to purchase</td>
<td></td>
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<tr>
<td>the most convenient quantity</td>
<td></td>
</tr>
<tr>
<td><strong>Packaging promotes hygiene and safety</strong></td>
<td>Packaging/package development. Customization. Package design in relation to relevant</td>
</tr>
<tr>
<td>Improvements in standards of hygiene and safety in food are partly related to</td>
<td>market demand/need</td>
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<tr>
<td>packaging</td>
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<tr>
<td><strong>Packaging is innovative</strong></td>
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<tr>
<td>In many cases the packaging industry responds to new demands which arise for</td>
<td></td>
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<tr>
<td>specifically packaged foodstuff products</td>
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The following sections draw together the theory on packaging and new product development, and develop a unique theoretical approach to the generation of new packaging ideas.
A theoretical approach for the development of packaging opportunities

The role of the consumer in packaging development

The existing literature on new product development has highlighted the key role of customers in generating new product ideas and concepts (Pooltan and Barclay, 1998), as well as understanding their needs, which is key to successful innovation (Nambisan, 2002). Indeed, the importance of understanding the market and undertaking research is recognized by successful companies (Cooper, 1999), and it has also been found that organizations will have a better understanding of how to focus their new product development activities if they have a clear focus on the market, including needs, wants and preferences (Calantone and Di Benedetto, 1989). Thus, a key challenge for organizations is to improve their understanding about target customers’ needs and wants so as to improve their products (Narver et al., 2004). When it comes to the development of product packaging, consumer involvement is clearly of great importance, particularly due to the ability of packaging to affect satisfaction levels. Thus research is required to focus on ensuring the packaging is consumer friendly in order to guarantee effective product performance. This would involve considering a number of elements that may contribute to overall satisfaction levels, including issues such as openability, reclosability, carrying, and dispensing facilities (Lee and Lye, 2002). This is particularly important when it is taken into account that in the case of low involvement products the packaging can effectively become the product, in the eyes of the consumer (Silayoi and Speece, 2004). Indeed, Ahmed et al. (2005) suggest, it is necessary to look at product/package opportunities
holistically (produce + package + equity) to ensure an effective combination for the consumer, hence considerable consumer-based research may be required to highlight effective opportunities and solutions. Thus the inclusion of the customer in packaging development is likely to be of significant importance in improving the success of new product/pack combinations, in the FMCG industry. This forms the first principle for the development of a conceptual framework, and the following proposition:

**Proposition 1:** Incorporating the consumer into the process of generating new product/pack combinations will enable a greater number of opportunities to be identified.

While research is required to optimize consumer satisfaction levels with the product and its packaging, when it comes to packaging this research is also required to uncover how packaging may affect consumers and their choices in a number of other respects. First, as was discussed in the previous section, packaging plays an important role in influencing consumers’ perceptions of a product in a number of respects, such as quality and value and its positioning in the marketplace. Therefore research can be undertaken with consumers to develop understanding and to explore opportunities to define the structural and graphic design of the product and package to ensure correct positioning (e.g. Ivanze Gimeno, 2000, as cited in Ampuero and Vila, 2006). While the NPD literature recognizes that products developed with their involvement have a greater chance of success (Cippe, et al, 2005) and can help to avoid product failure or delays (Osbourne, 2002), in the case of packaging its role in success effectively reaches a different level. While this literature to some degree recognizes that the customer has a number of roles in NPD (Nambisan, 2002), in the case of packaging, the role of consumer research must be expanded further, to reflect its even more critical role in product success, due to the fact that packaging communicates with the consumer and has an important effect on their choices in the retail environment (Grossman and Wisenblit, 1999; Prendergast and Pitt, 2000; Wells et al., 2007). Therefore research to develop ideas for new packaging that is able to communicate with the consumer more effectively and attract their attention is critical. This forms the second principle for the development of our conceptual framework:

**Proposition 2:** Incorporating the consumer into the process of generating new packaging ideas and concepts, to improve the ability of the pack to communicate with the consumer, will generate a greater number of opportunities.

**NPD: The need for a wider perspective**

When generating new product ideas, the new product development literature highlights that undertaking activities to develop a better understanding of the market, users, and acquiring knowledge, is key to company success in NPD (Di Benedetto, 1999; Calantone et al., 2002; Rogers et al., 2005), as has already been addressed. However, while the traditional focus of research is on the end customer, it is also recognized that a wider range of data sources for ideas and information may enhance the likelihood of new products being created and introduced (Rochford and Rudeles, 1992), and it is also clear that information requirements are higher for more innovative products (Davis, 1993; Nijssen and Frambach, 1998). Thus while focusing on the consumer to generate new ideas is critical, there is also a need to incorporate a wider perspective.
When it comes to packaging, this is particularly pertinent, as it is the packaging of the product with which most channel members (not just the retailers, but the entire distribution chain) will come into direct contact (summarized in Figure 2), and the packaging plays a number of key roles for these channel members. This creates a need to expand the focus of idea generation when it comes to the development of packaging.

Within the existing NPD literature, Saren and Tzokas (1994) provide some insights into the need for a wider perspective. They effectively highlight risks associated with a customer-only focus, arguing that to focus on the consumer and manufacturer will lead to a product that is viewed in isolation from:

- its context;
- the way it is used;
- and the role of the customer-supplier relationship.

This in turn contributes to misleading views on new products. From this, Saren and Tzokas (1994) developed the tripartite concept. The significance of this approach is that it highlights the reality of any product’s situation. That is, product developers and product testers need to recognize that a product is viewed differently by channel members than by end-users, therefore a focus on the end consumer is likely to be limited in many respects. For example end-users will be concerned about how the product will perform, whereas channel members are more interested in how the product will sell, whether it will be easy to stock and display, and most important, whether it will be profitable. With reference to packaging, this issue is particularly pertinent, as it is the packaging with which channel members will come into direct contact. Thus when the complete ‘lifecycle’ of the product is considered, from the moment it is wrapped, this will lead to the creation of a greater number of additional considerations. At every stage within this lifecycle the packaging itself must meet the needs of each stakeholder. It has a number of important and different functions to perform (although these will differ between products), and its design can affect the performance of each one of them and can potentially positively influence their efficiency and effectiveness as the product is moving through this chain.

More widely within the literature there is already some indication of the importance of forming collaborative relationships with channel partners as a strategy for firms to improve their performance in the grocery sector (Hyvonen and Tuominen, 2007). Indeed, Srivastava et al. (1998) emphasized this point: ‘best products do not necessarily win while the best-networked firms usually do’, and furthermore, Simpson et al. (2001) and Spekman et al. (2002) illustrate how manufacturing, distribution and retailers are increasingly recognizing that the management of their channel activities offers considerable opportunities for firms to differentiate their products, reduce costs and add value for their customers. In the case of packaging, it is necessary to develop the principle of
this concept further than the current literature reflects, due to the key role of packaging in the distribution chain. This means that in new packaging development, FMCG companies effectively need to adopt a wider definition of who the ‘customer’ is, as the packaging can add value for each of them. The next section expands on this view to consider the role of the package to the consumer and the entire supply chain, in new packaging development.

**Intermediaries.** Intermediaries are the first to receive the product/package combination once it leaves the FMCG manufacturer, therefore in the context of this discussion these intermediaries are also referred to as ‘first-tier’ distribution chain customers (as opposed to the retailers who will subsequently come into contact with the product/package after the intermediaries and are therefore referred to as ‘second-tier’ distribution chain customers). The role of intermediaries in product innovation has been discussed in the literature (e.g. Howells, 2006); however, this is largely limited to their role in technology and knowledge transfer. When considering new packaging development, there is a need to consider the intermediary more specifically, as packaging has an important role to play in their logistics, handling and distribution (Bowersox et al., 2002) of the product, and consequently in meeting their needs. Thus the inclusion of intermediaries will highlight new considerations in the development of new packaging ideas, such as weight, size and labelling, which can potentially contribute to the effectiveness of the product packaging for this member of the channel. With reference to their logistics in particular, this requires consideration of the intermediaries’ value chain (e.g. Porter, 1985) and how the packaging can optimize efficiency and effectiveness with regard to their key activities. Some evidence of this is provided by Francis et al. (2008) who illustrate how UK multiple: ‘Asda’ (Wal-Mart operation in UK) develops new products and packaging in association with its suppliers.

It is also worth noting that in some cases the consideration of intermediaries means that it is necessary to take into account the different channels through which products may be distributed. Indeed Ahmed et al. (2005) suggest that this could create new opportunities for the development of different multi-channel packaging offerings. For example wholesalers perform a number of important functions, such as ‘breaking bulk’ so that smaller retailers may purchase amounts suitable to their needs. Therefore the design of, and relationship between, primary, secondary and tertiary packaging (these different types of packaging will be discussed later in the paper) may be particularly important in facilitating this process. Furthermore, when one considers the growth of internet shopping among consumers (Nielsen, 2008), the importance of considering opportunities to improve products for home delivery also becomes apparent. Thus in the development of new packaging it is necessary to consider the channels through which the product/pack will be distributed, as this can create additional opportunities and considerations.

**Retailers.** The importance of considering retailers in NPD is highlighted by the tripartite concept (Saren and Tzokas, 1994) that identifies the need to consider the delivery of the product and the retail space in which the product is sold. In the case of packaging this is critically important, as it can affect key retailing decisions and issues which include allocation of shelf space, in-store displays and merchandising (e.g. Mulhem, 1997). In new packaging development, it is also critical to consider the retailers’ own needs and the retail environment in which the product will be sold. This raises further issues that must be considered, such as the likely positioning of the product within the retail space, the amount of actual space that will be available for it, the type of display the product will be in, and the likely visibility of the product. Developing an understanding of the retailers’ perspective will provide valuable insights into their needs. In addition, developing further
understanding of retailers may also provide new ideas for how the product could be sold and displayed in new and innovative ways. When the context of the retail environment, in which consumers are exposed to thousands of products and a wide variety of stimuli (Schiffman and Kanuk, 1994), and packaging’s important role in grabbing the consumers attention (Sara, 1990), are all taken into consideration the potential value of this insight for product/packaging development becomes evident.

While issues of shelf space and product display are considerations unique to the retailer, the retailers ('second-tier' distribution chain customers) are likely also to have some concerns common to intermediaries ('first-tier' distribution chain customers), particularly those relating to the protection of the product. For example the retailer may desire to simply discard tertiary packaging to display the product, or they may potentially value 'shelf ready' tertiary packaging that can aid in getting the product to the shelf quickly and effectively (thereby lowering costs), as well as using this packaging to display and promote the product in the store. Thus incorporating the perspective of the retailer into the design of the packaging, including their desire to use each layer, is critical in order to ensure the product performs effectively in the store. Indeed, it is important to establish and consider their acceptance criteria for new products (Luo et al., 2007), which is of great significance, as a poorly packaged product that does not meet such criteria may never be accepted by the retailer in the first place, effectively refusing to stock it.

The above discussions provide the rationale for incorporating the distribution chain into the new packaging development process, and this forms the third principle for the conceptual framework, and the following proposition:

**Proposition 3:** Expanding the focus of the idea generation process for the development of new packaging concepts to incorporate the needs of each member of the distribution chain, as well as packaging's role in their activities, will enable a greater number of opportunities to be identified.

**Recyclers.** Considering the supply chain in packaging development is of critical importance, due to the key roles packaging plays to their processes and activities. However, when it comes to the development of packaging there is a need to consider packaging’s entire ‘lifecycle of use’ (highlighted in Figure 2), thus while recyclers are not ‘traditional’ members of the supply and distribution chain there is a need to adopt wider definition of the supply chain, particularly due to the disposable nature of FMCG goods and their packaging. To some degree this is evident more widely within the literature, as there is a fundamental shift in waste management responsibility towards manufacturers, distributors and retailers (Ferguson and Browne, 2001), which is likely to increase in the future. The development of recyclable packaging is therefore an issue of increasing importance, and the importance of packaging on the environment is receiving more attention from consumers (Prendergast and Pitt, 1996). Indeed research by British Market Research Bureau (BMRB)/Mintel (2007), suggests that it is a key issue to grocery shoppers. Issues of particular concern include resource use, energy consumption, pollution, solid waste and litter (Lawson and Wall, 1993).

Bras (1997), as well as others (e.g. Brezet et al., 1994; Hemel and Keldmann, 1996), has provided important insights into the issues of environmental and recycling related considerations in product development; if their work is considered in relation to packaging, particularly the LiDS wheel which explains the key environmental considerations, a number of key issues are identified:

- the selection of low impact materials;
- reducing the amount of material used (weight and volume);
possible improvements in distribution of the product to improve its environmental performance, to incorporate factors such as efficient transport and reuse of packaging;

minimizing environmental impact at the use stage, incorporating factors such as energy consumption, few consumables needed during use, and the use of cleaner consumables;

optimization of lifetime, to ensure the product can be used as long as possible (such as minimizing spillage and stopping food going off);

optimizing the end of life system, to incorporate factors including disassembly, recycling or reuse.

By incorporating these considerations, FMCG firms can improve the performance of the packaging in the respect of the recycler, as well as the environment overall. Indeed Kassaye and Verma (1992) suggest that this issue of balancing environmental concerns with the essential functions of packaging is one of the most difficult tasks facing marketers. For example a reduction in packaging size (an issue of government and EU concern) can cause problems in packaging safety (will it still protect the product?), less advertising space, and ultimately the risk of lower sales revenues (Kassaye and Verma, 1992). Therefore involving the recycler in the NPD process will create a greater understanding of their needs and generate new ideas that may allow more optimal compromises to be achieved.

The above discussions provide the rationale for incorporating this extended distribution chain into the new packaging development process, and this forms the fourth principle for the conceptual framework, and the following proposition:

Proposition 4: Expanding the idea of generation process to incorporate the needs of recyclers, to account for packaging’s lifecycle of use, will enable a greater number of opportunities to be identified.

The multiple layers of packaging

While the preceding discussions have revealed the complex nature of packaging development, and the increased number of views to take into consideration, a review of the packaging literature reveals one final principle that must be considered in the development of new packaging. That is, many FMCG products require a number of layers of packaging in transportation and final use. While this has been detailed to some extent in the preceding discussions it is important to fully address the importance of this issue, as well as the opportunities it presents.

In the case of many FMCG products, including food and drinks, a number of layers of packaging are required, hence it is important to consider in the development of new packaging how the needs of each stakeholder group (in the ‘lifecycle’ of use) may relate, and be relevant to, these different layers. Likewise decisions made for one level may impact another, and will therefore be interlinked. Vidades Giovannetti (1995) highlights these three key types, or layers, of packaging. These layers have already been briefly discussed, but to clarify:

• Primary packaging is in direct contact with the product (e.g. a plastic bag containing cereal).

• Secondary packaging typically protects the product in its primary pack, identifies it, and communicates with the customer (e.g. the cereal box); sometimes this may be disposed of once the product begins to be consumed.

• Tertiary packaging contains the two previous types of packaging and its role normally relates to the distribution of the product (e.g. cereal boxes are typically moved through the distribution
chain on large cardboard trays with plastic protective wrapping). It is worth noting that in some cases products will have more than one layer of tertiary packaging, whose use may vary in different value chains (for example orange juice cartons are often contained in brown cardboard boxes, tertiary packaging, while in the distribution system these boxes are often stored on larger cardboard or wooden ‘punnets’ and are ‘shrink’ wrapped to these).

Depending on the distribution system and processes, any member of the packaging chain may break down and discard one of the tertiary levels of packaging. In packaging development it is important to consider each of these different levels, as they may present different opportunities. For example Gelperovic and Beharrell (1994) highlight that the demands of consumers lead to a need to minimize packaging, due to their environmental concerns, while the demands of the distribution chain may create a need for increasing the amount of packaging (to protect the product through the rigours of the journey). This challenge could potentially be met through the development of more effective tertiary packaging, to provide protection during distribution, while reducing primary/secondary packaging to a minimum. Or indeed it may be possible to remove the need for secondary packaging through the design of effective shelf-ready packaging, which could also aid in promoting the product. Thus considering each of these levels of packaging with regard to the relevant stakeholders (identified in the preceding sections), and prioritizing their relative importance, can represent an opportunity to develop a range of different product/packaging concepts. The development of each of these layers should be integrated to maximize the number of opportunities identified and to ensure the needs of each of these groups are met in the most effective way. This forms the fifth key principle for the conceptual framework, and the following proposition:

**Proposition 5:** A greater number of opportunities for new packaging will be identified when idea generation involves the consideration of the integration between different layers of packaging used on FMCG products.

**A conceptual framework for new packaging development**

From the preceding discussions it is clear that the effective development and design of new product packaging, to maximize opportunities, is a complex process. Furthermore, in many cases, this situation may be complicated further through the involvement of multiple organizations separately involved in packaging design, product filling, and manufacturing packaging, as well as recycling and distribution. Figure 3 illustrates the interactions between the various parties within the FMCG supply chain. To develop effective new packaging ideas it is necessary to conduct research with each of the stakeholder groups identified in Figure 3. In presenting this framework it is important to recognize that in some cases the consideration of each of these stakeholders, throughout this ‘lifecycle’ in packaging development, may cause compromises and conflicts, due to their differing needs. The process will therefore involve balancing the different roles packaging must try to fulfil.

Given the above discussions it is clear that when both the customer and full supply chain are considered (and the requirements of all these ‘stakeholders’), this generates a much wider range of demands on packaging. Consideration of the needs of each of these stakeholders in relation to each of the layers of product packaging further increases the number of opportunities that may be identified. The five key principles identified provide a framework from which ideas can be
developed. This is conceptualized in Figure 4 as the five faces of packaging and graphically captures much of the preceding discussions. To summarize, the key propositions are based on the following:

1. Developing new packaging requires the consideration of customers’ needs (e.g. Di Benedetto, 1999; Calantone et al., 2002; Nambissan, 2002; Rogers et al., 2005) with regard to the product-packaging combinations (Silayoi and Speece, 2004; Ahmed et al., 2005).

2. Packaging development needs to incorporate the potential to generate new opportunities with regard to its role in communicating with the consumer (Grossman and Wisenblit, 1999; Prendergast and Pitt, 2000; Wells et al., 2007).
3. Successful product development needs to incorporate a range of perspectives within the supply chain (Saren and Tzokas, 1994; Bowersox et al., 2002).
4. Consideration of the packaging ‘lifecycle of use’ highlights the need to consider the recycler in new packaging development, which is of increasing importance (Prendergast and Pitt, 1996).
5. Product packaging has multiple interacting layers (Vidales Giovannetti, 1995).

These propositions recognize that success in the marketplace is much more likely if acceptance is achieved with all stakeholders; in fact if intermediaries and retailers are not sufficiently considered the product may not even reach the market. It is this wider range of product packaging requirements that can help develop many more new product opportunities, and may improve the subsequent performance of the packaging developed.
Discussion

This paper has demonstrated the importance of packaging to many marketing disciplines and that this is not currently fully recognized in the literature. Furthermore, products in the FMCG sector are characterized by a high level of packaging that is inseparable from the core benefit/product itself, further enhancing its importance. Packaging development therefore represents an under-utilized opportunity for improving product performance and success, yet the existing literature provides few insights in this respect. Therefore the primary purpose of this paper was to provide a theoretical framework for the generation of new packaging ideas.

The framework developed in this paper enables the identification of new opportunities for packaging products in a more systematic way than has been evidenced in the past, and accounts for the unique nature of packaging. The conceptual framework offers a different conceptual approach for the development of packaging opportunities. This framework should be seen as a preliminary attempt at addressing an issue that has significant implications for marketing theory. Empirical testing of the conceptual framework and propositions that have been put forward should follow. Nonetheless, based on this conceptualization of NPD, a number of implications can be highlighted.

First, the framework contributes further to the debate concerning NPD, and performance can be enhanced in this vital area. It provides a means for understanding the role packaging development plays in the NPD process, and how this may lead to many new opportunities to enhance the product offering. For example, it highlights that the focus of marketing intelligence must be throughout the value chain, rather than just focusing on the end consumer to capture new ideas. The development of new packaging to enhance product performance requires this expanded multiple perspective to maximize the number of opportunities identified. The framework further contributes to our understanding by highlighting that the different levels of packaging involved throughout the product's lifecycle of use must be considered in development (including identifying opportunities through the interaction between each of these layers).

Second, the arguments presented in this paper highlight that while much has been written in the literature on the role of the consumer within NPD, there is little written about the role of the supply chain and recyclers. With regard to most products, this is understandable, but in the case of FMCGs there is a need to incorporate this wider perspective. The existing literature fails to provide an adequate breakdown for the conceptualization of NPD due to its focus on the consumer, and there is clearly a need for additional research into these areas of NPD.

Third, the number of roles packaging performs means that it is an important tool in the context of the FMCG industry. However, with these varied roles comes complexity, which has been further complicated with the rise of increasing environmental concerns and considerations in the modern marketing environment. Kassey and Verma (1992) suggest that this issue of balancing environmental concerns with the essential functions of packaging is one of the most difficult tasks facing marketers. While the focus of the conceptual framework is on generating ideas, and thus evaluating an optimal balance is not within the remit of this paper, it is important to consider that through the wider more holistic perspective proposed in this paper it is more likely that new opportunities may be identified that will help to achieve an optimal compromise in this respect.

Finally, one outcome of this conceptual paper is identification of the need for further research into how NPD is currently undertaken and the research inputs into this development process. Research is also required to fully evaluate the role of packaging to, and understand the priorities of, each of these groups in relation to primary, secondary and tertiary packaging. Further research is also necessary to understand the potential conflicts in meeting each stakeholder's needs, as well as
how these could be effectively balanced and managed. Research could evaluate the potential for the development of multi-channel variations to product packaging solutions, to meet the needs of different channel variations.

Note
1. FMCGs are low priced items that are used with a single or limited number of consumption occasions (Baron et al., 1991).

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Appendix 6.1: Van Der Ven’s Diamond Model for Case Analysis (2007)
Appendix 6.2: Questions for Phase 1 Interviews with FMCG firms

Questions for FMCG firms:

- Investigating role of packaging.

Name:

Position:

Contact details:

Company & its size:

1. What is [the company’s] view on packaging and new product development? (Is packaging seen as a driver of opportunities?)

2. How and when is new packaging development considered? (Regularly? General types of situations?)

3. What is packaging’s role in the NPD process and at what stage does it fit? (degree of attention/commitment & degree to which integrated?)

4. Who is involved in new packaging development? (who are the key decision-makers)

5. How is packaging managed within the firm (responsibility, team, team size, spend/budget - how do each compare to NPD as a whole?)?

6. Do you have a packaging development strategy? (what is it?)

7. How much time and money is put into packaging? (do they do R&D, team size, spend/budget - how each compare to NPD as a whole?)

8. What do you consider to be the primary focus/attention packaging receives within your organisation/SBU? (e.g. cost/innovation?)

9. Who is responsible for assembling knowledge & generating new ideas? (Receptive to new ideas?)

External:

10. What role do external parties/networks play (is it outsourced, to who and how?)?
11. What type of relationship do you have with the packaging suppliers & design agencies (close/collaborative, knowledge sharing, idea sharing, joint development, distance)? Why?

12. What other sources of external knowledge are used (suppliers, distribution, trade bodies, design agencies, customers)?

13. When are they contacted in NPD/how do you use each party?

14. What role do consumers play/how integrated into development?

15. Are there any issues and areas for improvement (in your opinion)?
Appendix 6.3: Questions for Phase 1 Interviews with Packaging Suppliers

Questions for Packaging firms: Investigating role of packaging.

Name:
Position:
Contact details:
Company:
Company size:

1. What is your relationship with your customers/how do you work with them?
   Why? (How strong - how do you work together/type of relationship? joint NPD, collaboration)?

1. How do you think your customers perceive packaging, and the suppliers?

2. In your experience, what do you believe to be focus of most of your customers in developing/sourcing new packaging (e.g. cost/innovation)?

3. When do you normally get contacted within their NPD processes & how much involvement do you have (do you think integral to NPD)?

4. What is your typical primary point of contact (e.g. buyers etc)?

5. What happens when/if you approach firms with new ideas?

Internal:

6. How do you generate new ideas/technologies (areas for improvement?)?

7. Do you involve the consumer in development & how do you understand their needs?

8. How do you access external knowledge and be sure you are aware of your customers’ needs, and latest developments (type of relationships with each group)?
9. Who is responsible for NPD, gathering information & managing R&D (& innovation)?

10. How is NPD/R&D process managed within your organisation?

11. Issues/frustrations/challenges for you/industry?
Appendix 6.4: Questions for Phase 1 Interviews with Design Agencies

Questions for Design Agencies: Investigating role of packaging industry and NPD in FMCG.

Name:
Position:
Contact details:
Company:
Company size:

1. What is your relationship with your customers/how do you work with them? Why? (How strong - type of relationship? Joint NPD, collaboration)?

2. How do you think your customers perceive packaging, and the design agencies?

3. What is the focus of most of your customers in sourcing/developing new packaging (e.g. cost/innovation)?

4. When do you normally get contacted within their NPD processes & how much involvement do you have (do you think internal to NPD)?

5. What is your typical primary point of contact (e.g. buyers etc)?

6. What happens/what is the attitude when you approach customers with new ideas?

Internal:

7. How do you generate new ideas/technologies (areas for improvement?)?

8. Do you involve the consumer in development & how do you understand their needs?

9. What other parties do you work with to generate new ideas and technology (suppliers, customers, trade bodies, universities etc)?
10. How do you make sure you are aware of latest developments (type of relationships with each group)?

11. Who is responsible for NPD, gathering information & managing R&D (& innovation)?

12. How is your process managed & who is involved (e.g. designers, engineers etc)?

13. Do you undertake R&D/technology development (or where do you source from)?

14. Issues/frustrations/challenges for you/industry?
Appendix 6.5: Outline of Case Study Protocol

1. Introduction - Research Aim and Questions to be Addressed

1.1 Context: Notes

The primary aim of this phase is to understand the NPD process utilised by firms to develop new products and packaging, and to validate or further refine the framework (developed from phase 1). However, this must also provide insight into the key issues identified in the first phase:

- Understanding why packaging development is not a priority, and instead considered later in new product development. There are also key differences in how packaging is managed compared to perceptions of how it is managed.
- The focus of packaging development is on cost and design/marketing communications; and firms are risk averse to changes.
- Relationships and outsourcing seem to be key, but can cause issues in packaging development.
- The issue of absorptive capacity causes problems in collaboration.

1.1 Research Aim

To develop a framework that conceptualises the management of packaging in food and drinks manufacturers and brand owners’ NPD.

1.2 Research Questions:

RQ 1: How do food and drinks firms manage the development of new packaging within their NPD process?

RQ 2: How does packaging development contribute to the generation of new product opportunities?
1.3 Propositions

Proposition 1: An absence of internal packaging ‘champions’ will lead to a skin-deep or body modification level of development, due to the lack of an individual actively pursuing new opportunities for product innovation.

Proposition 2: A lack of staff with technological packaging capability will result in opportunities for external packaging development and innovation being overlooked due to a lack of absorptive capacity, which will in turn lead to a propensity towards skin-deep and body modification developments.

Proposition 3: A lack of packaging specialists will lead to a myopic view of the meaning of ‘packaging development’, resulting in the development of innovative new packaging being entirely overlooked (and a subsequent focus on skin-deep and body modification in development).

Proposition 4: The degree to which the manufacturing process is viewed as a constraint will harm a firm’s ability to explore opportunities for technical packaging change: leading to an emphasis on incremental changes at a skin-deep and body modification level.

Proposition 5: A high level of concern about the impact of packaging change on the retailer, and their display of the product, will result in skin-deep and body modification levels of change being considered primarily.

Proposition 6: The propensity to collaborate with suppliers will be influenced by the packaging development orientation (skin-deep, body modification, or format change orientation). A skin-deep or body modification orientation will lead to a greater propensity to collaborate with design and marketing firms in development, resulting in technical opportunities not being explored, whilst an orientation towards format change result in a greater propensity to collaborate with packaging suppliers.

Proposition 7: Where buyers have a high level of power within packaging decision-making, this will result in an emphasis on cost: which will in turn lower the attention technical packaging development, and opportunities for innovation.

Proposition 8: An emphasis on skin-deep and body modification development will result in a consumer-driven approach to packaging development. Subsequently, the opportunities presented by packaging suppliers’ technological development will receive a lower level of attention.
2. **Data Collection Procedures**

2.1 **Sites to be visited**
Headquarters, UK SBU headquarters, or key production plants.

Specific details for case organisation:

2.2 **Contacts**
Head of packaging, packaging managers, product development managers, technical packaging manager, category manager, buyers, production staff/manager, or marketing personnel.

Specific details for case organisation:

2.2.1 **Note any new contacts made or provided**
Details:

2.3 **Data Collection Plan**
Key activities for interview:

- Identify suitable embedded cases within the organisation or SBU.
- Draw models of the NPD process for cases discussed, asking the interviewee to comment where possible.
- Identify structure key decision-makers, and point at which decisions were made within the firm/department, and establish the role/involvement of packaging staff in NPD.
- Note all inputs into the process.
- Gain insights into any problems experienced in development.
Preparation Required:

- Read through protocol prior to interview.
- Read up on the company: website and recent trade articles.
- Identify its main products and product lines, plus any recent products launched that may be discussed.
- If company was included in stage one of interviews, read notes to prepare for interviews.

2.4 Outline of Case Study Report

- Identify and provide details on one or more individual cases (in line with the case selection rationale), ideally discussing:
  - A product development project.
  - A packaging development project (successful or unsuccessful).
- Identify the type of packaging change, utilising the typology.
- Analysis using the framework generated in Phase 1.
- Discussion of the process, key activities, inputs, and any other relevant factors.
- Create diagrams and models as a summary of the structure of the NPD process.
- Identify responsibilities within the new product teams, as well as the key team members and where relevant their influence.
- Identify external inputs, if any, into the process; the stage at which the external partners were involved, and the nature of their involvement.
- Identification of any key factors influencing the process.
3. Case Study Interview Questions

1. With reference to a recent [relevant] product development project, describe what happened from beginning to end.
   Note, discussion should include:
   a. Idea & source
   b. Concept stage
   c. Analysis
   d. Development (processes e.g. kitchen trials, taste tests, recipe tests, scale up, pilot plant)
   e. Testing
   f. Launch

2. What factors drove the development of the new product? (e.g. costs, personnel, the production line/investments etc)
   a. Why did these factors drive the development?
   b. What was their influence?

3. What evaluations were included in the process and where do they fit?
   a. What personnel were involved and at which stages?

4. Where did packaging fit within this process and why?
   Note, discussion should include: where it begins to be considered, the development of packaging (not labeling)

5. How was the format decided upon?
   Note: Who was responsible for, and involved in, packaging decision-making?

6. What was the emphasis of the packaging activities?
   Note: e.g. label changes, structural, or technological development.

7. Did any problems arise with the packaging developed?

8. Think back to a recent [relevant] successful packaging development you were involved in. Characterise what happened (as above).

9. With regards to packaging development:
   a. Who was responsible?
b. Who set the brief, and how was it defined?
c. How were new pack ideas/changes identified (whether to do them)?
d. What drove the new/change to packaging (e.g. cost, opp’s etc)?
e. What other factors impacted on the change/project?
f. What other decision-makers influenced the project, and what was their influence?

10. What role did external parties play in the process, and where do they fit within the process?

General questions to address:
9. When and why are packaging changes considered? (constantly reviewed)
   Degree of consideration in NPD? What about format changes? How do changes in the process changes impact on this?

10. To what degree is packaging seen as a driver of NPD opportunities?

11. Consumers role/input (both generally and in regards to packaging)?

12. How does the product and packaging development process differ by product area/what factors cause differences in the process (e.g. newness, product category, production process etc)?
Appendix 6.6: Detail on the Design of the Case Study

Protocol: Skills and the Protocol

1. Procedures for Skills Required

In order for data collection and interviewing to be effective, it is important that the researcher possesses the required skills and understanding. According to Yin (1994) this includes five particular considerations or skills. Table 7.3 identifies the skills and knowledge, and then relates them to the strategies and considerations incorporated in the research to ensure these were adhered to.

Appendix Table 6.1: Skills and understanding required (based on Yin, 1994)

<table>
<thead>
<tr>
<th>Skills and understanding required (based on Yin, 1994)</th>
<th>Considerations and strategies adopted in the research to account for the identified factors</th>
</tr>
</thead>
</table>
| The ability to ask good questions                     | -Analysis of literature & phase one to define questions  
|                                                      | -Preparation of interview guide and questions  
|                                                      | -In depth knowledge and understanding of the researcher into the subject matters and issues (all interviews conducted by the researcher) |
| Then in turn, the ability to interpret the responses appropriately | -Prior knowledge from phase one and from preliminary research  
|                                                      | -Prior interviewing experience (based on prior research units studied, experience as a market researcher, and skills developed in phase 1) |
| Being a good listener                                | -Prior interviewing experience (based on prior research units studied, experience as a market researcher, and skills developed in phase 1) |
| The capacity to be flexible and adapt the interview/data collection based on the responses and situation | -Prior interviewing experience (based on prior research units studied, experience as a market researcher, and skills developed in phase 1) |
| A good understanding of the issues being studied     | -Prior knowledge from secondary data collection, phase one, and from preliminary research  
|                                                      | -Secondary data collection on each organization to build background understanding of the cases |
| Unbiased preconceptions or notions                    | -Based on prior research methods units studied (research methods unit at masters level, attendance of research training workshops at University of Portsmouth, and research training at the British Academy of Management)  
|                                                      | -Prior interviewing experience (experience as a market researcher, and skills developed in phase 1) |

In addition to the above, the researcher also focused on being able to listen carefully, note important responses, then adapt the interview format to ask appropriate questions in order to address key issues highlighted and provide clarification. Becker (1998) and Yin (2009) both suggest that this is of critical importance in order to deal with discrepancies, as well as achieve greater insights.
2. **Application of Procedures**

The development of the research protocol is critical in case study research (Yin, 1994; Levy 1988; Tellis, 1997). Indeed, use of protocols, alongside multiple sources of data (Yin, 1984), can ensure accuracy and aid in triangulation (Stake, 1995). This is critical, as triangulation can be used to confirm the validity of the processes. Furthermore, the protocol is particularly important in helping to focus the investigator on the main tasks and goals. The protocol incorporates the development of an instrument for data collection, rules, and procedures to enhance reliability (as recommended by Yin, 1994). Yin (1994) suggests it should include the following sections (adapted from Tellis, 1997): an overview of the case study project, field procedures, case study questions, and a guide for the case study report. Based on these considerations, a case study protocol was developed for this research. The protocol was structured based on the above areas, but adapted slightly into three main sections:

1. **Introduction** - this focused on the context of the research, particularly in regards to its phase, the research aims, questions, and propositions.

2. **Data collection procedures (incorporating notes on reporting)** - this addressed the site or sites to be visited for each interview, the key contact or contacts (providing room for any additional contacts made to be noted), the plan for the data collection, and the outline of the proposed case reports.

3. **The interview questions** - this focused on the specific questions to be asked of each interviewee or interviewees. These covered each area required; within the interviews, decisions were made as to the degree to which each question could be answered by the interviewee, and if necessary, it was noted that additional information may be required from other respondents.

Within this report it was not considered relevant or necessary to incorporate relevant readings or issues, due to the researcher’s detailed knowledge and involvement throughout the process.

Whilst the first three sections of the protocol are relatively self-explanatory, in terms of the need to incorporate them, it is worth briefly noting that Yin (1994) highlights the need to consider the format of the report from the start. This results from the lack of a widely accepted reporting format (Tellis, 1997), which causes many researchers to focus on a common journal format (Feafin, Orum, Sjoberg, 1991). Therefore, an understanding of what the key sections would be would enable the researcher to ensure the relevant data would be collected for the write-up.
3. Ethics

Ensuring ethical conduct was an important consideration within the research (Ethics approval form provided in appendix 6.7). The principle of justice in research translates practically into the need for informed consent. In this respect, the following had to be ensured: the disclosure of the purpose of the research, its themes, and expectations of the participants. Fundamentally, it was also necessary to ensure that interviewees agreed to participate. Ensign (2003, p. 47) has suggested that “In qualitative research, breach of confidentiality and the resultant invasion of privacy are usually the greatest risks of harm”. This is particularly important in business interviewing, as the interviewees’ rights must be protected; therefore, competitive data or data that would potentially place them at risk must not be disclosed. As a result, confidentiality and anonymity were key. In this research, the following steps were taken:

- The overview section of the case study protocol provided the relevant information to the interviewees.
- Each interviewee was sent a copy of the cases as they were to be written up in the thesis, in order for them to review this and confirm that they were happy.
- Each interviewee and organisation was ensured anonymity, unless otherwise agreed. In any case, the interviewee’s name was not revealed in the write-up.

The combination of these steps, alongside other strategies and practices detailed elsewhere in this chapter, aimed at ensuring the research was ethically conducted.
Appendix 6.7: Details on Ethics Approval

PBS ETHICS APPROVAL V3: 2007

Ethical Review Checklist – Staff and Doctoral Students

This checklist should be completed by the researcher (PhD students to have DoS check) and sent to Sharman Rogers who will coordinate Ethics Committee scrutiny.

No primary data collection can be undertaken before the supervisor and/or Ethics Committee has given approval.

If, following review of this checklist, amendments to the proposals are agreed to be necessary, the researcher must provide Sharman with an amended version for scrutiny.

1. What are the objectives of the research project?
This study aims to investigate the incorporation of packaging within the new product development process of Fast Moving Consumer Goods Firms, which will involve identifying the key managers involved in the process within FMCG firms (particularly focusing on the food and drinks sectors of the industry). Furthermore the research will investigate the process by which these firms develop new packaging. The study will be undertaken within the UK, involving involved in the production of both own brand (retailer) and branded products.

2. Does the research involve NHS patients, resources or staff? YES / NO (please circle).
If YES, it is likely that full ethical review must be obtained from the NHS process before the research can start.

3. Do you intend to collect primary data from human subjects or data that are identifiable with individuals? (This includes, for example, questionnaires and interviews.) YES / NO (please circle)
If you do not intend to collect such primary data then please go to question 14.
If you do intend to collect such primary data then please respond to ALL the questions 4 through 13. If you feel a question does not apply then please respond with n/a (for not applicable).

4. What is the purpose of the primary data in the dissertation / research project?
To gain insights into the management of packaging within new product development projects of food and drinks firms. These insights to be gained are focused on the projects themselves, as opposed to understanding the organisations set product development process and its management. Hence interviewees will be questioned within a small number of organisations, approximately four, in order to develop case studies. Some secondary data may also be collected in order to achieve the main objectives.

5. What is/are the survey population(s)?
Interviews will be conducted with managers within food and drinks firms operating in the UK. The data collection will focus on relevant staff involved in the management of product and packaging development. This will be done in two stages.
• The first stage will focus on gaining an overview of the management of product and packaging development within the supply chain, involving depth interviews with managers within the FMCG industry, packaging industry, and packaging consultancy firms. This will not only provide an overview, but will also enable the interviews in the second phase to be targeted at appropriate individuals.

• The second stage will focus on the collection of data for the case studies, a total of around four cases. This data collection will involve the managers involved in this process, based on the insights from phase one of the research.

6. How big is the sample for each of the survey populations and how was this sample arrived at?

The research will be conducted by interviewing managers within organisations with relevant knowledge and experience with regards to the topic (e.g. involved in product and packaging development). Interviewees will be selected by a convenience sampling method. There will also be some use of snowball sampling, where appropriate interviewees will be identified through other individuals involved in the research. The exploratory nature of the research will mean that only a small number of individuals will be involved in the research. Furthermore the nature of data collection in a business setting is likely to limit the number of interviewees involved, due to time constraints, difficulties in gaining access, and the difficulties of scheduling interviews in the workplace setting.

7. How will respondents be selected and recruited?

Interviewees will be selected based on the relevance of product and packaging development to their job role and position. The organisations will be selected to provide an overview of packaging management within the development of both branded and own brand products. The selection of interviewees will also be aided by the first stage of the research, which will aim to develop contacts (although the researcher already has some existing contacts in the sector). Furthermore the first stage will aid in identifying the types of individuals that need to be involved. In addition, the literature review will also shape the respondents selected, as prior research has identified the key departments involved in NPD, particularly individuals from R&D, marketing, buyers, sales force staff, and packaging staff.

8. What steps are proposed to ensure that the requirements of informed consent will be met for those taking part in the research? If an Information Sheet for participants is to be used, please attach it to this form. If not, please explain how you will be able to demonstrate that informed consent has been gained from participants.

The interviews will make use of a case study protocol, which will include an information sheet in order to brief the interview respondents on the purposes of the research, and the subjects to be investigated. Discussions will be held with the interviewees in order to ensure they fully understand the purposes of the research and how the data will be used. Consent will also be confirmed either by email or voice recording in the interviews. Debriefing will also be provided through a summary document comprising a synopsis of the study findings.

9. How will data be collected from each of the sample groups?

Interviews will be the primary method of data collection, with interviews being conducted with appropriate managers within FMCG organisations, as well as other organisations involved in the
development of packaging (including design agencies and packaging suppliers). The interviews will be conducted in a semi-structured manner, using the interview guide that forms part of the case study protocol. The first phase of the research will also inform the questions and topic areas to be addressed in the second phase.

10. How will data be stored and what will happen to the data at the end of the research?
Data will be stored on the researchers computer, and in the notes taken by the researcher at the interviews. Both will be stored by the individual, and will not be shared with other groups, other than any sharing agreed by interviewees (such as feeding results back to the organisations involved, or gaining approval from the interviewee that the write up provides an accurate account of the data collected). The raw data will be destroyed at the end of the research, once the final PhD document is approved by the external examiners.

11. How will confidentiality be assured for respondents?
The data collected in the interviews, alongside any secondary data provided by respondents, will be discussed with the interviewees throughout the interview process, in order to identify information that is considered to be confidential and that is not to be revealed (or to what degree and in what contexts it can be revealed or written up). All the agreed data will be written up and provided to the interview respondent once the writing up process is completed, in order for them to approve the data and ensure the are satisfied that no confidential data has been revealed.

12. What steps are proposed to safeguard the anonymity of the respondents?
The specific details of the organisations involved in the research, and the interviewee respondents themselves, will not be revealed within the writing up of the research, unless this is otherwise agreed in writing by an appropriate representative for the organisation. Once again, the process of providing the interviewees with the case/interview write up will also ensure that the interviewee is satisfied that their anonymity is safeguarded.

13. Are there any risks (physical or other, including reputational) to respondents that may result from taking part in this research?  YES / [NO] (please circle).

   If YES, please specify and state what measures are proposed to deal with these risks.

14. Are there any risks (physical or other, including reputational) to the researcher or to the University that may result from conducting this research?  YES / [NO] (please circle).

   If YES, please specify and state what measures are proposed to manage these risks.1

1 Risk evaluation should take account of the broad liberty of expression provided by the principle of academic freedom. The university’s conduct with respect to academic freedom is set out in section 9.2 of the Articles of Government and its commitment to academic freedom is in section 1.2 of the Strategic Plan 2004-2008.
15. Will any data be obtained from a company or other organisation? [YES] [NO] (please circle)
   For example, information provided by an employer or its employees.

The data for this study will be collected from Fast Moving Consumer Goods firms, and other supply chain partners, within the UK. The information will be collected from appropriate managers within these firms using the interviews, as well as any additional secondary data provided.

16. What steps are proposed to ensure that the requirements of informed consent will be met for that organisation? How will confidentiality be assured for the organisation?

Each interviewee is an established contact of the researcher. The purposes of the research, its reporting, and how the data will be used, will be discussed prior to interviews by both telephone and email communications. Confirmation will then be sent either through email or within the interview (recorded or prior to commencing questioning), from the interviewee. All responses will be treated confidentially. The data collected will only be used for the purpose of this research. Furthermore, each interviewee will be provided with a copy of the data, for them to review, prior to the research project being submitted. In addition it has also been agreed with the organisations involved that presentations may be made to appropriate members of staff, in order to provide feedback on the findings, validate the data, and ensure that any concerns with the data collected are resolved prior to the information being disclosed in the thesis.

17. Does the organisation have its own ethics procedure relating to the research you intend to carry out? [YES] [NO] (please circle).

   If YES, the University will require written evidence from the organisation that they have approved the research.

18. Will the proposed research involve any of the following (please put a \checkmark next to ‘yes’ or ‘no’; consult your supervisor if you are unsure):

   - Vulnerable groups (e.g. children)? [YES] [NO] \checkmark
   - Particularly sensitive topics? [YES] [NO] \checkmark
   - Access to respondents via 'gatekeepers'? [YES] [NO] \checkmark
   - Use of deception? [YES] [NO] \checkmark
   - Access to confidential personal data? [YES] [NO] \checkmark
   - Psychological stress, anxiety etc? [YES] [NO] \checkmark
   - Intrusive interventions? [YES] [NO] \checkmark
19. Are there any other ethical issues that may arise from the proposed research?

No
The member of staff undertaking the research should sign and date the application, and submit it directly to the Ethics Committee. However, where the researcher is a supervised PhD candidate, the signature of the Director of Studies is also required prior to this form being submitted.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Christopher Simms</td>
</tr>
<tr>
<td>Director of Studies</td>
<td>Paul Trott</td>
</tr>
<tr>
<td>Date</td>
<td>December 15th 2011</td>
</tr>
</tbody>
</table>

Approval by Ethics Committee

I/We grant Ethical Approval

FREC

Date

AMENDMENTS
If you need to make changes please ensure you have permission before the primary data collection. If there are major changes, fill in a new form if that will make it easier for everyone.
If there are minor changes then fill in the amendments (next page) and get them signed before the primary data collection begins.
Dear Chris

Following resubmission, the Committee is content that the remaining concerns have been addressed and has approved your Ethics application ref E169.

Best wishes,

Sharman

Dear Sharman,

Sorry I haven't got back to you sooner. I have made some changes that I believe overcome the issues highlighted below. I have attached the unsigned word copy, I would like to get this approved in principle if possible (rather than getting Paul to sign multiple versions, as further changes may be required from the committee)? Look forward to hearing from you.

I also attach the information sheet.

BW,

Chris

Sharman Rogers
Business Services and Research
Portsmouth Business School
T: +44(0)23 9284 4202
What we offer business:
Services for Business
http://www.port.ac.uk/research/ceri
Talent Development:
http://www.port.ac.uk/departments/faculties/portsmouthbusinessschool/talentdevelopment
Events and Open Evenings
http://www.port.ac.uk/pbsevents
Appendix 7.1: Table providing greater detail of categories, themes and dimensions within the key findings. This is divided up into each main group of interviewees.

(Displayed on the following page for presentation purposes)