

Opening the Business Network -Reconsider, Reinvent, Renew-

Bo Rundh
Karlstad University
Department of Business Administration, S-651 88 Karlstad University
Sweden
e-mail:Bo.Rundh@kau.se

Bo Rundh

Abstract

Purpose: The increasing global business has forced many firms to reconsider what contributes to their competitive advantage. This paper addresses business thinking about the 'core product' and marketing strategy in a paper packaging supply chain.

Research method: Aspects of the packaging industry and market are reviewed. Four case studies covering different packaging board materials in the supply chain are presented and analysed. Information in the case studies is received by interviews and secondary material from the firms. Even field visits are done.

Research findings: The competitive situation may force the single firm to reconsider its prevailing business network by opening it for new ideas from alternative sourcing. Re-evaluating and reconsidering the sources of supply might encourage the firm to search for other or better solutions for the prevailing production outcome or processes used. This re-evaluation can increase the properties of the product and give a better cost position for the firm in relation to existing competitors. The source of the advantage can be created by a new design and manufacturing quality, simplification in the process or raw material used in the product. New properties can also create market opportunities by reaching new market segments with a product.

Main contribution: Opening the business network for reconsideration and renewal of business thinking will become a necessity for firms to stay competitive in a rapidly changing business environment. The basis of competitive advantage requires meeting customer's needs in a way that is superior to competitors. Among factors leading to competitive advantage are better user convenience, better in-use characteristics and superior design. The competitive advantage may result from reinterpretation of product functions or emphasis on one of its functions.

Keyword: Business network, marketing strategy, packaging

Introduction

In the era of global business when products and services can be sold in ways that were not possible in the past, firms need to compete not only within the domestic market, but also to fight for market shares globally. This paper addresses issues concerning the necessity to reconsider and finding alternative solutions to business problems in an international context. Taking examples from the packaging industry four different product case studies are discussed in relation to an international packaging supply chain. While most scholars agree that a firm need some form of competitive advantage to succeed, they do not necessarily agree on what the phrase competitive advantage means (Barney, 1992; Peteraf, 1993; Slater, 1996). The competitive situation may force the single firm to reconsider its prevailing business network by opening it for new ideas from alternative sourcing (Kotabe and Murray, 2003). Re-evaluating and reconsidering the sources of supply might encourage the firm to search for other or better solutions for the prevailing production outcome or processes used. This re-evaluation can increase the properties of the product and give a better cost position for the firm in relation to existing competitors.

The Packaging Market

Packaging is an important business both in Europe and in the rest of the world. The nature of packaging is such that it is interlined with all other industries. The packaging industry can not exist on its own, but only as an integral part of other industries. The role of packaging is vital for the commercial success in many areas for both consumer and industrial products since it protects the product, provides information and supports the marketing for fast moving consumer goods. The global packaging industry is one of the world's largest and most diversified manufacturing sectors valued at £300 billion in 2001. The consumer market dominates the global packaging industries accounting for 70 percent of the total sales, while industrial packaging has an estimated share of 30 percent. The food industry is the largest single end-use market estimated at 35 percent share of the global packaging industry (Packaging Federation, 2004a). Paper and board packaging has remained the most important sector of the packaging industry depending on its ease of use, light-weight, strength, cost, printability and possibilities for recycling.

The Packaging Industry

The core of the packaging industry is the manufacturer of packaging material and packaging machinery, but in the business network there are also many sub-contractors depending on the end use of the products. This study focuses on the manufacturing part of the packaging industry, in this case the supplier of raw material to the converter. The complicated structure in the packaging industry can be explained by the composition of suppliers of raw material and converting equipment, packaging converters, their suppliers and their customers in the following stages such as the packer/filler and the retailers. There can also be several steps of distributors before the packed product reaches the end customer in the supermarket. The main customers are the companies who pack or fill their products and a lot of development work is made in order to meet their requirements.

Theoretical Points of Departure

Different researchers discuss diverse functions of packaging and some of them relate either to logistic or marketing functions (Prendergast and Pitt, 1996). Several factors emphasize an increased importance for packaging as a marketing tool. Another factor is growing management recognition of the capacity of using packaging to create differentiation and identity for homogeneous consumer non-durables (Underwood et al., 2001).

The Multifunction of Packaging

The main purpose of packaging is to protect the content in the package from the outside environment, but packaging also carries out many other functions such as information to customers and meeting legal requirements. It sometimes also aids the use of the product (re-closure the content) or adds value to the product by being re-usable as a container for different purposes. Previous research in the packaging field (Schwartz, 1971) focused on the general features and the role of packaging design (Prone, 1993; Vasquez et al., 2003). Other scholars have focused on the communicative aspects of

packaging (Underwood and Ozanne, 1998) and a need for understanding perceptual processes for packaging design by Nancarrow et al., (1998). Despite these studies little is known about the managerial aspects on marketing strategy.

The Packaging Supply Chain

A company's success in business markets depends to a great extent on its relationships with customers and suppliers. In most industries the relationship is built up during considerable time. The relationship between different companies can be explained over a continuum from pure transactional relationships to collaborative relationships or partnerships. The working relationships are embedded in business networks comprised of connected relationships (Håkansson and Snehota, 1995). Working relationships and business networks are complex phenomena that also exist at multiple levels. A business network is a set of two or more connected business relationships. Connected means the extent to which exchange in one relation is contingent upon exchange (or non-exchange) in the other relation (Anderson et.al. 1994). Two connected relationships can also be directly or indirectly connected with other relationships as a part of a larger business network. A focal relationship can also be connected to several different relationships that either the supplier or customer has, where some are with the same third parties. A lot of research has been devoted to explain relationships and business networks (Easton, 1992; Håkansson and Snehota, 1995). The business network can be analysed by using a model of three components – *actors*, *activities* and *resources* (Håkansson and Johansson, 1992). Actors are companies such as suppliers and customers that perform activities and control resources. Actors perform activities such as transactions and create value by transforming these resources in the mind of the customers. Resources can be of many kinds and refers to anything that actors explicitly value for their business processes. This means that resources can take many forms such as technology and technical know-how, equipment, personnel or capital for investments which the company can use to generate greater value for the company itself or other stakeholders. In some situations a company can possess a given resource for strategic purposes, but may instead look for other companies to develop the resource collaboratively. This can be in the form of a partnership or an alliance. Iansiti and Levien (2004) argue that strategy is becoming, to an increasing extent, the art of managing assets that one does not own (p.1). In a framework of the supply chain management literature Tan (2001) argues that in a truly 'integrated' supply chain, the final consumers pull the inventory through the value chain instead of the manufacturer pushing the items to the end users (p.40). Harland (1996) explain supply chain structure as a dynamic interconnected supply network, whereas Hewitt (2000) describes a development stage beyond integrated business networks as demand chain communities. The focus of this paper is the evolving structure of the supply chain and how main actors are using the resources for the creation of competitive advantage. This is in line with Cooper et.al. (1997) how describe the integration of business processes across the supply chain as a fundamental part of supply chain management.

Actors in the Supply Chain

In a paper supply chain there are different actors involved at each added value level. In the first stage the producers are depending on different suppliers of raw materials. The dependence on external actors is depending on the grade of vertical integration in the following stages of the supply chain. This is highlighted when it comes to further converting or added value processes such as lamination or coating of different materials. The vertical integration can be both in the form of a technical or a commercial integration in the supply chain. In SCM research literature the traditional purchasing and logistic functions have evolved into a broader strategic approach to materials and distribution management known as supply chain management (Stank and Goldsby, 2000; Alvardo and Kotzab, 2001; Tan, 2001).

Activities in the Supply Chain

From a theoretical point of view activities occur when one or several actors combine, develop exchange or create resources by utilising other resources (Håkansson and Johansson, 1992). These activities take the form of *transforming* and processing different resources by adding value at different stages in the paper supply chain. Another important element is also the *transfer* activities either to further processing or directly to customers. Single activities can be linked to each other in different ways. Especially within the Swedish pulp and paper industry with a very high degree of vertical integration in relation to competitive producers where the level of integration can be at a much lower

level. Many activities are therefore tightly coupled to each others while others are more loosely coupled. However, a complete activity cycle is seldom controlled by a single actor.

Resources in the Supply Chain

The resources within a paper packaging supply chain are controlled by the different actors. However, basic resources of strategic value are also controlled by single or jointly controlled by actors outside the paper industry. These resources are either in the form of raw materials or as supplies necessary for the production process in the form of products or services for the business. Resources are heterogeneous and have attributes in an unlimited number of dimensions (Håkansson and Johansson, 1992; Håkansson and Snehota, 1995). Some of the resources have also an alternative use either within other industries or for further processing.

Packaging and the Marketing Strategy

The main function that companies have granted to packaging has traditionally been related to the mission of protecting the products satisfactorily from producer to consumer. However, new customer needs has favoured consideration of new requirements on the design and development stage of packaging including logistic, commercial and environmental functions (Dimitratos et.al.,2003; Hogg, 2003). The logistic function is defined by the way a product takes from the producer to the consumer and the packaging must fulfil the physical requirements within the supply chain. The commercial function concerns the needs from marketing communication, knowledge of customer demand and its potential impact on the purchase decision process. Numerous factors have made packaging to an important marketing tool. The environmental function relates to the re-utilization, recycling and reduction of packaging materials as well as the general ecological awareness. The function also includes the market environment with consumer, competition and legislative requirements. This discussion emphasises the research question about “What is affecting the paper supplier’s position from a marketing point of view?”

Research Design

This study uses the case study method according to Yin (1994) and Eisenhardt (1989). This methodology focus on understanding dynamics within a single setting (Eisenhardt, 1989) but also in relation to a particular context (Yin, 1994). The research design allowed the researcher to understand the complexity and nature of interactions in the supply chain and the surrounding business network. Within the areas studied multiple cases are used rather than a single case. Yin (1994) discusses multiple cases but it is Eisenhardt (1989) who has written about their theory building properties. Eisenhardt (1991) found that multiple cases encourage the researcher to study patterns common to cases and theory and avoid associations by chance. Eisenhardt (1989) also stated that in the multiple cases approach there is no ideal number of cases, but recommends four to ten cases. When the study has fewer than four cases theory is difficult to generate and with more than ten cases the volume of data can be difficult to cope with. The products were selected since they have different characteristics as recommended by Eisenhardt (1989). Each case was selected carefully so that it predicts different results for expected reasons (theoretical replication). The unit of analysis was the product. This means that questions had to be pertinent to this unit of analysis otherwise the data collected would be irrelevant. Structured interviews with four firms were conducted during 2002-2004 relating to the product chosen. The interviews lasted 2 hours. The interview results were then combined with other documents provided by the firm to produce a detailed case study of each firm and the product for analysis. Material has also been provided by the firm’s official internet site. The interviewed person typically a marketing manager then checked the reports for accuracy and when that was confirmed the case evidence was suitable for analysis. In order to keep in accordance with the case study method multiple sources of data were used to provide triangulation. In addition to the interviews described, data was also collected from other sources by field visits at competitors, customers, suppliers and at packaging exhibitions. Direct observation was done through onsite visits. Yin’s (1994) pattern matching and explanation building was then used for analysing the available data. According to Yin’s (1994) and Eisenhardt’s (1989) approach each case was analysed as a separate entity in order to find unique patterns which can be generalised among the cases. This has been arranged in tables in the form of key words in order to find similarities and differences among the cases.

Results and Discussion

“Packaging adds to the perceived value of the whiskey” (Packaging Development Manager).

The four different products are categorized by a short description in the form of a case study and then analysed in a matrix. The first product is based on bleached liquid packaging board containing CTMP-pulp with an end-use for liquid packaging. The board is normally coated with different polymers such as plastics depending on the end-use of the material. The second product is also a packaging board material built up on a four layer virgin fibre board with a bleached (TCF= Total Chlorine Free) clay-coated top layer. The third product is a solid board packaging material and the fourth corrugated board. All product categories are used for packaging of consumer products, whereas the discussion in this paper refers to the business-to-business relationship between supplier of the packaging material and the filler or brand owner.

Case 1

One main packaging material for primary packaging is Solid Unbleached Board (SUB) with the primary end use areas of beverage & multi-pack, chocolate & confectionary, food and pharmaceutical packaging and media products. Another main product is bleached liquid packaging board containing chemi thermo mechanical pulp (CTMP) with the primary end use of liquid packaging and detergent & household packaging. “Think outside the box” is a wording that is used within media advertising and influencing the product development in relation to the board material. Different media such as television, radio, newspapers and magazines are filled with advertisements so why not use the display area offered by e.g. beverage cartons for a variety of on-pack promotion. Liquid packs have the potential to become an increasingly important tool. This is confirmed by the growing number of dairy and juice brand owners who are now catching consumers with attractive on-pack advertising right at the point of sale in the supermarket. A generous printing surface and superb print quality makes paperboard cartons ideal information carriers and brand builders. Reliability in high-speed filling lines saves money and minimises production downtime. Renewable fibres make a particularly well-founded choice also environmentally friendly. These new and changing demands have put pressure on the company to develop the product concept, but also the relationships with different actors in the packaging supply chain. Increased demand on printability and run ability in the printing and converting machines, reinforce the necessity with continuous product development in co-operation with key customers. To meet different demands new service centres for prompt deliveries of premium boards and grades has been located in the middle of main market areas with high performance sheeting machinery. The service centres are located in Germany, Belgium, Holland, UK and Sweden. Another step has been the establishment of inno-centres in order to meet requirements for innovation, testing new technology and devising innovative packaging concepts. “We are committed to vertical innovation: a way of co-operating with our partners across the board to promote the efficiency and sustainability of fibre-based packaging”.

Case 2

Fibre based materials enjoy a strong and well-deserved status in the packaging world. Danish lager, French champagne or English pies are all examples of products that are packed in the board material. Packaging board material has in recent years been established as a board grade for demanding applications within market segments as beauty care, health care, chocolate and luxury drinks. “We know that the unique white and strong board is here to stay, but we also know that we have to continuously to develop our products. With the new version we have focused on improved printing surface” says the responsible for product development at the firm. The development project lasted 18 months and the aim was to improve the print surface. The result is a more even print surface that has the visual sensation of enhanced whiteness and thereby offering a better print result. This development was due to adjustment of the composition in the pulp by adjusting the middle layers and optimising the process for a better formation of the fibres. Changes in the coating technique also improved the surface. A prestigious market area is the whiskey market and the firm has been an established supplier to the whiskey market for more than 20 years. An important step was taken in 2001 when the board material Bright (combines the strength of unbleached kraftboard with a white and luxurious reverse) was launched. The combination of strength and a white reverse turned out to be a successful material for the whiskey business. One of the Scotch whiskey producers who prefer to market their whiskey in the board material is Whyte and Mackay who summarise their approach on the market in the phrase “Fighting Spirit”. They own four of the 98 distilleries and use cartons for their premium and super premium brands, but also for seasonal promotions of their standard products.

Damaged cartons on the shelf are seriously harmful to the brand and after having some problems in the distribution chain with the previous board material Ballantine switched to this board material. The company believes that they have improved retail performance for their cartons, thanks to the strength of the material. The brand owner Ballantine also work in close relationship with the converting company in Leeds who recently has made large investments in their premises. The converter has developed jointly with the whiskey producer and knows their filling machines and can therefore supply them with the right construction of packs. The relationship between filler and converter is close.

Case 3

Packaging in board material makes transport of food possible and has been important for the innovation of many new distribution outlets. Food packaging poses an abundance of challenges as well as opportunities for different actors to create value in the packaging value chain. Many processed and packaged food products also become shelf stable by a suitable package, which means that they do not require refrigeration until the package is opened. Meat, fish, poultry, beverages and dairy products are amongst the everyday products that are successfully packaged in solid board material. Packaging solutions based on solid board offers superior performance where water, moisture or condensation is a major element in the packaging and distribution environment. A packaging for frozen products must satisfy a multitude of requirements and need to withstand moisture and have no taste odour. At the same time it must have strength and withstand harsh treatment in the supply chain and meet necessary requirements in weight. In order to reach these properties the solid board is delivered in different substances and coated with polymers by the supplier, or at the converters plant. The board is converted in the local market for boxes and trays for fruits, vegetables, perishables and flowers in most European markets. Solid and corrugated board offers a multitude of packaging solutions for this demanding and challenging sector. Trays and boxes for other perishables, including meat, fish and bread, call for a product- and market-specific approach. Post harvest quality retention is a big issue in the perishable food markets. Most techniques tend to affect the natural shape and flavour of foods such as vegetables, fruits, fish and poultry. Natural and mild conservation methods like modified atmosphere in the transport box, as an alternative to the ready-prepared consumer pack may open a world of new opportunities.

Case 4

Packages in corrugated material are visible wherever goods are produced, transported and displayed. Corrugated board is the world's largest single packaging material used in transport packaging, but also for high quality consumer and display packaging and accounts for about 60 percent of transport packaging in Europe. Since transport packaging is being used to a greater extent in store displays, demands on design and packaging concepts that will sell are increasing. The paper component in corrugated board packaging material is in the form of kraftliner, testliner and fluting, where two liners are glued to a corrugated inner medium of fluting. The containerboard material is based on fresh wood fibre, as well as recycled fibre from recovered paper collection organisation in Europe. Transport packaging serves as secondary and tertiary packaging for different applications and end-uses within chemical, plastics, automotive, food and agricultural products industries. In addition to protecting packaged goods it also has to be designed for storage, transport and marketing the products. The corrugated material must also fulfil requirements in automated or semi-automated filling lines. Since secondary and tertiary packaging is being used to a greater extent in store displays, demands on design and packaging concepts that sell are increasing. Different packaging problems can even include a combination with other materials for more efficient solutions e.g. of glass wares or electronic consumer products. Packaging design for innovative and attractive solutions has become a necessity. Customers are therefore requesting more service from the suppliers in the form of on-time delivery and vendor managed inventories, which requires the suppliers to be more proactive in relation to its customers. Due to its properties and customer needs in the form of service requirements and lead times, corrugated board need to be produced locally close to the customer. This has also affected the structure of the corrugated board industry (converting plants) which comprises more than 500 companies in Europe with the five largest producing about 45 percent of the market.

Actors: The analysis of the case studies show that the supplier of the packaging board plays an important role in providing suitable material for further processing by converters and their sub-suppliers. Some of the actors in the packaging supply chain are working in close relationship with the suppliers of base material for product development and packaging design.

Activities: Changing demands and new customer requirements have increased the importance of reconsidering prevailing packaging solutions. This has also made it necessary to involve customers in the product development process (e.g. showrooms for packaging design, combination of materials, printing technology) and suppliers of packaging equipment for more efficient solutions. Structural changes within the European food industry and retail business have also put an increased pressure on the converting industry.

Resources: Combination of different resources is a necessity for meeting new customer demands. This can also include the combination of materials used in order to reach new properties, but in addition by using other technology developed in other areas (e. g. printing).

The four case studies with reference to different product categories emphasize the importance that different packaging materials plays for the distribution and sales of most products in our society. This is also in accordance with previous research where packaging was found to fulfil several functions and where the modern lifestyle will require even more packaging, but also with more functionality in the future (Prendergast and Pitt, 1996). This has been manifested by many new requirements from different actors in the packaging supply chain. The packaging solution needs to (Packaging Federation, 2004a; 2004b):

- Protect the product through longer supply chains
- Preserve products to longer shelf life
- Meet new customer demands with respect to quantities demanded (size of package)
- Convenient in relation to easy-to-open and safely
- Communicative to improve sales
- Innovative to meet new demands in the supply chain (e.g. RFID)
- Innovative design to meet new consumer demands.

These new requirements have put pressure on converters and suppliers of packaging material to improve their products by innovation and development in co-operation with their suppliers. The pressure has been built up from more powerful retailers due to structural changes and concentration within the European retailing industry. Requirements on more and higher printing quality has forced paperboard manufacturers to improve their base materials. A strong competition from different plastic materials and solutions to packaging problems has also forced suppliers of paperboard to develop their products. This has been accomplished by product development, but also by innovating products and processes through combination of different materials to reach new qualities. Development work with suppliers of chemicals and printing equipment has also created improved printing facilities. Another important development work has been the possibility for customers to visit particular showrooms in order to take part in the development of a new packaging solution.

Conclusion

Changing market conditions can create market opportunities for a firm and might force it to redefine its product concept for reaching other market segments. In order to reach factors that will create a higher or better value for customers (superior value) it can be necessary to reduce or eliminate material or steps in the prevailing production processes. Examples from the packaging industry show that different materials can be combined to create products with new or better properties. These new combinations can even be the necessary means for competing with other solutions such as plastics. Opening the business network for reconsideration and renewal of business thinking will become a necessity for firms to stay competitive in a rapidly changing business environment. The skills and resources that form competitive advantage can range from the tangible and concrete such as money and superior technology, to the intangible such as how a firm serves its customers or relates to its employees in the international market. The competitive situation may force the single firm to reconsider its prevailing business network by opening it for new ideas from alternative sourcing. Re-evaluating and reconsidering the sources of supply might encourage the firm to search for other or better solutions for the prevailing production outcome or processes used. This re-evaluation can increase the properties of the product and give a better cost position for the firm in relation to existing

competitors. The source of the advantage can be created by a new design and manufacturing quality, simplification of parts or raw material used in the product. New properties can also create market opportunities by reaching new market segments for the product. This is in line with many scholars (Day and Wensley, 1988; Porter, 1990; Slater, 1996). The basis of competitive advantage requires meeting customer's needs in a way that is superior to competitors. Among the factors leading to competitive advantage are better user convenience, better in-use characteristics and superior design. The competitive advantage may result from reinterpretation of product functions or emphasis on one of its functions. Packaging can therefore be an important source for creating competitive advantage in a company's competitive offering. Developing an integrated marketing strategy including packaging as a marketing tool requires several important decisions about the packaging and its relation to other marketing tools. One issue is to establish a packaging concept defining what the package should be or do for the particular product. Decisions must also be made on additional factors such as size, shape, material, colour, text and brand mark. This is especially important for the international market depending if the company is working with a standardized or adaptive marketing. However, all decisions are depending on where the activities are taking place in the supply chain.

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Appendix 1

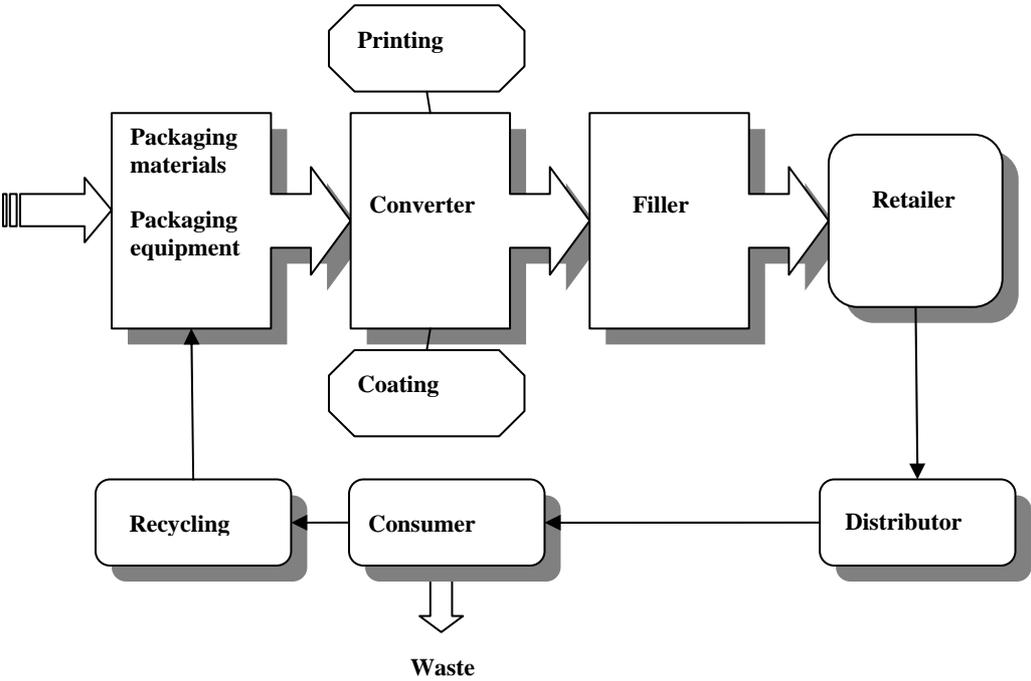


Figure 1: The Packaging Industry

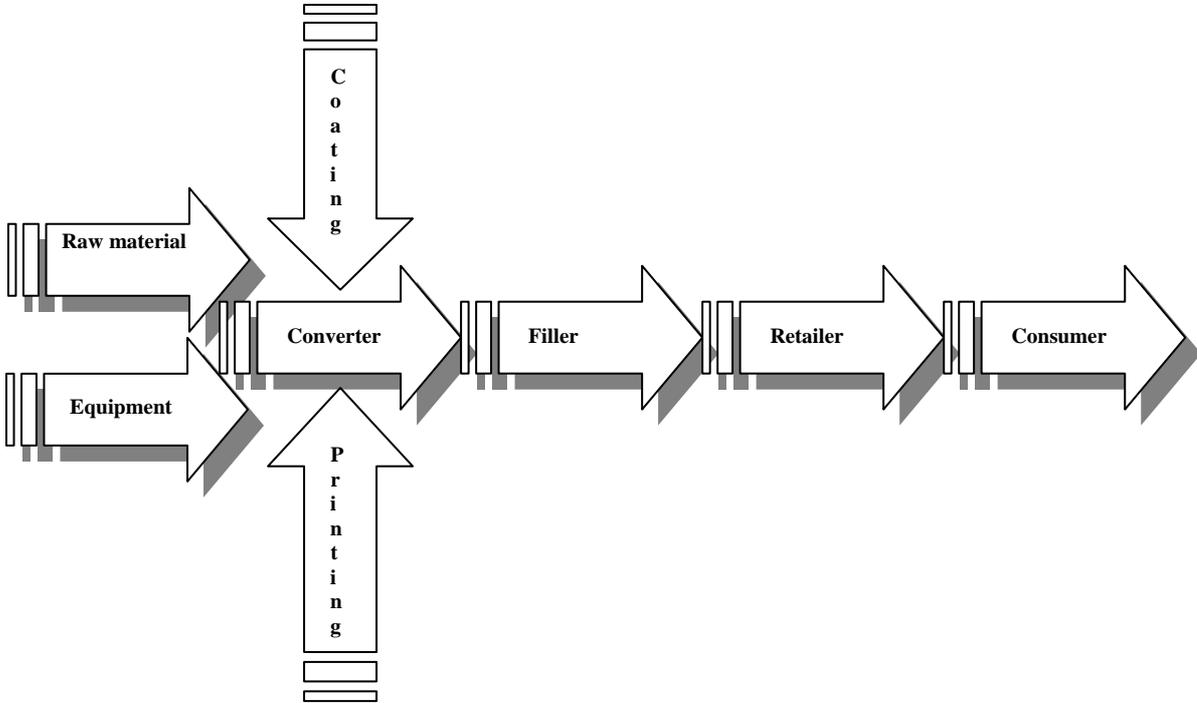


Figure 2: The Packaging Supply Chain