A case Study of Make or Buy Decision in FMCG Business

By

Ms.Anchalee Iamamornlert

A Final Report of the Six Credit Course
SCM 2202 Graduate Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of Master of Science
In Supply Chain Management
Assumption University

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ABSTRACT

The make or buy question represents a fundamental issue faced by many companies. Companies have finite resources and are unable always to afford to have all manufacturing technologies in-house. Outsourcing is becoming increasingly important for all business firms.

The purposes of this project are to identify the key factors in make or buy decisions, and to identify the appropriate manufacturing site for a Fast Moving Consumer Goods (FMCG) business.

In this project, make and buy data was collected from Unilever Thai Holdings Ltd. Then the data was analyzed by using case study methodology.

The conclusions of this project are that the company should have both Make and Buy decisions to support business value. Moreover, the right decision can drive further company growth.

ACKNOWLEDGEMENT

I am indebt to the following persons and organizations. Without them, it would not have been possible to complete this project.

I would like to thanks my advisor Asst. Prof. Dr. M.Asif Salam for his guidance, patience, assistant and constant support.

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TABLE OF CONTENT

LIST OF FIGURES

LIST OF TABLE

CHAPTER I
INTRODUCTION

1.1 Justification

Fast Moving Consumer Goods (FMCG) are a type of product that has a quick shelf turn over, at relatively low cost and does not require a lot of thought time and financial investment to purchase. The profit margin on very individual FMCG products is less. However the huge quantity of goods sold is what makes the difference. Hence profit in FMCG goods always translates to number of goods sold.

Fast Moving Consumer Goods refers to a wide range of frequently purchased consumer products such as toiletries, soaps, cosmetics, mouth cleaning products, shampoo, detergent etc. Brand loyalties or recommendations of reliable retailers / dealers drive the purchase decision. The trial of a new product, i.e. brand switching, is often induced by heavy advertisement, recommendations of the retailer or neighbors / friends.

Three of the widely and best known manufacturers of Fast Moving Consumer Goods companies are Unilever, Nestle and Procter & Gamble. Examples of FMCG goods include: soft drinks, tissue paper and chocolate bars. Example of FMCG brands are Breeze, Coca-Cola, Kleenex and Pepsi.

The FMCG industry is built on everyday needs, which means it succeeds or fails in the split-second it takes for the consumer to decide whether to buy a particular product. Therefore, all FMCG battles for the customer are fought on just two fronts: the shelf in the shop and the heart of the shopper. (Johnson 2006)

Cantor (2003) reviewed the industry structure for FMCG in India and states that FMCG companies sell their products directly to customers. The major features that distinguish FMCG from other businesses are Design and manufacturing, Marketing and distribution, and Competition.

1) <u>Design and manufacturing</u>

- Low capital Intensity. Most product categories in FMCG require relatively minor investment in plant and machinery and other fixed assets. Also, the business has low working capital intensity as the bulk of sales from manufacturing take place on a cash basis.

- Technology. Basic technology for manufacturing is easily available. Also, technology for most products has been fairly stable. Modifications and improvements rarely change the basic process.

2) <u>Marketing and distribution</u>

In relative terms, the marketing function has greater importance in FMCG companies. The players have to reach out to mass population and compete with several other brands that offer similar products. Major features of the marketing function include the following

- High initial launch cost – new products require a large front-ended investment in product development, market research, test marketing and launch. Creating awareness and developing a franchise for a new brand requires enormous initial expenditure on launch advertisement, free samples and product promotions. Launch costs are as high as 50-100% of revenue in the first year. For established brands, advertisement expenditure varies from 5-12% depending on the categories.
- Limited mass media options – the challenge associated with the launch and/or brand-building initiatives is that there are few no-mass-media options. TV reaches 67% of urban consumers and 35% of rural consumers. Alternatives like wall painting, theatres, video vehicles, special packaging and consumer promotion become an expensive but required activity associated with a successful FMCG.
- High distribution network – for a big country like India which is home to six million retail outlets, including 2 million in 5,160 towns and four million in 627,000 villages. Supermarkets virtually do not exist in India. This makes logistics particularly for new players extremely difficult. It also makes a new product launch difficult since retailers are unwilling to allocate resources and time to slow moving products. Critical factors for success are the ability to build, develop, and maintain a robust distribution network.

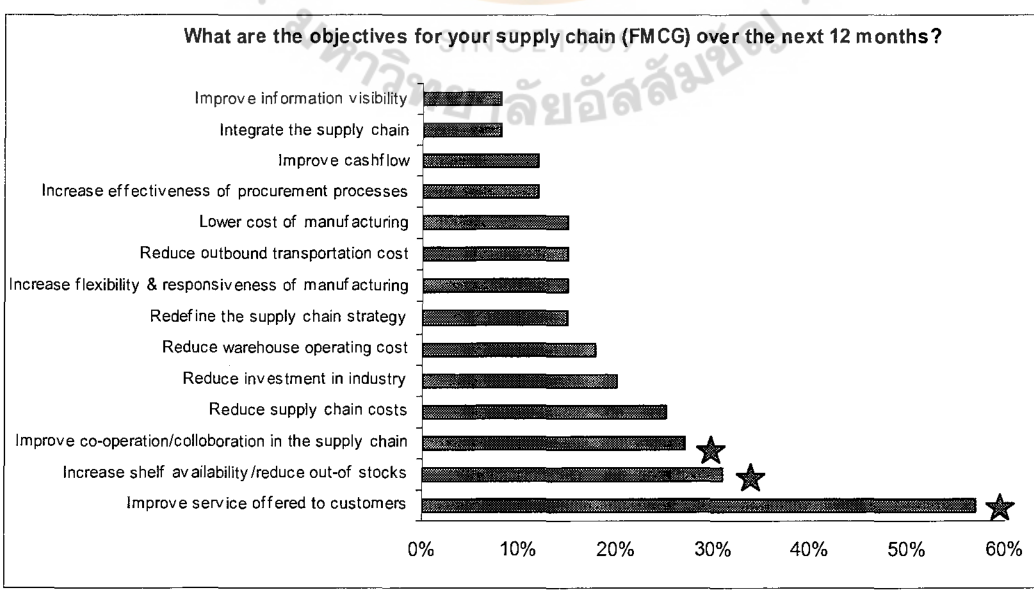
3) <u>Competition</u>

Significant presence of unorganized sector – factors that enable small unorganized players with local presence to flourish include the following

- Basic technology for most product is fairly simple and easy available.
- The small scale sector in India enjoys exemption/lower rates of excise duty, sales tax etc. This makes them more price competitive.
- A highly scattered market and poor transport infrastructure limits the ability of multi-national companies and national players to reach out to remote rural areas and small towns.
- Low brand awareness enables local players to market their spurious look-alike brands.
- Lower overheads due to limited geography, family management, focused product life and minimal expenditure on marketing.

(Source: Finding Profit Opportunities in The Indian Fast Moving Consumer Goods Market, Cantor 2003)

A supply chain research survey from South African, on supply chain foresight, (Barloworld Logistics 2006) states that FMCG and the retail sector find a way to collaborate with each other to improve service level and increase the availability of product to consumer at lower cost. Figure 1.1 shows that the FMCG sector wants to use the supply chain to improve service to retailers and rates this as its chief objective, with the parallel reduction of out-of-stock rated second, and collaboration rated third.



Source: FMCG and Retail supplychainforesignt survey 2006 (P.4)

Figure 1.1 The objectives for your supply chain over next 12 months.

In the FMCG industry the assets are of limited value compared to the overall values of the business. The key issue therefore is to identify where manufacturing supports business value and to ensure access to the appropriate capabilities (internal or external). This results in an increasing awareness of the importance of make or buy decisions. Although the strategic implication of make or buy have been discuss for many years, make or buy decisions are often made purely on the basis of cost. However, during the last decade more emphasis has been placed on providing a more practical structure guideline on make or buy decision (Canez 2000)

This paper reports guidance for both approaches and the responsibilities of the make or buy decision framework, and implementation and relationship guidelines. Firstly, a literature review of the principal make or buy approaches is discussed. Secondly, the development of a make or buy framework is described and the framework is explained using case studies. Finally, the decision making is conclusion.

1.2 Research Objective

1) To understand the characteristic of the Fast Moving Consumer Goods/Business
2) To identify the key success & failure factors in make or buy strategy
3) To identify the appropriate manufacturing support business value

1.3 Scope

This report uses Unilever Thai Holding Company for a case study by focusing on Make or Buy strategy for Manufacturing aspects of the Home and Personal Care (HPC) category which is a major contribution of the company (approximately 80%).

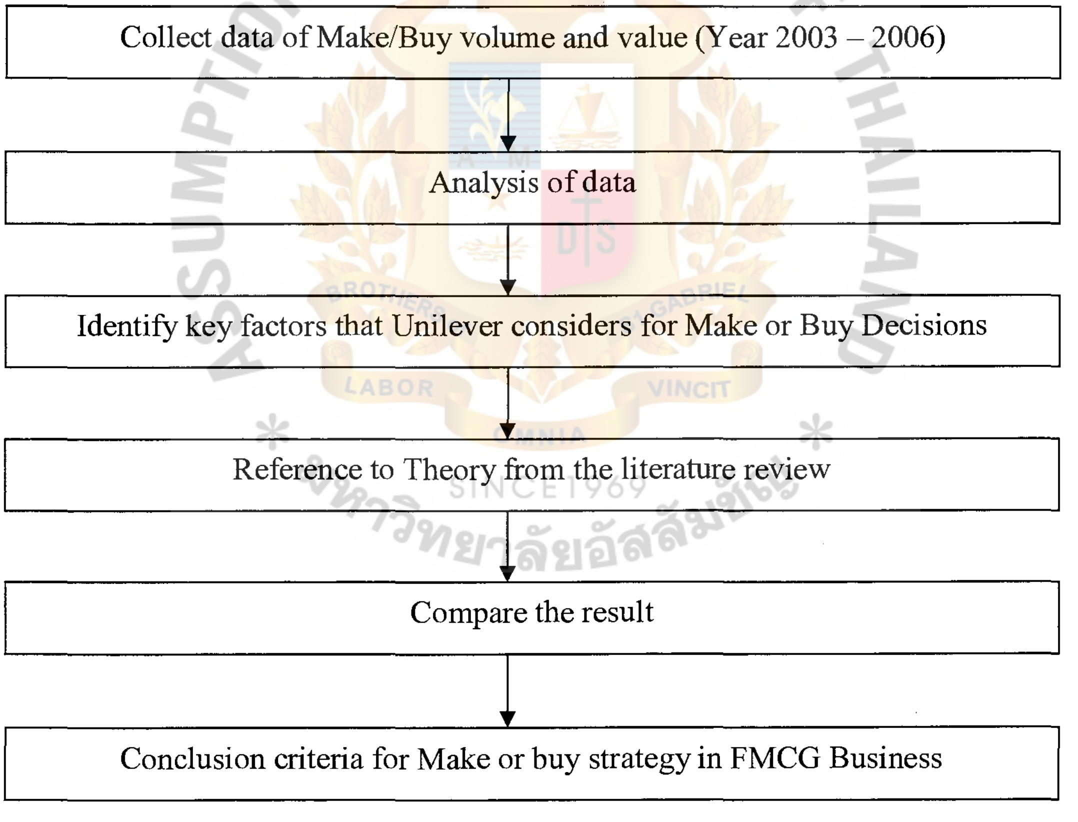
Since many aspects will be taken into consideration before taking a decision to make or buy, we aim to study and understand the FMCG business characteristics. We will wear the shoes of a Supply Chain manager, Financial manager and Marketing Manager who each play a significant role in decision making to make or buy products.

1.4 Methodology

This paper identifies the relevant factors (cost, core competency, plant capacity, technology, suppliers' know how and company policy) that impact make or buy decision-making. The methodology for this project is a case study approach. The primary data is Unilever's make and buy volume/value for the past 4 years, face-to-face and telephone interviews with key drivers on decision making, business journals, textbooks, internet, and the company's website and report.

The data analysis will identify key factors that Unilever consider in a make or buy decision. The conclusion compares data analysis with theory from the literature review.

1.5 Study Framework



1.6 Research Assumption

1) The research assumed that factors of managerial and operation in Unilever employees have an influence on the level of decision making, such factors are:

(a) Work period

(b) Job position experiences in make or buy decisions

(c) Knowledge and understanding of make or buy

2) The Research assumed that the final result from the case study can represent and be applied to other FMCG companies, because of the variety and wide range of products of Unilever which is a big player in the FMCG business in Thailand.

CHAPTER II
LITERATURE REVIEW

This chapter covers make or buy strategy in term of overview, theory, meaning and future trend of make or buy decision including reasons, options, advantages and disadvantages.

2.1 Definition of Make and Buy

2.1.1 Make means an item or work effort to be produced or performed by a company, using its personnel and resource facility (NREL 1999).

2.1.2 Buy means an item or work effort to be produced or performed by an outside source, including co-packing activities (NREL 1999).

2.1.3 Make or Buy Strategy means a decision to make production of finished products "in-house" or buy them from contract manufacturing "outsourcing". Factors to consider in the decision include costs, capacity availability, proprietary and/or specialized knowledge, quality considerations, skill requirements, volume, and timing (NREL 1999).

2.2 Overview of Make or Buy Decisions

Within an organization the make or buy decision is being given more consideration because of it strategic implications. The make or buy decision can often be a major determinant of profitability making a significant contribution to the financial health of the company (Mclvor 1997)

Make or buy decisions are often made purely on the basis of cost. However, during the last decade more emphasis has been placed on providing more practical structure guidance. The decision making focus is not only on cost but also for strategic reasons which deliver competitive advantage to the company including an understanding of the nature of each industry and discussing the issue with the team before make a decision (Anderson 2003). The company need to focus on what they do best (core competency) and outsourcing everything else to those better suited for the function (Mclvor 1997; Mclvor 2000; Duber-Smith 2005)

In the factors influencing Make or Buy decisions, two factors stand out above all the others when considering that make or buy decisions at a tactical level: total cost of ownership and availability of production capacity. (Burt 2004) In addition to these two basic factors there are other factors for consideration which influence decisions to make or to buy the items used in their finished product or their operations.

Considerations which favor Making

(a) Cost consideration (less expensive to make the part).

(b) Desire to integrate plant operation

(c) Use of excess plant capacity

(d) Control over production and/or quality

(e) Design secrecy required

(f) Unreliable suppliers

(g) Desire to maintain a stable work force

Considerations which favor Buying

(a) Limited production capability

(b) Cost consideration (less expensive to buy)

(c) Small volume requirements

(d) Suppliers' specialized know how

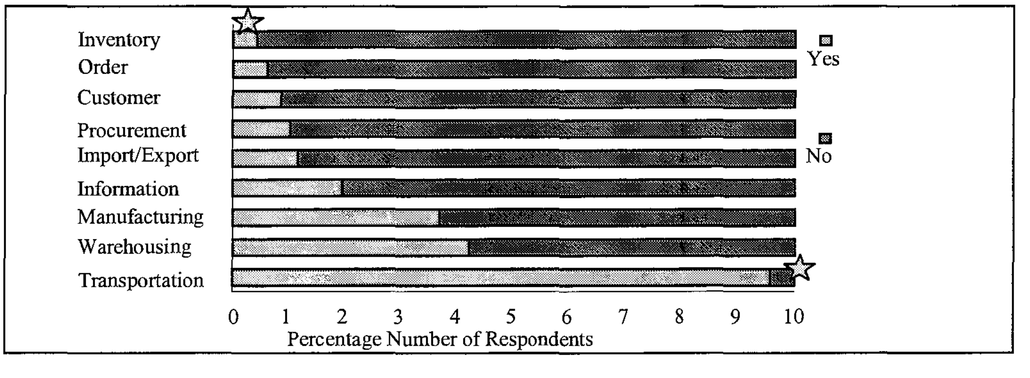
(e) Stable work force (rising sale)

(f) Multiple source policy

(g) Indirect managerial control considerations

(h) Procurement and inventory considerations

Sahay (2004) postulated on the extent of outsourcing of supply chain activity, and found only 37% in manufacturing parts that are outsourced to contract manufacturing (see Figure 2.1).



Source: Conference on "Winning with Intelligent Supply Chains" (Dr. B.S. Sahay Dean 2004)

Figure 2.1 The extent of outsourcing of supply chain activity.

Sahay also describe the major reasons for outsourcing of supply chain activity as below

(a) Lower Cost (27%)

(b) Strategic Reasons (26%)

(c) Process Effectiveness (24%)

(d) Investment Reasons (12%)

(e) Lack of Internal Capacity (11%)

In terms of financial factors, incremental analysis is the process used to identify the financial data that change under alternative courses of action.

Lyson (2000) states that the quantitative and qualitative factors also need to be considered in deciding whether to make or buy (see Table 2.1).

Table 2.1 Factors in make or buy decision

Quantitative factors in favor *of making* include: • Chance to use up idle capacity and resource • Potential lead-time reduction • Possibility of scrap utilization • Greater purchasing power with larger order of a particular material • Large overhead recovery base • Exchange rate risks • Cost of work is known in advance	*Quantitative factors* in favor *of buying* include: • Quantities required are too small for economic production • Avoidance of costs of specialist machinery or labor • Reduction in inventory
Qualitative factors in favor *of making* include: • Ability to manage resources • Commercial and contractual advantages • Maintaining secrecy	*Qualitative factors* in favor *of buying* include: • Spread of financial risk between purchaser and vendor • Ability to control quality when purchased from outside • Availability of vendor's specialist, machinery • Augment the manufacturing capacity of the purchaser

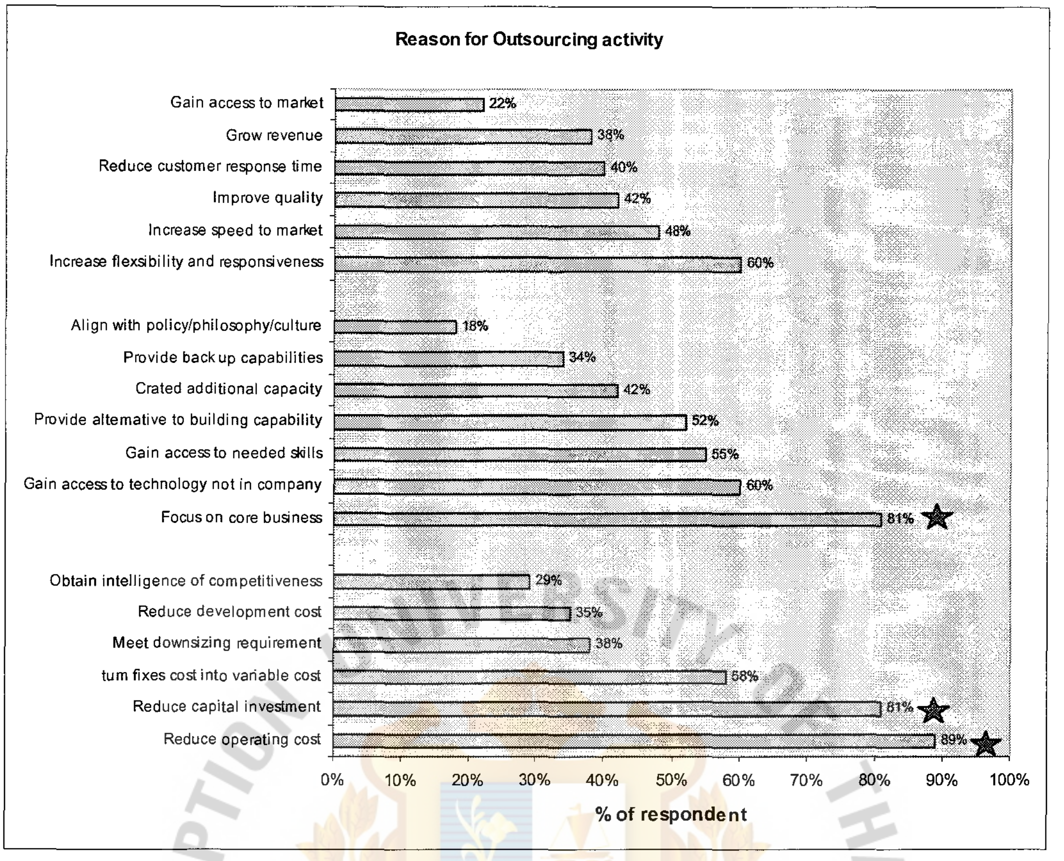
Source: Purchasing and Supply Chain management (Kenneth Lyson, 2000) P. 284

2.3 Advantage and Disadvantage of Outsourcing

Welch and Nayak (1992) studied Strategic Sourcing: A Progressive Approach to the Make or Buy Decision states that outsourcing has certain advantages potentially allowing them to convert fixed cost to variable cost, balance work force requirement, reduce capital investment, reduce cost via supplier's economies of scale, accelerate new product development, gain access to invention and innovation from suppliers and focus on high value added activities.

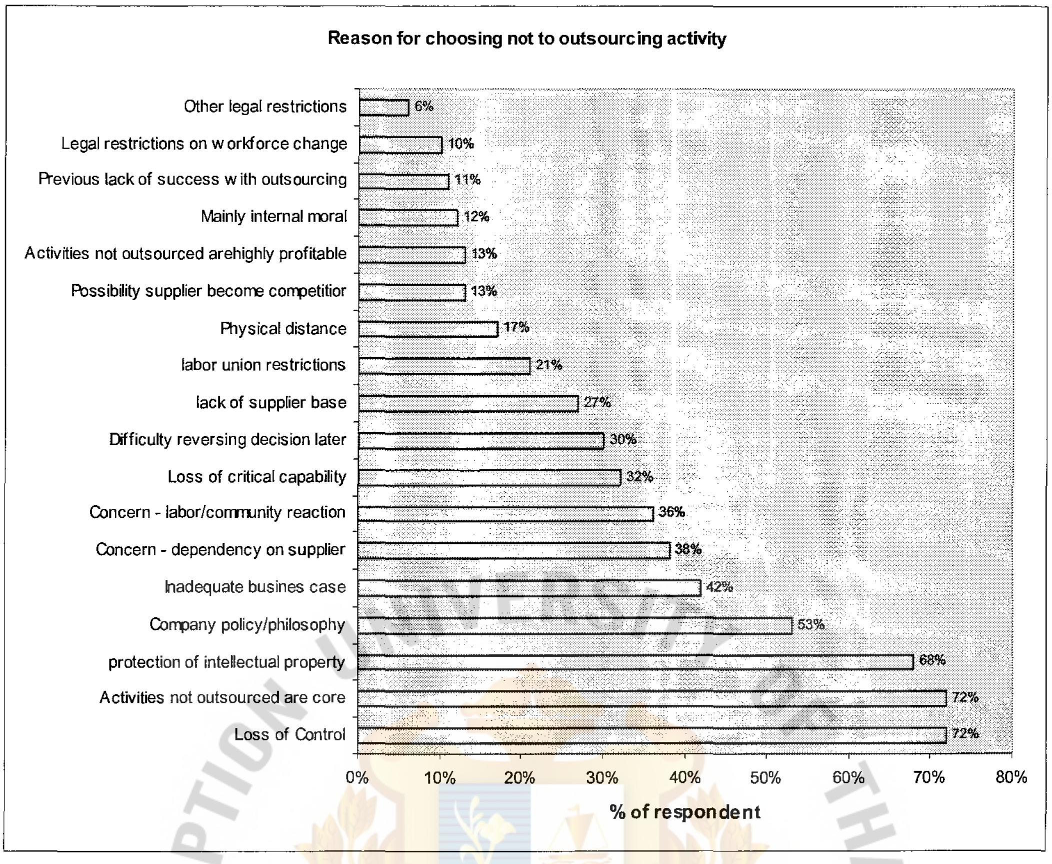
Mclvor (2000), who researched a practical framework for understanding the outsourcing process, states that many companies deciding to buy rather than make do so for short-term reasons of cost reduction and capacity.

The CAPS research survey from 24 industries (165 companies) states that the main reasons for outsourcing and not-outsourcing activity (as shown in figures 2.2 and 2.3) can translate that cost and focus are the primary drivers of outsourcing, with more than 80 percent of respondents indicating that cost reduction (operating cost and capital investment) and the need to focus on the core business led them to outsource. Generally, fewer than half of respondents cited revenue growth related reasons for outsourcing. Among the primary reasons companies chose not to outsource were concerns over loss of control, the individual company's belief that the remaining in-house activity were core, and protection of intellectual property. More than half of the respondents also noted that outsourcing is contrary to their company policy or philosophy.(Monczka 2005)



Source: Outsourcing Strategically for Sustainable Competitive Advantage (Monczka, 2005) P.22

Figure 2.2 Reason for outsourcing activity



Source: Outsourcing Strategically for Sustainable Competitive Advantage (Monczka, 2005) P.23

Figure.2.3 Reasons for choosing not to outsource activity

Roberta (2005) states that firms can outsource anything, although outsourcing the manufacturing at one facility may seem relatively straightforward compared to outsourcing travel purchases, which occur among all users and across many locations. The potential benefits of outsourcing are as follows:

(a) Keep what is core and outsource what is not
(b) Realize cost reduction
(c) Optimize the time factor
(d) Accommodate a materials-dependent environment
(e) Act as a result of mergers, acquisitions or downsizing
(f) Manage license goods

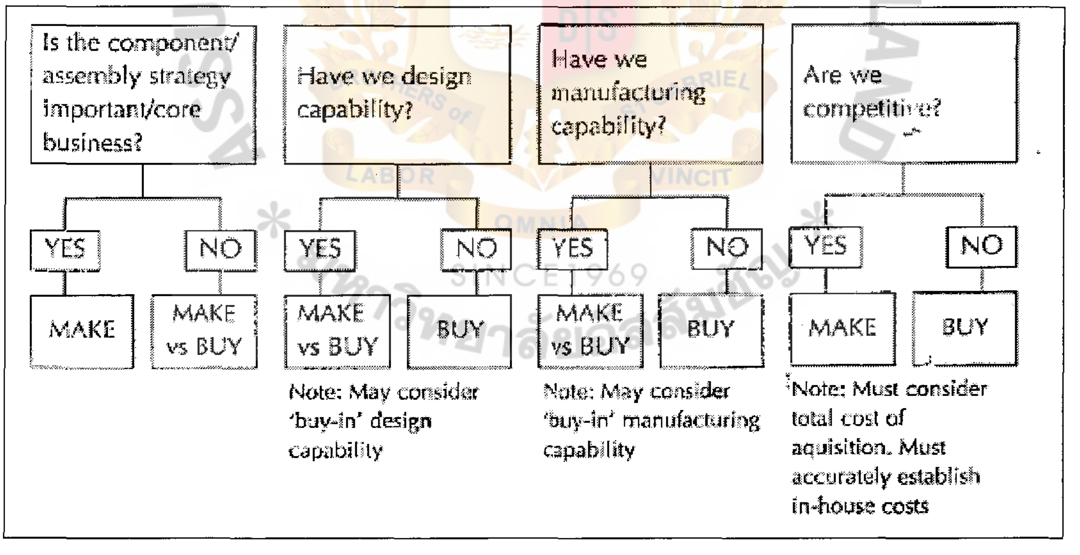
Cohen and Eimicke (2004) studied the limits to contracting:, when to make instead of buy, and strongly agreed on a make decision because a poor contract can lead to inefficient use of time, risk of failure to meet the highest quality goods and service, and the possibility of fuel corruption.

Examples of problems of outsourcing are: cost escalation, maintaining quality, over dependence on suppliers, lack of supplier flexibility and lack of management skill to control supplier (Lyson 2000)

In India, many FMCG companies are rethinking their manufacturing strategies. They are moving away from contract manufacturing to begin investing in capacity expansion. Also, a company-owned plant means better product quality control, economy of scale in raw material procurement, and gives cost advantages since value-added tax (VAT) and MRP-based excise were expected to be introduced. (Bhattacharya 2004)

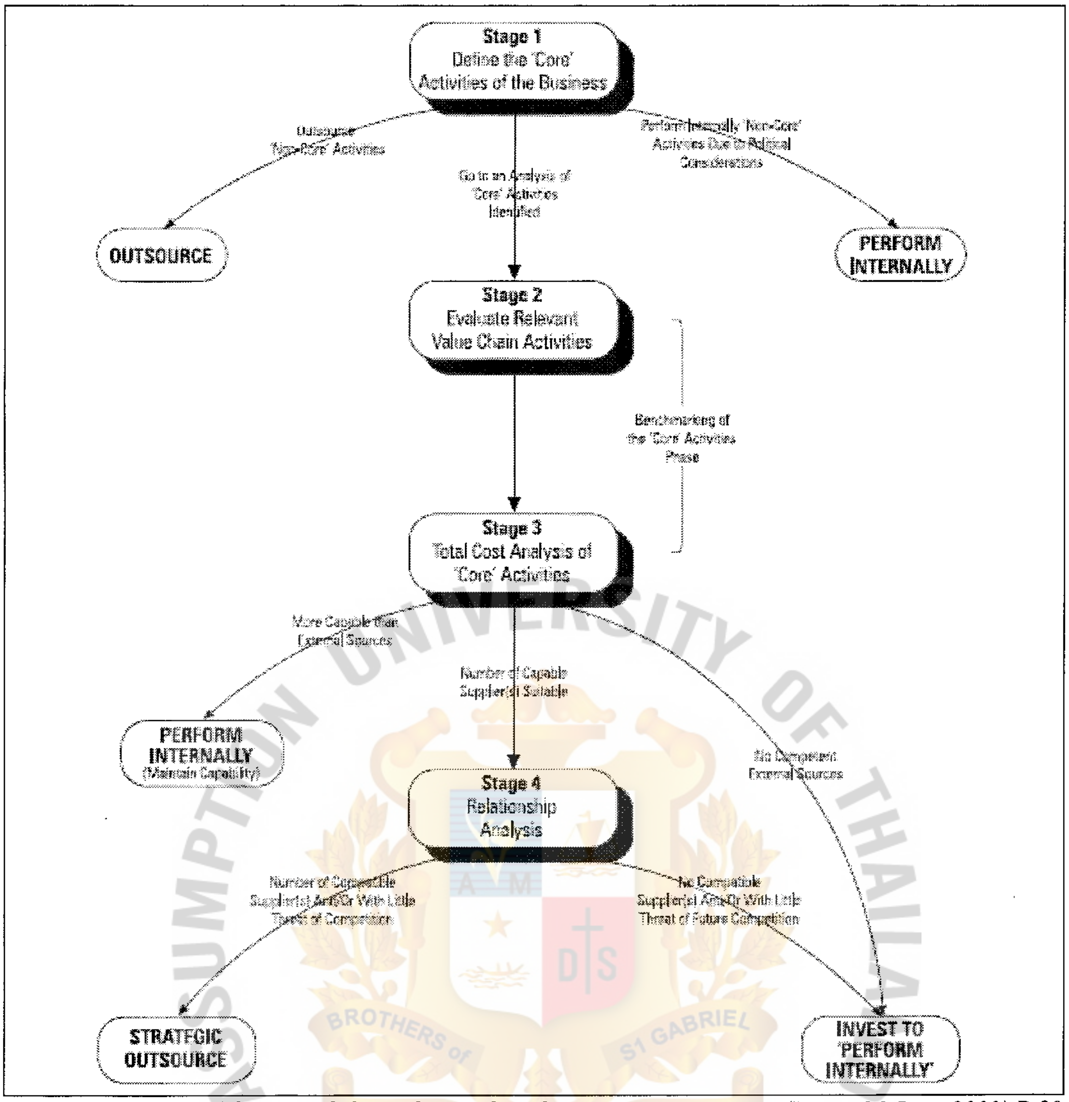
2.4 Make or Buy Decision Process/Framework

Once companies know the influence of factors on make or buy decisions, the next question is how to make a decision from the factor list. Lyson (2000) outlined the procedure designed to answer this question as shown below, in figure 2.4 McIvor (2000) illustrated outsourcing decision using a decision tree, as shown in Figure 2.5



Source: Purchasing and Supply Chain management (Kenneth Lyson, 2000) P. 285

Figure 2.4 Decision processes for make or buy.



Source: A practical framework for understanding the outsourcing process (Ronan McIvor, 2000) P.29

Figure 2.5 A practical framework for evaluating the outsourcing decision.

A full description of the stages involved in the framework is presented below.

Stage 1 – Defining the core activities of the business

In this stage, the company needs to identify the core and non-core activities, by top management along with input from lower levels in the organization. *A core activity is central to the company successfully serving the needs of potential customers in each market.* The framework proposed that all non core activity will be outsourced. However it must be pointed out that certain factors, such as industrial relations, may impact on the freedom of a company to outsource activities previously carried out in-house.

Stage 2 – Evaluate the relevant value chain activities

This stage is concerned with analyzing the competencies of the company in these core activities in relation to potential external outsources. This analysis is in two steps:

(1) *Evaluate the relevant value chain activities*. Each selected core activity must be benchmarked against the capability of all potential external providers of that activity.

(2) *Total cost analysis of the core activity*. Identify and measure the cost associated with either retaining the activity in-house or outsourcing the activity.

In effect, these two steps identify the discrepancy between the sourcing company and potential external providers of the core activities.

Stage3 – Total cost analysis of core activities

This stage involves attempting to measure all the actual and potential costs involved in the sourcing activity – internally or externally. There are two types of cost that are identified in this stage:

(1) Cost estimation of carrying out the activity internally

(2) Cost estimation associated with potential suppliers identified in the previous stage

There will be an overlap in the analyses carried out in stages 2 and 3. Both stages are concerned with benchmarking activities – but different aspects of the activities. Two possible scenarios will be faced in a company:

***Scenario one**:* the company is more competent than any other potential external source. With this situation, the company has two possible options:

(1) *Perform internally*. Keep the activity in-house. It is also important to maintain any current advantage by further developing the competency in order to minimize the risk of competition.

(2) *Strategic outsource*. It is possible that the company considers that it may not be able to sustain its competency in this activity in future, and then may decide to outsource the activity to the most competent external source. The company supports this strategy through the development of partnership relationship with key suppliers.

Scenario two: there are external sources that are more competent than internal. With this situation, the company has two possible options:

(1) *Invest to perform internally*. This option entails investing in the necessary resources to bridge the gap between the company and the more competent external provider. This option may be desirable in cases where the technologies involved is at the developing stage. However, if the company's capabilities lag considerably behind the capabilities of external providers, then it may be difficult to justify a substantial investment of resource in order to match or advance upon external capabilities.

(2) *Strategic outsource*. The company may wish to consider outsourcing 'a core' activity in which it has no competitive advantage. In this case, it should proceed to stage 4 – Relationship Analysis

Stage 4 – Relationship analysis

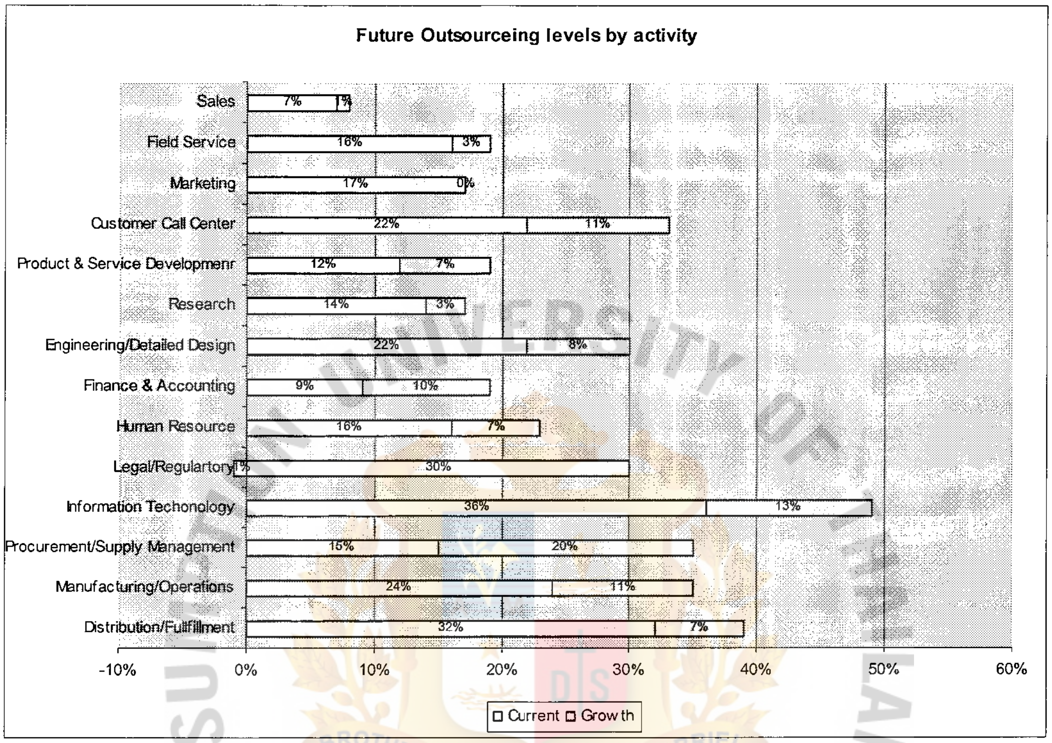
The company may establish a partner relationship or strategic alliance with a supplier in order to exploit their capabilities. This involves an intensive collaborative working relationship with the prospective partner.

2.5 Outsourcing Trends/Growth

In the Strategic Outsourcing book, Greaver (1999) states that the trend in larger organizations is to outsource entire processes. This will be done with strategic relationships and the transfer of significant decision rights. The outsourcing begins with processes furthest from the core and then moves towards it. Another trend, involving large diversified companies, is to outsource global functions and processes to large providers with a stronger global presence and expertise. For smaller and midsize organization, outsourcing of individual activities is growing (Burt 2004).

Outsourcing is expected to grow at double-digit rates over the coming decade. Greaver states that the in the survey made by KPMG Peat Marwick LLP of Fortune 500 CEOs, 94 percent of them said that they outsource and many predicted a marked increase; 86 percent expected to outsource additional processes over the next five years. In a 1997 survey by KPMG Peat Marwick, "G2 Research predicts that by the year 2000, the worldwide market for such services will approach \$282 billion, will a growth rate 20 percent".

A 2005 survey by CAPS of 24 industries (165 companies) stated the projected growth of outsourcing over the next 18 months. The greatest growth was expected to be information technology (growth 13%), call centers (growth 11%), finance and accounting (growth 10%), manufacturing and operations (growth 9%), engineering and details design (growth 8%), human resources (growth 7%), product and service development (growth 7%) and procurement and supply management (growth 5%). These findings are shown in Figure 2.6.



Source: Outsourcing Strategically for Sustainable Competitive Advantage (Monczka, 2005) P.21

Figure 2.6 Future outsourcing levels by activity

Summary of Literature Review

The literature on make or buy decision shows that the company needs to consider all relevant factors (e.g. plant operation/capacity, quality control, technology/know how, company policy etc.) and not only cost. The company needs to keep all the core business in-house and outsource everything else to those better suited for the function.

The outsourcing trend is expected to growth year by year. Then good relationships with contract manufacturers are required, in order to make a smooth operation of work/process, which could develop into a strategic partnership.

CHAPTER III
RESEARCH METHODOLOGY

The methodology of this research is the case study approach. The case study methodology focuses on Make or Buy decision in term of the manufacturing aspect. The research data was collected from the financial department in terms of volume produced and value spending both in-house and on contract manufacturers from year 2003 to 2006, covering 7 product categories which are Fabric wash, Household Care, Hair, Personal Wash, Skin Care, Oral Care and Deodorant. Moreover, the total number of Stock Keeping Unit (SKU) or (sku) for collected data in year 2003, 2004, 2005 and 2006 are 334, 343, 393 and 472 respectively. Also, interviews were held with people who are in charge of Make or Buy decision-making (Financial, Supply Chain and Marketing Managers).

The data was analyzed by using make and buy data (volume and value) for each product category which shown the portion which the company makes against buys and in comparison with the findings in the literature. The research summarizes the key factors which the company considers in Make or Buy decision making.

The research shows the factors which influence decision made within the organization. This allowed the researcher to understand the company's situation.

This chapter covers the company's profile, key factors of decision making and the framework of make or buy decisions in Unilever.

3.1 Unilever's Company profile

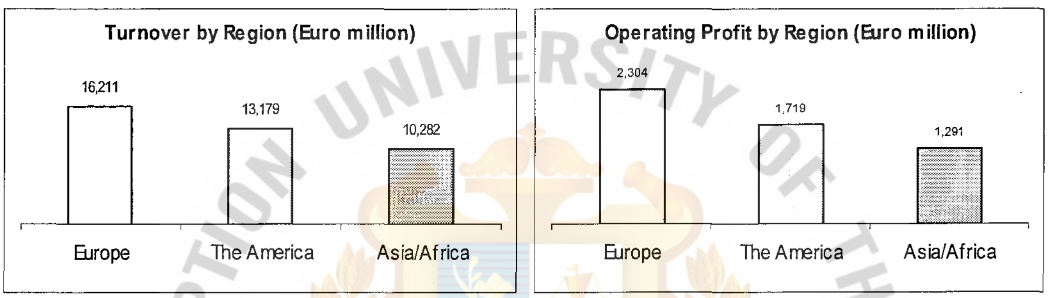
Unilever is the one of the world's fast moving consumer goods companies with a turnover of nearly €40 billion and more than 200,000 employees. Unilever produces 400 brands across a range of food home and personal care products. It has operations in around 100 countries, and its products are sold in about 50 more.

Unilever describes itself as a 'multi-local' multinational, bringing its international expertise to the service of people everywhere. It has consumers, employees, business partners and shareholders on every continent.

Unilever was created in 1930 when the British soap-maker Lever Brothers merged its businesses with that of the Dutch margarine producer Margarine Unie. Although they remain two parent companies with primary listings on the London and Amsterdam stock exchanges, they operate as one. They have a unified board with a non-executive chairman, a group chief executive responsible for the day-to-day management of the business, and a streamlined executive team.

Key Facts 2005

In year 2005, the company turnover was 39, 672 million Euros, from three key regions: Europe 41%, America 33% and Asia/Africa 26%, while the company operating profit was 5,314 million Euros, from these three key regions: Europe 43%, America 32% and Asia/Africa 24% (see figure 3.1).



Source: Unilever 2005

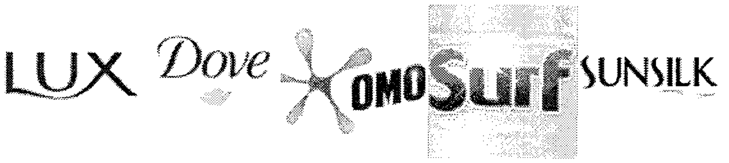
Figure 3.1 Turnover and Operating profit in year 2005

Unilever Brands and Position in Market

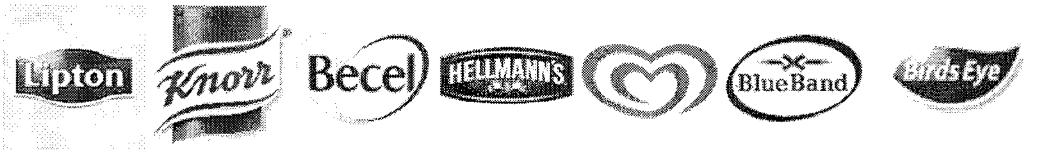
Unilever has a powerful portfolio of both Foods and Home & Personal Care brands. It has twelve €1 billion brands and global leadership of many of the categories in which it operates (see figure 3.2).

In Asia and Africa, the company has the leading position in the market e.g. Face Care and Skin Cleansing is number one in India, South Africa, Indonesia, Thailand, Vietnam and Philippines. For Fabric Cleaning, Hair, Deodorant, Tea, Savoury and Ice cream the company has local strength even though it is are not number one in those countries (see figure 3.3).

Home & Personal Care



Foods



Source: Unilever 2005

Figure 3.2 Top 12 brands year 2005

	India	South Africa	Indonesia	Thailand	Vietnam	Philippines
Fabric Cleaning	1	1	2	1	1	2
Hair Care	1	2	1	1	1	1
Face care	1	1	1	1	1	1
Skin Cleansing	1	1	1	1	1	
Deodorant	1	1	1	2		1
Tea	1	2	1		1	
Savoury		1	2	2	1	1
Ice Cream	2	2	1	1		1

Source: Unilever 2005

Figure 3.3 Leading Position in Key Market year 2005

Unilever Thailand's company profile

In Thailand, Unilever was establish since 1932

1932 Unilever begin business in Thailand as Siam Industrial Co., Ltd.

1954 The company name changes to Lever Brothers (Thailand) Co. Ltd.

1997 The company's name changes to Unilever Thai Holdings Co. Ltd.

2001 The company announces a business partnership with Best Foods, and changes its name to Unilever Bestfoods Co., Ltd (UBF).

2002 Grand opening of the Distribution Center and 70th year celebrations of business in Thailand, and also a change of company organization, as follows:

- Unilever Thai Trading Ltd which manages marketing business and distribution activity
- Unilever Thai Holdings Ltd became the base manufacturing site for the region of hair category by establishing a new organization in Thailand (Regional Sourcing Unit and Regional Technology Center).

2005 Merger of Unilever Bestfoods Co. Ltd. and Unilever Thai Trading Ltd. to Unilever Thai Trading Ltd to support a 'One Unilever' global strategy

Product Portfolio in Unilever Thailand

Table 3.1 shows a summary of the product groups and brand, position in the market, and market share, in year 2005. The company is number one in the local market for all 8 categories e.g. Fabric Wash, Household Care, Hair, Personal Wash, Skin Care, Foods and Ice Cream, while Deodorant and Oral care are number two and four in the market respectively.

Table 3.1 Summary Product group and brand

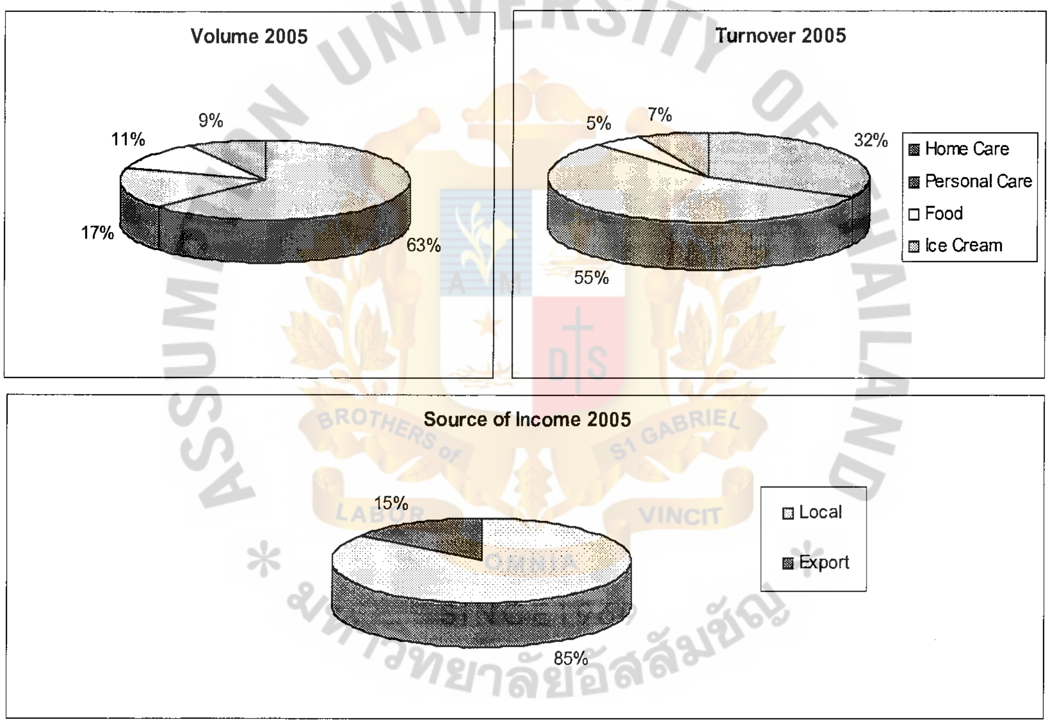
Business Group	Product category	Brand	Position in Market	Market share 2005
Home Care product	Fabric Wash	"Breeze", "Omo"	1	65%
	Household care	"Sunlight", "Vim", "Comfort"	1	65%
Personal care product	Hair	"Sunsilk", "Dove", "Clinic"	1	52%
	Oral Care	"Close up",	4	10%
	Deodorant	"Axe", "Rexona",	2	21%
	Personal Wash	"Lux", "Vaseline Harmony", "Dove"	1	35%
	Skin Care	"Pond's"	1	25%
		"Vaseline", "Citra"	1	50%
Food Product	Ice Cream	"Wall's", "Ben & Jerry's"	1	30%
	Food	"Best Foods", "Knorr"	1	45%

Source: Unilever 2005

Source and ratios of Income 2005

The company's turnover value was €620 million in year 2005 (see figure 3.4).

1) The incomes sources come from the local market and the export market to Unilever subsidiaries are 85% and 15% respectively.
2) In term of value income, the biggest portfolio of categories in the company is Personal Care (55%), followed by Home Care (32%), Ice Cream (7%) and Food (5%).
3) In term of volume produced, the biggest portfolio of categories in the company is Home Care (63%), followed by Personal Care (17%), Foods (11%) and Ice Cream (9%).



Source: Unilever 2005

Figure 3.4 Source and Ratios of Income year 2005

Supply Chain in Unilever

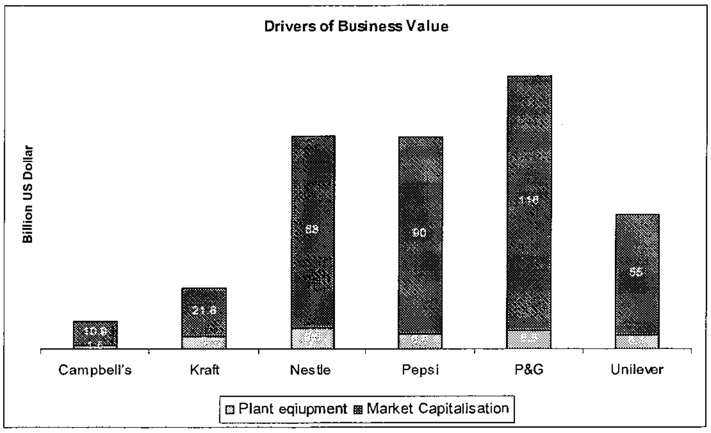
In term of its supply chain, Unilever has the following strategic tasks:

- Support Unilever growth through speed and quality of innovation at specified quality and service levels
- Increase the operating margin by creating a low cost supply chain
- Manage assets and working capital effectively

In this context it is essential to continuously review which technologies and capabilities should stay in-house and which should be outsourced to support business strategy and optimally create value for Unilever.

The important considerations of the make or buy manufacturing decisions are

- Make or buy decisions must be made in a context of global/regional business strategy.
- In the FMCG industry Unilever is a large player, whereas the industry as a whole has not yet been consolidated. Therefore, usually there will be a limited amount of possible contract manufacturers in the market that can accommodate Unilever volumes, complexity and technical requirements. As a consequence, often a considerable amount of resource and support from Unilever is required to successfully outsource products and services on a large scale. This must be taken into account in the planning process.
- In the FMCG industry the assets are of limited value compared to the overall value of business. The dominant drivers of business value must be sought outside manufacturing. Market capitalizations include brand value, trade leverage and product differentiation/innovation. The key issue therefore is to identify where manufacturing supports business value and to ensure access to the appropriate capabilities (internal or external), e.g. safeguarding the quality of its products supporting the brand reputation.



Source: Unilever 2002

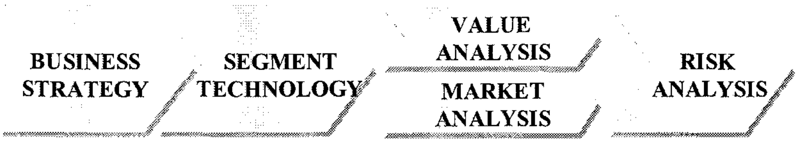
Figure 3.5 Asset contribution to Business Value

Figure 3.5 show that the investment of Market Capitalization in Unilever is eight times greater than Plant & Equipment. While other FMCG company likes P&G and Nestle investment for Market Capitalization is around thirteen and eight time of Plant & Equipment respectively. This number shows that the FMCG business focuses on brand value, product differentiation and innovation more than plant equipment.

- Finally, the success rate of contract manufacturing depends to a great extent on the approach taken to manage the relationship between the contract manufacturer and Unilever. The reliability and success of a project between companies with different cultures and expectations and in different locations is dependent on good communication and relationships between the people involved. It is essential to dedicate the appropriate time and attention to the relationship development throughout the process.

3.2 Make or Buy Strategic Framework in Unilever

The relevant activities in Make or Buy Strategy development are shown in figure 3.6. Using the Business strategy as input, the Make or Buy Strategy builds on a rigorous analysis of how to leverage technologies and the sourcing network within and outside the company to create maximum value. We need to understand how the supply chain contributes to and supports the business. Next we need to understand what the potential is in the market place, both in terms of technologies as well as sourcing opportunities. In case of Buy this will require a vision of how to leverage the market and what type of relationship is required. The potential opportunities should be substantiated with guidelines to manage competitive strength of technologies, position in the market, and possible alliances, etc.



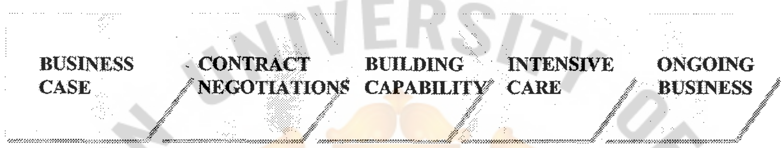
Source: Unilever 2002

Figure 3.6 The description of Make or Buy Strategy.

The Make or Buy strategy should deliver a framework stating the conditions for in-sourcing and outsourcing, and the opportunities that should be pursued to deliver more value.

Relationship Management is central in the implementation process. We present specific guidelines for all activities in the implementation process.

The Make or Buy implementation process starts with developing the Business Case (see figure 3.7) which involves alignment with the strategic framework, detailed analysis of the regional market and contract manufacturers, and a detailed business case involving financial and non financial aspects.



Source: Unilever 2002

Figure 3.7 The description of Make or Buy Implementation.

Contract negotiations require a rigorous preparation process, before the negotiations can take place. The preparation should highlight the added value for both parties.

After the contract has been signed a project team will co-develop the innovation and/or capabilities, leveraging the capabilities of both companies. This activity is concluded by a Launch Go/No-Go decision. If a Launch decision is made, a period of intensive monitoring is required to ensure product quality and performance.

After launch the sourcing decision will move to continuous business, where we expect improvements creating more value. Periodically the Business Case is reviewed.

Make or Buy Strategic Framework

Unilever needs to have a strategic framework to ensure that leverage of third party manufacturing to create business value for all divisions where appropriate:

- It requires decisions founded on fact based on rigorous analysis.

- We must guarantee that we maintain or gain access to core competencies and/or proprietary knowledge.
- The decision requires a focus on all business value drivers - not just cost.
- We will likely need fewer, bigger relationships to leverage supplier capabilities including scale and innovation potential.

The policies and strategies should be updated during the strategic planning cycle and reviewed as appropriate to ensure business relevance.

Business Strategy

The business strategy presents the objectives we need to pursue and the impact we want to make on the market. Then the Make or Buy strategy should tell us how we can leverage the internal and external sourcing network to achieve our objectives. Therefore, we need to develop an appropriate segmentation model of core technologies on which to build our make or buy strategies.

For a specific technology we then need to analyze how manufacturing creates value in the market, focusing on brand value, product differentiation, and trade leverage. For each segment, we can develop (sub) regional and aggregated global Make or Buy strategies to define:

- practical business opportunities
- potential outsourcing strategies and contract manufacturers
- action plans to deliver these opportunities

This will involve a rigorous analysis of the market situation: what capabilities are available internally and externally, and how can we leverage that market. Subsequently we need to assess potential contract manufacturers. Building on that information we can then understand the potential benefits and investments.

Finally, we have to balance this with an analysis of the risks from the market or contract manufacturers. Strategy development will require global as well as regional supply chain inputs.

Segment Technologies

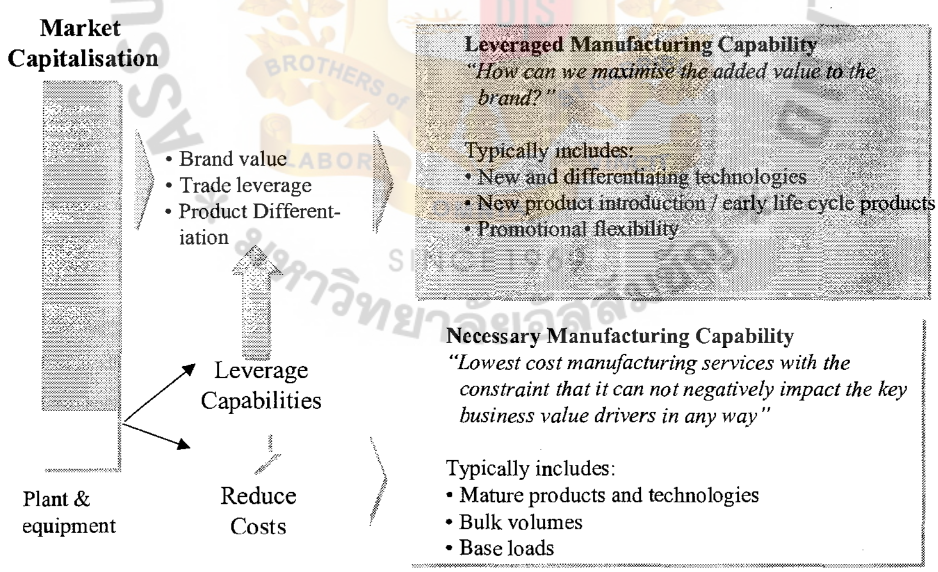
The starting point for the framework is segmentation of the core technologies. On the divisional level we need to define what segmentation is most appropriate and which policies we need to specify and how often they need to be revised. We take the technology segmentation as a given in this manual. The next step is to understand how we create value in that segment.

Value Analysis

A value analysis delivers insight in how the supply chain contributes to the business value drivers. This contribution can only be seen by comparison with the capabilities in the market place. Therefore value analysis and market analysis are intertwined activities that cannot be implemented independently, but are explained separately for clarity.

There are basically three ways to create value: through brand value, e.g. 'Quality image' or 'Made in' image, product differentiation/innovation, e.g. impact on consumer properties, and innovation lead-time, and trade leverage, e.g. promotional flexibility and customer service.

The question is: can we further enhance business value through an effective combination of in-sourcing or outsourcing activities? An example is gaining access to contract manufacturer technologies. This could lead to leveraged manufacturing capability (see figure 3.8).



Source: Unilever 2002

Figure 3.8 Two different make or buy decisions

However, for some technologies manufacturing will prove not to have an impact on the business value drivers. Then the question is: what marketplace capabilities can be leveraged to drive down cost more effectively than in-house manufacture?

In other words, can in- or out-sourcing provide us with lower cost manufacturing without causing unacceptable risks to key value driver performance? We may for example increase average manufacturing asset utilization, reduce manufacturing overheads, or facilitate process renewal through scale increase.

The first step is a business discussion to identify the key value drivers for the brands in which the technology is used. A clear view of the business value drivers should be formulated with supply chain and brand development representation.

Unilever have identified four Supply Chain criteria which are crucial in understanding the impact of Supply Chain on the key value drivers.

1) Innovation

- Technology
    - Proprietary
    - Unique Capabilities
    - Add value for the consumer
- Competitive and Legal aspects
    - Patents
    - Legal issues prohibiting import or export
- Innovation
    - Significant knowledge
    - Innovation capacities and track record
    - Unique innovation skills or networks
    - Speed of introduction
    - Relevance of speed compared to competitors

2) Service

- Agility/Flexibility
    - Experience in managing and planning complexity
    - Planning capability and systems in place
    - Alternative Channels
- Reliability & Responsiveness

- Product Availability
- Customer Delivery Adherence
- Lead-time

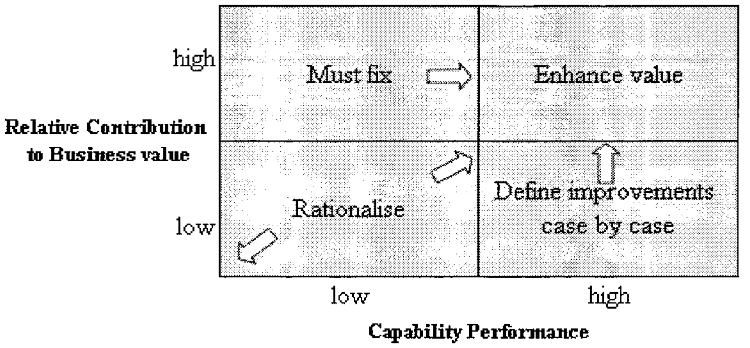
3) Quality and SHEQ (Safety, Health, Environment, Quality)

- Consumer Safety
    - Ability to deliver good quality products
    - Consistency of quality
    - Quality management systems in place, verified by audit
    - Potential of equipment to deliver better quality products
- Business Principle and SHE (Safety, Health, Environment)
    - Environment care systems, compliance to legislation, emergency plans
    - Health and safety management system, identification and control of main hazards, training of employees
    - Business principle: human right, compulsory or child labor

4) Cost

- Financial
    - Variable & fixed costs, (avoided) investment, once-off costs or revenue, working capital, opportunity cost, redundancies
    - Financial stability, interest of owner
    - Leanness/Low cost
    - Gross Capital employed
    - Extended Supply Chain cost

In order to understand the contribution of the Supply Chain, Unilever rate our capability performance for the Supply Chain criteria that are keys to business value drivers. This rating positions Unilever performance against the market.



Source: Unilever 2002

Figure 3.9 The capability matrix.

Based on the rating and the relative contribution to the business, the technology can be mapped in one of the quadrants (see figure 3.9). Based on the business strategy the future situation can be mapped as well (target value and capability). Using this approach sourcing units as well as technologies can be mapped to understand what actions should be taken. To bridge the gap, there will be various options. The potential opportunities per quadrant are presented below.

<u>Low contribution-low performance:</u>

- Seek minimum cost ensuring no value driver impact
- Outsource to leverage market capability
- Make for others to improve cost position

<u>High contribution-low performance:</u>

- Improve internal effectiveness
- Analyze 'buy' to improve capability

<u>Low contribution-high performance:</u>

- Restrict capital expenditure
- Analyze 'buy' to maintain performance
- Exploit Capability

<u>High contribution-high performance:</u>

- Retain in-house
- Outsource with protection to avoid capability loss
- Enhance effectiveness through continuous improvement

Risk Analysis

The opportunities we have identified from the analysis have been evaluated in terms of the benefits they can deliver. However, each opportunity may present risks to the business value drivers e.g. losing competitive advantage, damaging the brand, loss of know-how, reduce barriers to market, impact on quality, product safety, etc..

As presented in figure 3.10 there will be a maximum level of accepted risk and a minimum level of benefits that would be expected before outsourcing would be considered. This maximum level depends on a view of how these risks can be managed /mitigated.

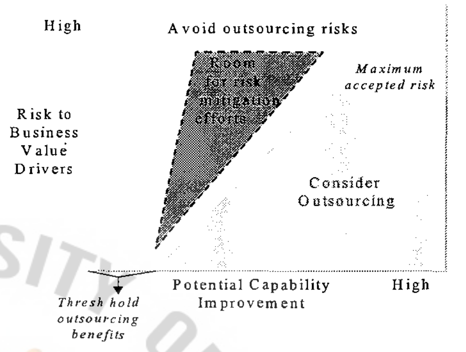


Figure 3.10 Balance Risk versus Benefit

Source: Unilever 2002

Based on the risk analysis we can specify criteria and conditions for in-sourcing and outsourcing:

- identify and reject those options that would become liabilities
- select the top opportunities
- specify additional risk management activities for the selected opportunities

When the risks for each option are understood, the framework can be defined, balancing value versus investment and risk, and specifying the constraints for each option, e.g.

- outsource only to contract manufacturers that do not have own brands

- protect proprietary process technologies

In figure 3.11 some relevant risk factors are presented:

Factors increasing the risk:

- Closely linked to key business value drivers
- Varying volumes / loading
- Scarce technologies
- Highly competitive contract manufacturing industry (reduced investments / quality risks)
- Embryonic (high growth) Contract Manufacturer industry
- Many supply chain interrelationships
- Limited Innovation/ Improvement Capabilities at CM-ers
- CM Culture & Management style conflicts significantly with UL requirements

Factors reducing the risk:

- Stable volumes
- Readily available technologies
- Established contract manufacturer industry
- Clear market leaders in contract manufacturing industry
- Highly modular supply chain architecture
- Contract Manufacturer flexibility
- Partial Ownership
- Well developed innovation and improvement capability at CM-ers
- CM shows an ambition to align with UL.
- Robust CM relationships

Source: Unilever 2002

Figure 3.11 Risk Factors

By following the steps outlined above, you should have a strategic framework, consisting of:

- Strategic rationale for outsourcing or in-sourcing with respect to Value Drivers
- Strategic Make or Buy objectives e.g. increase speed to market
- Sourcing framework – including market approach, potential Contract Manufacturer's and relationship approach
- Business internal/external opportunities, including risk analysis.

The business opportunities should be further elaborated in the regions in formulating the business case (in the context of the strategic framework). This activity is defined in Make or Buy implementation.

The Five key Drivers of Supply Chain Performance in make or buy decisions

1. Product Quality

Consistency and Conformity

The delivery of consistent quality products that conform to the standards defined by the business.

2. Reliability

Product availability

Providing the right product, at the right place (at point of sale e.g. grocery channel, OOH etc), at the right time, in the right quantity. The ultimate measure here is 'on-shelf' availability.

Customer Delivery Adherence (good customer service levels)

Achieve customer satisfaction by meeting customer (trade) delivery requirements. Performance here is measured by typical case fill/OTIF (on time in full) indicators.

3. Responsiveness

Reduced lead times

The ability to respond to changing customer needs upon request. This requirement impacts the whole supply chain and includes supplier lead times and manufacturing cycle times to effectively provide the required customer delivery lead times.

Short term volume responsiveness

The ability of the organization to respond to peaks in consumer or more likely customer demand (seasonal or unexpected demands/opportunities).

Innovation Time to Market

The importance of the Supply Chain ability to rapidly provided new product availability (new products and promotions that affect the format of the finished goods) to the market.

4. Agility/Flexibility

SKU Complexity Management (includes Product Innovation)

The ability of the organization to provide a product portfolio that meets the needs of the Consumer /Customer yet balancing the cost of complexity within the Supply Chain and organization.

Long Term Volume Flexibility

The ability of the organization to respond to significant change in the long term volume requirements.

Product Innovation

The requirement for the Supply Chain to be able to handle new SKU's needing 'innovation' or major change in the Supply Chain (e.g. new manufacturing technology and processes).

Alternative Channels

The ability of the organization to deliver products to new delivery channels and to extend their reach in existing channels.

5. Low Cost

<u>Gross Capital Employed</u>

The ability of the organization to optimize its Supply Chain fixed assets and working capital.

<u>Optimal Extended Supply Chain Cost</u>

Achieve the optimal balance between service and cost. This category covers costs such as material spend, administration costs, warehousing and transportation costs, conversion costs etc. including those incurred at the Suppliers and Customers.

The Financial part in make or buy decision

Incremental costs involved in sourcing decision. The commercial assessment will be done on the basis of a Discounted Cash Flow (DCF) approach by comparison of the alternative options. The following items have to be considered:

- Variable cost: differences in variable cost have to be fully included (duties, import/export taxes for materials and finished products and differences in primary distribution cost)
- Fix Cost: only incremental fixed costs should be included if in-sourcing into own factories is considered (typical examples: additional repairs & maintenance, quality assurance, additional supply, warehousing and planning cost). If outsourcing is considered only un-sheddable fixed cost and cost of removing sheddable cost (such as redundancies) have to be considered.
- Investment/avoided investment: here investment into buildings and equipment has to be distinguished due to different depreciation rules. Repair has to be considered as cash outflow.
- One off cost/revenue (such as tooling, development cost, start-up cost, training, repairs, and redundancies). The asset write offs in own factories are non-cash items and hence may not be included. However the positive cash impact from taxes should be considered.

- Working Capital: Co-packing usually has a positive effect on WC due to the fact that 3rd party creditors in co-packing as being for full product cost which are typically higher than material creditors in own factories and due to the fact that usually no material stocks are held in contract manufacturers. (Stocks in finished goods have to be considered as well if they differ materially e.g. in case the contract manufacturer is producing in smaller lots or its stock due to the long supply chain in co-packing have to be higher).

Opportunity cost: all opportunity cost effects should be fully documented and take into account (e.g. an in-sourcing decision would block capacity that could otherwise be used for alternative products where out-sourcing would be significantly more expensive).

3.3 Make or Buy Decision Model

The Supply Chain Criteria can be used for Make or Buy, Different Market Approaches, Different Contract Manufacturers. The responsible managers first decide on weight of Supply Chain criteria. Then the option are discussed for each Supply Chain criteria and rated. The average weighted rating will point out the preferred option.

Table 3.2 shows all 10 supply chain criteria and weighting percentages for each factor: the biggest portion is Agility/Flexibility 20%, then Reliability and Responsiveness 15%, Technology 10%, Innovation 10%, Consumer safety 10%, Business principle and Safety, Health, Environment (SHE) 10%, Financial 10%, Low Cost 10% and Competitive and Legal 5%. For example, options 1 to 4 represent four alternative manufacturers. After the rated score, Unilever is the preferred option (highest total average score), followed by supplier 1, 2 and 3.

Table 3.2 Make or Buy Decision Model

	Weighing Factor	Unilever	Supplier 1	Supplier 2	Supplier 3
Technology	10%	9	8	5	6
Competitive and Legal	5%	8	7	6	4
Innovation	10%	8	7	4	4
Agility/Flexibility	20%	7	6	4	6
Reliability & Responsiveness	15%	7	7	6	7
Consumer Safety	10%	8	7	6	4
Business Principles and SHE	10%	8	7	6	4
Financials	10%	8	7	6	4
Low Cost/Leanness	10%	9	7	6	4
	100%	**8.72**	7.67	**5.89**	**5.61**
Rating (1 - 9)		**Preferred**	Solid	**Out**	**Out**

Source: Unilever 2002

The weighting factor in a Make or Buy decision model can be adjusted to fit with the market situation and product strategy. Different types of product require different Supply Chain criteria weighting. There is no single formula that applies to all situations. For example, Skin Care category is focusing on technology, innovation and consumer safety more than cost. The responsible managers will give a weight factor for all those 3 criteria higher than the other one.

CHAPTER IV
DATA ANALYSIS

4.1 Data Collection/ Analysis

Unilever Thai has its own manufacturing facility located at Ladkrabang Industry (Bangkok), and 9 suppliers of contract manufacturer.

The structure of transfer price in Unilever has been separated into 3 major costs which are manufacturing cost, raw material cost and packing material cost. For buy items, the contract manufacturer will buy both raw and packing material from a supplier that has already agreed a price with Unilever. That means that the benchmarking value/price between in-house (make item) or outsource (buy item) in this report is the manufacturing cost (M-fee cost).

M-fee for buy items covers production costs (e.g. mixing, filling and packing) and administration costs (e.g. employee's salary).

A summary of Unilever's make and buy data, both volume and value (M-fee), for each product category from year 2003 to 2006, is shown in the table below

Table 4.1 Summary make and buy data - Year 2003

Category	2003									
	Make		Buy		Total		Ratio volume		Ratio value	
	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Make	Buy	Make	Buy
Fabric Wash	209.11	395	4.33	6	213.45	401	98.0%	2.0%	98.6%	1.4%
Household Care	48.66	69	13.06	33	61.73	102	78.8%	21.2%	68.0%	32.0%
Hair	27.25	122	3.01	47	30.26	169	90.0%	10.0%	72.3%	27.7%
Personal Wash	20.76	122	1.43	14	22.19	136	93.6%	6.4%	89.5%	10.5%
Skin Care			5.59	163	5.59	163		100.0%		100.0%
Deodorant			0.49	16	0.49	16		100.0%		100.0%
Oral			4.16	336	4.16	336		100.0%		100.0%
Total	**305.78**	**708**	**32.08**	**615**	**337.86**	**1,324**	**90.5%**	**9.5%**	**53.5%**	**46.5%**

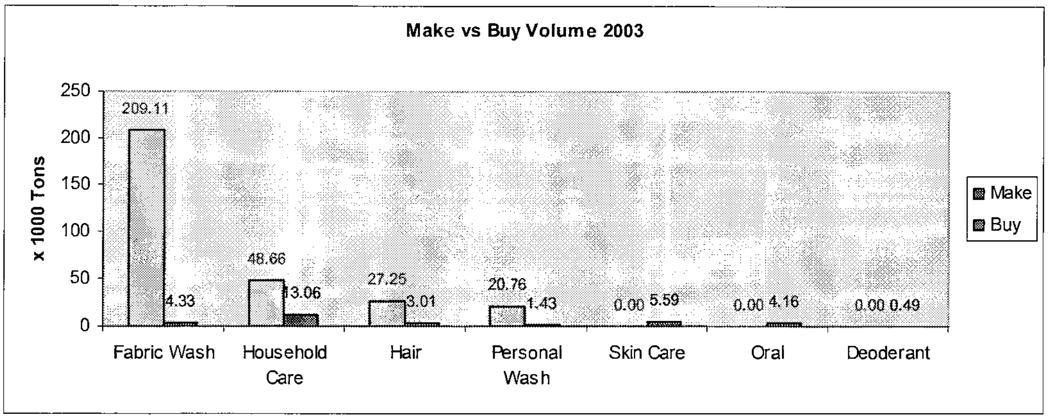


Figure 4.1 Make vs. Buy volume by category – Year 2003

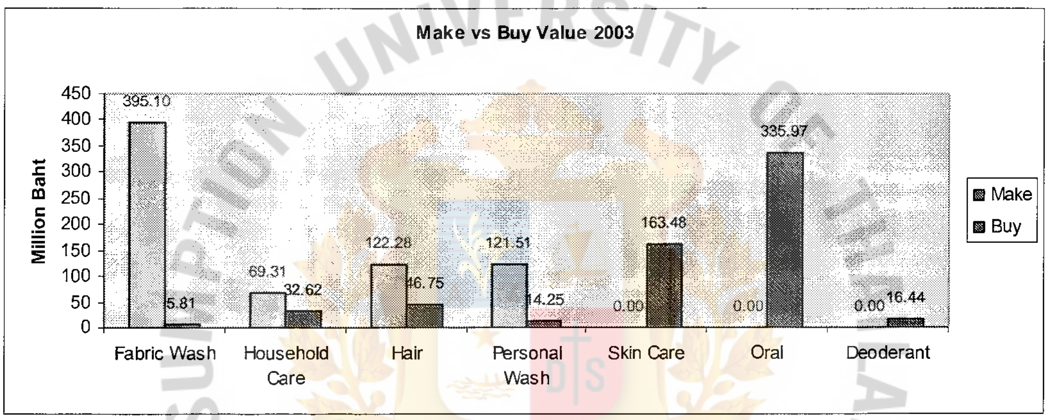


Figure 4.2 Make vs. Buy value by category – Year 2003

After evaluating data for year 2003, the percentage of make volume shown in Table 4.1 it reveals that the company produced for Fabric Wash, Household Care, Hair and Personal Wash Category which are a major part of total company volume (91%). The spending value for make items is approximately 54% of total company value.

Regarding the Pareto concept, 80% of volume produced is Fabric Wash and Household Care products, and 20% of volume produced is Hair, Personal Wash, Skin Care, Oral and Deodorant category. This means that Fabric Wash and Household Care categories are the Company's core business.

Figure 4.1 show the volume produced in each product category, both in-house and contract manufacturer. The biggest Make portion at 68% is from Fabric Wash, followed by Household Care, Hair and Personal Wash at 16%, 9% and 7% respectively. For Buy portion, the biggest is household Care 41%, followed by

Skin Care, Fabric Wash, Oral, Hair, Personal Wash and Deodorant at 17%, 14%, 13%, 9%, 4% and 2% respectively.

Figure 4.2 show the value spending in each product category both in-house and contract manufacturer. The biggest Make portion at 56% is from Fabric Wash, followed by Hair, Personal Wash (17% equal) and Household Care at 10%. For Buy portion, the biggest is Oral 54%, followed by Skin Care, Hair, Household Care, Deodorant, Personal Wash and Fabric Wash at 27%, 8%, 5%, 3% ,2% and 1% respectively.

Table 4.2 Summary make and buy data - Year 2004

Category	2004									
	Make		Buy		Total		Ratio volume		Ratio value	
	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Make	Buy	Make	Buy
Fabric Wash	227.19	380	7.16	15	234.35	394	96.9%	3.1%	96.3%	3.7%
Household Care	66.38	86	11.89	26	78.27	112	84.8%	15.2%	76.8%	23.2%
Hair	37.65	151	1.80	30	39.45	180	95.4%	4.6%	83.6%	16.4%
Personal Wash	23.18	127	1.01	11	24.19	138	95.8%	4.2%	92.0%	8.0%
Skin Care	1.32	7	9.87	253	11.19	260	11.8%	88.2%	2.7%	97.3%
Deodorant			0.71	162	0.71	162		100.0%		100.0%
Oral			4.12	334	4.12	334		100.0%		100.0%
Total	**355.72**	**751**	**36.56**	**830**	**392.28**	**1,581**	**90.7%**	**9.3%**	**47.5%**	**52.5%**

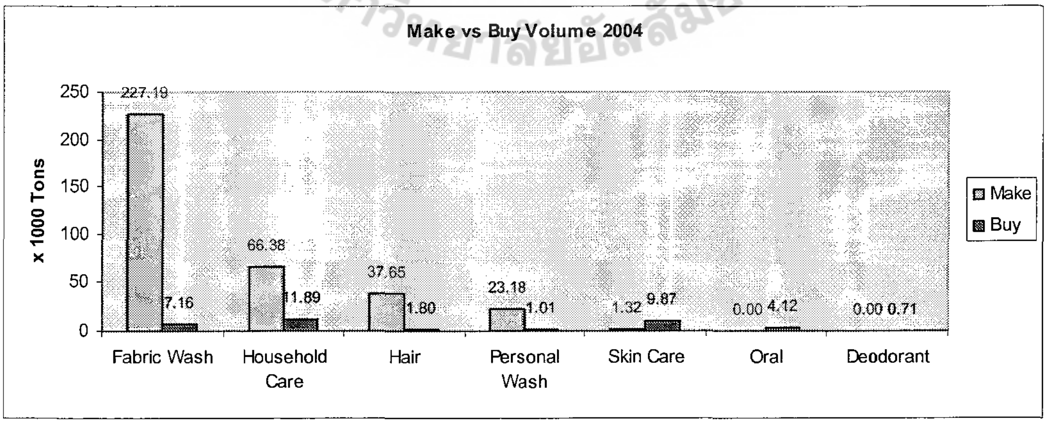


Figure 4.3 Make vs. Buy volume by category – Year 2004

Table 4.3 Summary make and buy data - Year 2005

Category	2005									
	Make		Buy		Total		Ratio volume		Ratio value	
	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Make	Buy	Make	Buy
Fabric Wash	227.76	391	4.86	18	232.62	409	97.9%	2.1%	95.5%	4.5%
Household Care	54.58	73	9.02	18	63.60	91	85.8%	14.2%	80.3%	19.7%
Hair	49.51	152	1.11	18	50.62	170	97.8%	2.2%	89.3%	10.7%
Personal Wash	28.73	145	0.89	10	29.61	155	97.0%	3.0%	93.6%	6.4%
Skin Care	2.68	16	9.41	284	12.09	300	22.1%	77.9%	5.4%	94.6%
Deodorant			0.69	175	0.69	175		100.0%		100.0%
Oral			3.50	286	3.50	286		100.0%		100.0%
Total	**363.26**	**777**	**29.49**	**810**	**392.75**	**1,587**	**92.5%**	**7.5%**	**49.0%**	**51.0%**

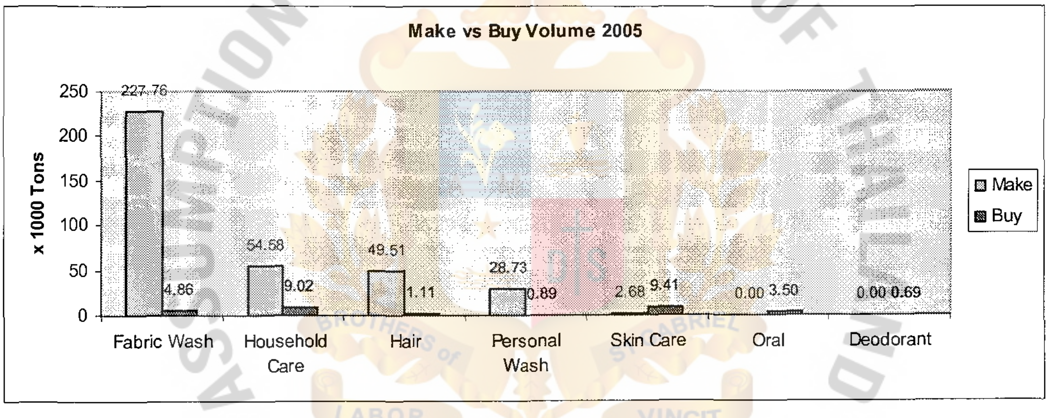


Figure 4.5 Make vs. Buy volume by category – Year 2005

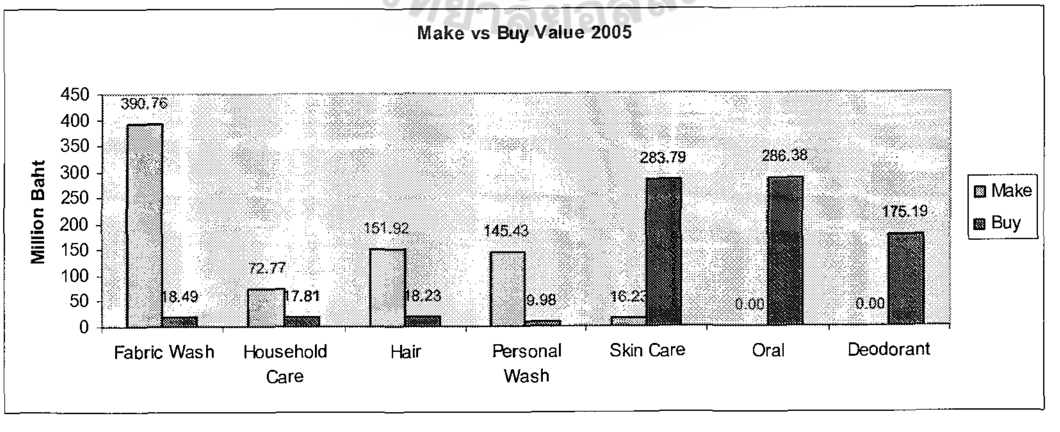


Figure 4.6 Make vs. Buy value by category – Year 2005

After evaluating data for year 2005, the percentage of make volume (Table 4.3) shows that the company produced for Fabric Wash, Household Care, Hair and Personal Wash Category which are the major part of total company volume (93%).While the spending value for make items is approx. 49% of total company value.

Regarding the Pareto concept, 80% of volume produced is Fabric Wash and Household Care products, and 20% of volume produced is Hair, Personal Wash, Skin Care, Oral and Deodorant category. Fabric Wash and Household Care categories are the Company's core business, the same as year 2003 & 2004.

Figure 4.5 show the volume produced in each product category both in-house and contract manufacturer. The biggest Make portion at 62% is from Fabric Wash, followed by Household Care, Hair, Personal Wash and Skin Care at 15%, 14% , 8% and 1% respectively. For Buy portion, the biggest is Skin care at 32%, followed by Household Care, Fabric Wash, Oral, Hair, Personal Wash and Deodorant at 31%, 16%, 12%, 4%, 3% and 2% respectively.

Figure 4.6 show the value spending in each product category both in-house and contract manufacturer, The biggest Make portion at 50% is from Fabric Wash, followed by Hair, Personal Wash, Household Care and Skin Care at 20%, 19%, 9% and 2% respectively. For Buy portion, the biggest is Household care at 36%, followed by Oral 35%, Deodorant 22%, Hair, Skin Care, Fabric Wash (2% equal) and Personal wash 1%.

Table 4.4 Summary make and buy data - Year 2006

Category	2006									
	Make		Buy		Total		Ratio volume		Ratio value	
	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Volume ($x10^3$Tons)	Value (MB)	Make	Buy	Make	Buy
Fabric Wash	185.94	333	2.72	6	188.66	339	98.6%	1.4%	98.2%	1.8%
Household Care	102.34	141	25.96	67	128.29	208	79.8%	20.2%	67.7%	32.3%
Hair	42.44	178	3.84	59	46.29	237	91.7%	8.3%	75.1%	24.9%
Personal Wash	26.24	134	0.77	12	27.01	146	97.1%	2.9%	91.5%	8.5%
Skin Care	4.87	23	7.75	214	12.62	237	38.6%	61.4%	9.8%	90.2%
Deodorant			0.82	201	0.82	201		100.0%		100.0%
Oral			3.14	245	3.14	245		100.0%		100.0%
Total	**361.83**	**809**	**45.01**	**804**	**406.84**	**1,613**	**88.9%**	**11.1%**	**50.2%**	**49.8%**

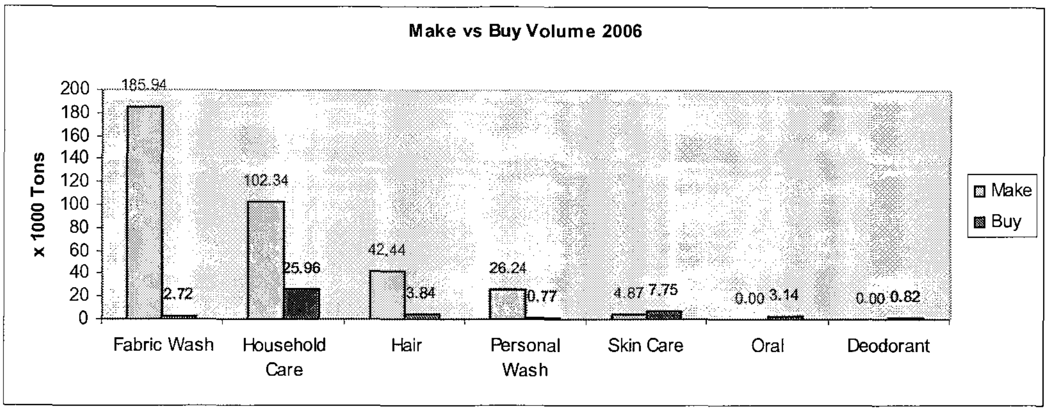


Figure 4.7 Make vs. Buy volume by category – Year 2006

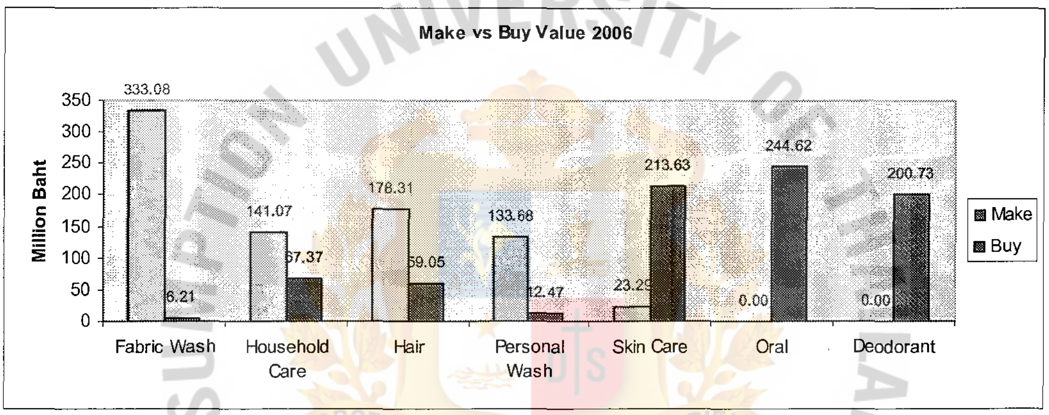


Figure 4.8 Make vs. Buy value by category – Year 2006

After evaluating data for year 2006, the percentage of make volume (Table 4.4) shows that the company produced for Fabric Wash, Household Care, Hair and Personal Wash Category which are the major of total company volume (89%), while the spending value for make items is approximately 50% of total company value.

Regarding the Pareto concept, 80% of volume produced is Fabric Wash and Household Care products, and 20% of volume produced is Hair, Personal Wash, Skin Care, Oral and Deodorant category. Fabric Wash and Household care category are the Company's core business, the same as year 2003, 2004 & 2005.

Figure 4.7 show the volume produced in each product category both in-house and contract manufacturer. The biggest Make portion at 52% is from Fabric Wash, followed by Household Care, Hair, Personal Wash and Skin care at 28%, 12% , 7% and 1% respectively. For Buy portion, the biggest is Household care at

57%, followed by Skin care 17%, Hair 9%, Oral 7%, Fabric Wash 6%, Deodorant and Personal wash (2% equal).

Figure 4.8 show the value spending in each product category both in-house and contract manufacturer. The biggest Make portion at 41% is from Fabric Wash, followed by Hair 22%, Personal Wash, Household Care (17% equal) and Skin Care 3%. For Buy portion, the biggest is Oral 30%, followed by Skin Care, Deodorant, Household Care, Hair, Personal Wash and Fabric Wash at 27%, 25%, 8%, 7%, 2% and 1% respectively.

From the data record for the past 4 years, Unilever is producing finished goods products more than it is outsourcing to contract manufacturing. For Oral and deodorant, Unilever 100% outsources from contract manufacturing. Oral and Deodorant are not number one in Market Position, while some product categories have both in-house manufacturing (make) and outsource to contract manufacturing (buy). Let us discuss details for each product category.

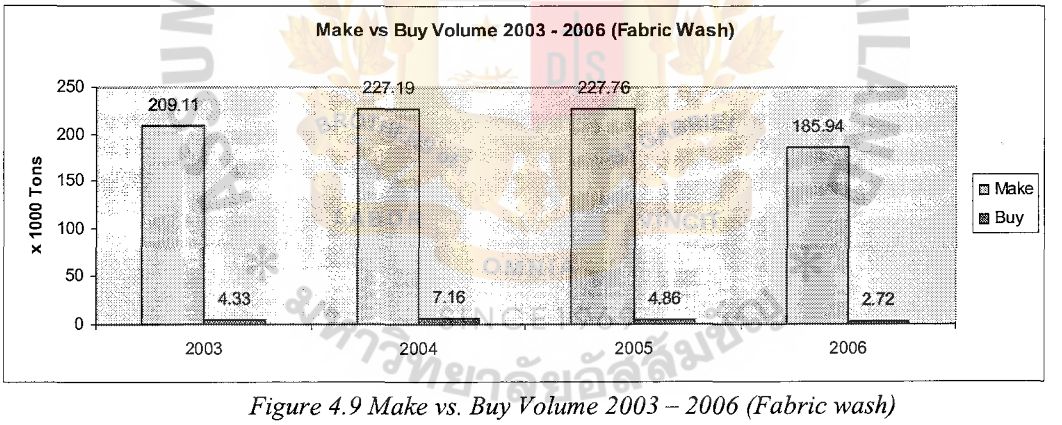


Figure 4.9 Make vs. Buy Volume 2003 – 2006 (Fabric wash)

Figure 4.9 shows the trend of make and buy volume, year 2003 – 2006, for Fabric Wash category. Fabric Wash is the number one of both company produced volume and position in Market, thus the company identifies this as a core business competency. Both manufacturing sides (make and buy) are considered for this category but the major volume is in-house manufacturing with the average running at 98% compared with contract manufacturing. Only one contract manufacturer applies for this category and only does one part of the manufacturer activity (filling finished goods product, while mixing is done by Unilever) because of a concern about technology limitation.

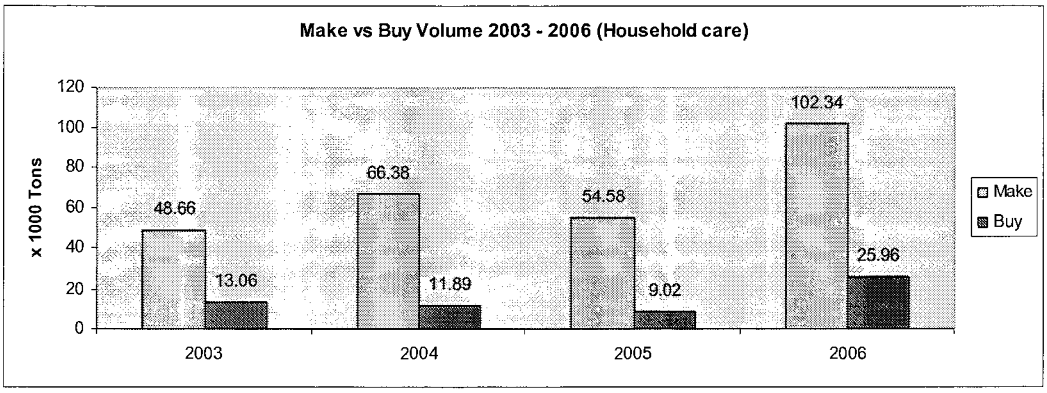


Figure 4.10 Make vs. Buy Volume 2003 – 2006 (Household Care)

Figure 4.10 shows the trend of make and buy volume, year 2003 – 2006, for Household Care category. Household Care is the second highest number of company produced volume and has the number one position in Market, thus the company identifies this as a core business competency. Both manufacturing sides (make and buy) are considered for this category but the major volume is in-house manufacturing with the average running at 82% compared with contract manufacturing. Two contract manufacturers apply for this category and the major reason for outsourcing is high utilization capacity in Unilever factory. The contract manufacturing is over flow plant (back up plan) during peak demand to cover market requirements.

In year 2006, plant capacity was high utilization, with double demand growth from year 2005, and so the contract manufacturer is used as over flow plant to cover peak market demand.

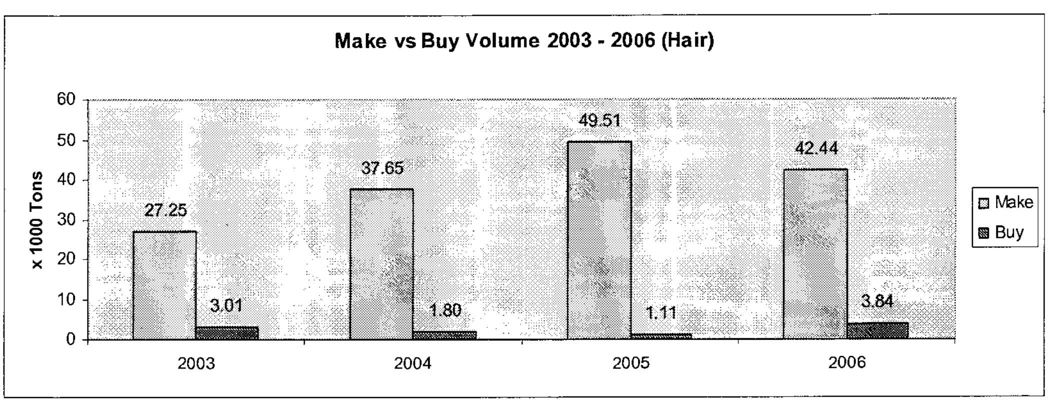


Figure 4.11 Make vs. Buy Volume 2003 – 2006 (Hair)

Figure 4.11 shows the trend of make and buy volume, year 2003 – 2006, for Hair category. Hair is the third highest number of company produced volume and holds the number one position in Market, thus the company identifies this as a core business competency. Both manufacturing sides (make and buy) are considered for this category but the major volume is in-house manufacturing with the average running at 94% compared with contract manufacturing. Two contract manufacturers apply for this category. There are two majors reason for outsourcing First, high utilization capacity in the Unilever factory, so the company needs to outsource some sku to contract manufacturing to cover the demand in market and facility limitation. Second, as this category covers a variety of products, the in-house manufacturing facility is unable to cover all product requirements.

Regarding company policy, Unilever Thailand is a regional sourcing base for Hair category since 2003. The significant growth volume comes from exporting finished products to Unilever subsidiary companies.

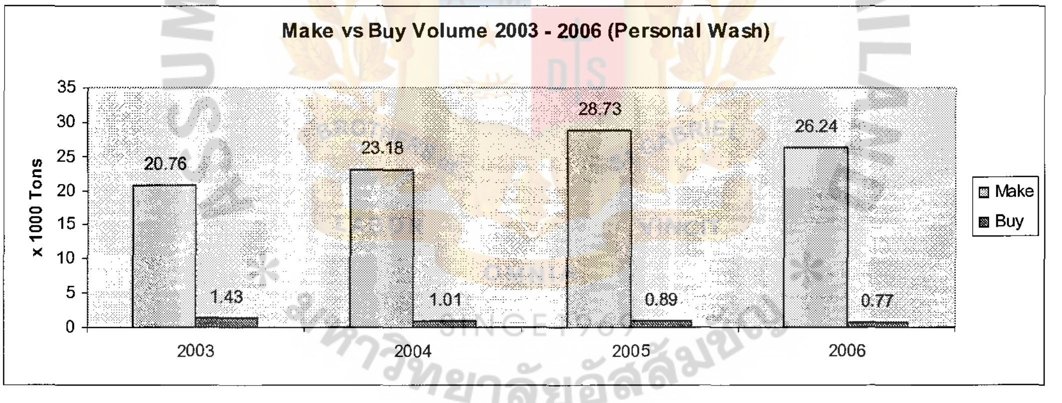


Figure 4.12 Make vs. Buy Volume 2003 – 2006 (Personal Wash)

Figure 4.12 shows the trend of make and buy volume, year 2003 – 2006, for Personal Wash category. Personal Wash is the fourth highest number of company produced volume and occupies the number one position in Market, thus the company identifies this as a core business competency. Both manufacturing sides (make and buy) are considered for this category but the major volume is in-house manufacturing with an average running at 96% compared with contract manufacturing. Two contract manufacturers apply for this category, and the major reason for outsourcing is high utilization capacity in the Unilever factory. The company needs to outsource some sku to contract manufacturing to cover the market demand.

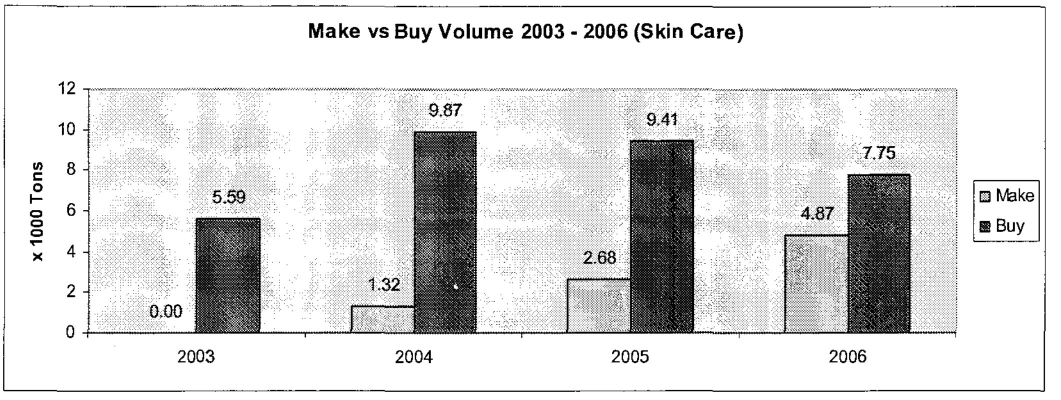


Figure 4.13 Make vs. Buy Volume 2003 – 2006 (Skin Care)

Figure 4.13 shows the trend of make and buy volume year, 2003 – 2006, for Skin Care category. Skin Care is the fifth highest number of company produced volume and holds the number one position in Market, thus the company identifies this as a core business competency. Both manufacturing sides (make and buy) are considered for this category but the major volume is contract manufacturing with an average running at 79% compared with in-house manufacturing. Three contract manufacturers apply for this category, and the major reason for outsourcing is facility limitation and a technology issue. As the Skin Care category is a complex product (many components in both packing and raw material), requiring high technology but for only a small volume, the investment in capital equipment would not be reasonable. Contract manufacturers can justify their capital investment in specialized equipment by manufacturing similar low volume products for multiple OEM (Original Equipment Manufacturer) brands.

Moreover, the average volume growth during year 2004 – 2006 is 38%, non core becoming core business. The company reviewed its make or buy decision since 2004 and found that making is more favorable (some sku). Then company retrieved some sku from contract manufacturing to in-house and continually reviews the make or buys decision.

Significant growth volume shows that the company favors in-house rather than outsourcing. Potential double growth in-house volume is likely in year 2007, and contract manufacturing will become the back up plan (overflow plant) in case high utilization in the Unilever factory.

Otherwise good relationships must be maintained with contract manufacturers.

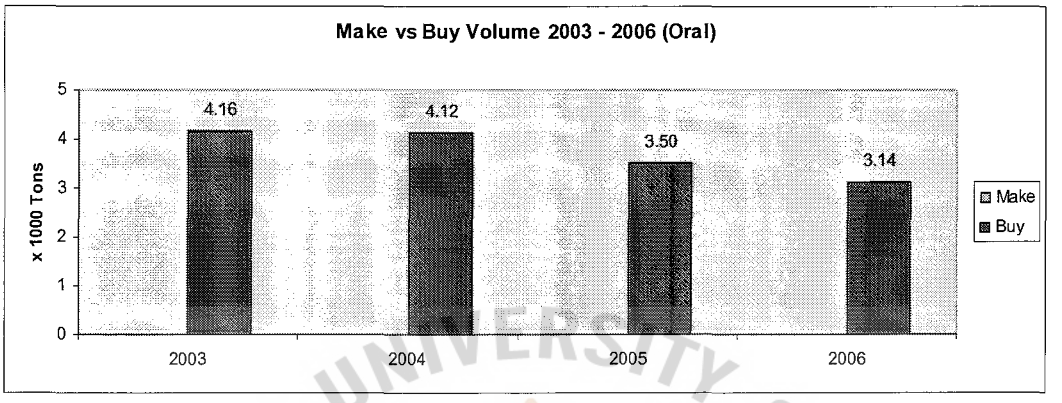


Figure 4.14 Make vs. Buy Volume 2003 – 2006 (Oral)

Figure 4.14 shows the trend of buy volume, year 2003 – 2006, for Oral category. Oral is the sixth highest number of company produced volume and occupies the number four position in the Market, thus the company identifies this as non core business. Only contract manufacturing is considered for this category (due to small volume of product). Two contract manufacturers apply for this category, one for local (toothbrush) and one abroad (toothpaste).

As company policy, the regional sourcing country for Toothpaste category is based in Vietnam. Unilever Thai is importing the finished product from Vietnam. The total cost of ownership (TCO) is considered for this category.

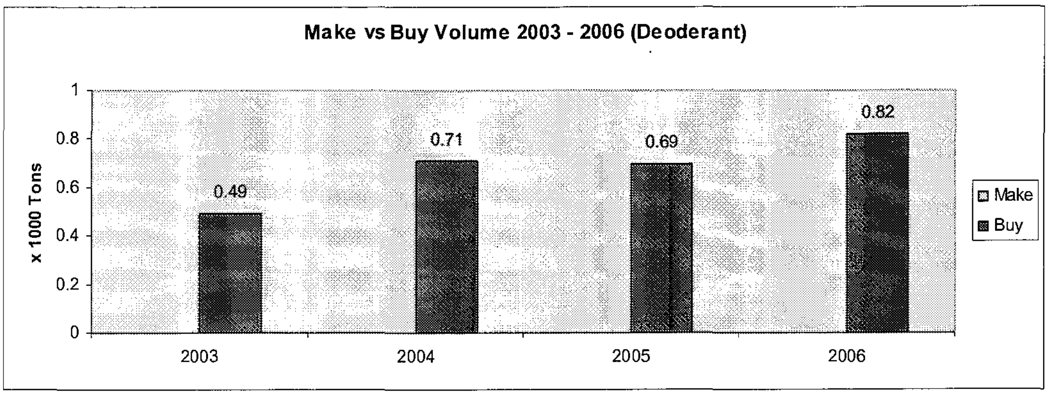


Figure 4.15 Make vs. Buy Volume 2003 – 2006 (Deodorant)

Figure 4.15 shows the trend of buy volume, year 2003 – 2006, for Deodorant category. Deodorant is the seventh highest number of company produced volume and holds the number two position in Market, thus the company identifies this as non core business. Only contract manufacturing is considered for this category (due to small volume of product). Two contract manufacturers apply for this category.

4.2 Identify the Key Success & Failure Factors in Make or Buy decision

Normally a Make or Buy decision is discussed and implemented at the beginning of the innovation phase. Moreover, top management also continuously monitors and measures the resource of their decision. They promptly change decision once the market situation changes.

1) From in-house to contract manufacturer

- High utilization – once in-house capacity is limited, contract manufacturing is the back-up plan (overflow plant) to serve customer demand during peak periods, especially seasonal products.
- Technology – some of Unilever products require a technology that does not exist in the company and is unsuitable for investment because of small volume. Then a contract manufacture is the best choice.
- Non core business (small volume) – once the market position changes, with lower demand, it is not worth it for the company to keep this in in-house: it is better for the company to focus on core competencies. The contract manufacturer is the alternative.
- Expertise (know how) – the company is better if it takes benefit/advantage from the specialized abilities vendors.
- Company policy – to align with regional sourcing strategy, identify and select the best sourcing country for Unilever's leading brand. An example is Oral category where the sourcing country is based in Vietnam; Thailand and other countries in the region need to import the finished product only from there.

2) From contract manufacturer to in-house manufacturer

- Core business (growth volume) - once market position changes, with demand growth, non core becomes core business, and in-house manufacturing is recommended. An example is Skin category: 37% growth average in the past 3 years, led the company to review the business/financial case and turn some skus back to in-house manufacturer.

- Cost consideration (fixed cost recovery) – to share the fixed overhead cost from company investment. The high in-house volume can share all fixed costs and this is thus reflected in lower cost of product and competitive advantage.
- Quality issue – the failure by contract manufacturers to meet quality specification, drives a reverse decision, from buy to make.
- Unreliable contract manufacturer – once a selected contract manufacturer is unable to meet company standards, and performance falls below the required level (in any area), then there is the possibility of reconsidering a make or buy decision: either change to another contract manufacturer or bring it back to in-house.

4.3 Opinion of Unilever's key driver on decision making

Individual interviews were conducted with the senior manager of the organization who is responsible for make or buy decisions in Unilever. A summary is below.

Financial point of view

To support/align regional policy to identify and select the best sourcing country for Unilever's leading brands, the financial managers of sourcing countries always make a financial study of the business case. For example, if Unilever Malaysia would like to import finished goods products from Unilever Thailand.

- How much of the total cost of ownership (TCO)?
- How much of product margin?

All scenarios are created by comparing in-house and outsourcing for all value aspects (e.g: product cost, operating cost, transportation cost, warehouse cost, operating cost, etc.). A higher firm's margin or profit of product is the benchmark.

Supply Chain point of view

The value chain analysis is considered which includes:

- Inbound logistic – procurement/purchasing input
- Operation – organization structure, control system, country culture
- Outbound logistic – warehouse and distribution cost
- Service level – to support customers after a product has been sold to them

This stage also needs Marketing to identify customer needs and the generating of sales. The final decision-making involves cross-functional teams.

Often, people focus on cost only and ignore the other factors that should be considered. The regional supply chain managers always verify all factors and remind people of this important point.

CHAPTER V

CONCLUSION AND FUTURE STUDY

5.1 Conclusions

The sourcing issue – to buy or not to buy – is of central importance. While cost is always important in any business decision, the management level should consider the company's core competencies and capture relevant factors in conjunction with the decision.

According to Unilever's data collection and analysis, it has been shown that Make and Buy decisions were selected which kept all core business within the company while outsourcing non core business to contract manufacturer. However, an outsourcing decision has significant implication for the corporate strategy of the organization.

The company has adopted a Make or Buy strategic framework to ensure the right decision making to create business value. The company focuses on all business value drivers, not only on cost.

The Make or Buy decision model was created, by comparing the weighted rating of all relevant criteria. The relevant factors that the company considers are below.

(a) Core competency
(b) Cost
(c) Plant capacity
(d) Quality
(e) Technology
(f) Flexibility/Reliability
(g) Company policy

Referring to theory from the literature review and comparing it against the study result, reveals that Unilever follows the Make or Buy principles very well. Unilever is ready to change a decision if the market situation changes. The right Make or Buy decision-making provides an opportunity to generate superior business value and protect its position as number one market leader in the FMCG business, as in Unilever's slogan *"The World of FMCG"*.

5.2 Research Contribution

The findings suggest several theoretical and managerial implications. The company should look at all areas and aspects before finalizing a Make or Buy decision. However in actual practice, most people focus only on cost, regardless of the other relevant factors.

The data collection and the results of this case study help to draw a picture of Make or Buy decisions, thus providing more understanding and clarity of all the implication factors, and also providing helpful guidance for further decision making within this FMCG business.

5.3 Research Implication

The implication of these findings do not necessarily apply to all FMCG businesses because of different types of organization, and economies of scale which require different drivers in make or buy decisions. This especially applies to a new company which has limited resources and capital investment/equipment.

The organization needs to identify it own type of business before decision-making, as a make or buy decision is an important step that helps the company to differentiate itself from its competitors in term of cost, quality and product shelf availability in the market. Top management needs to continuously monitor and measure manufacturing performance and discuss the results among the cross functional team.

5.4 Future area of research

For future research, other corporate environments can be explored such as the Food industry and others. Also, other organizations of the same industry type could be studied, in order to explore whether they are consistent with the results of this project.

Another area for future research is the switching cost arising from changing the manufacturing site, and changing management to ensure that the changed decision is more value added than the previous one. In addition, the suitability of other theoretical methods such as the survey instrument, to assist in the decision making process, can be explored.

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