

Maximizing Returns on Innovation through Service Encapsulation

A case study in Thailand Luxury Car Industry

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Abstract

The abstract of the thesis submitted to The University of Manchester by Nattavut Kulnides for the Degree of Doctor of Business Administration and entitled Maximizing Returns on Innovation through Service Encapsulation: A case study in Thailand Luxury Car Industry. April, 2013

The Thai Automotive industry was the third largest industry in the country and contributed nearly 12% of Thai GDP in 2010. Thailand is projected to be in the world's top ten vehicle production countries by 2015. In 2011, the country produced 1.8 million vehicles and 600,000 units were for domestic consumption. The luxury car industry in Thailand represents roughly 5% of the total automotive market in 2011. Luxury car consumption in Thailand reached its peak in 1995 with the domestic consumption of 23,265 units. In 1997, Thailand triggered the world economic meltdown by devaluing the Thai currency. Consequently, luxury car sale volume then dropped to 3,383 units in 1998. Since then Thailand's automotive industry has gone through a series of changes through political unrest (military coup – 2007, red shirt protest - 2010), global economy (US sub-prime crisis - 2008), and natural disaster (Japan's tsunami – 2011, Thailand's mega flood – 2011).

For the past decade, luxury car sales volume has stagnated at around 10,000 units, despite Thailand's GDP averaging growth of 7%. The study of the Thai luxury car industry provides a unique opportunity to probe the industry led by international firms entering fierce competition to win local consumers. This study looks through consumers' buying criteria and reasons why Thai consumers purchase highly priced luxury cars. The study explores the roles of innovations in the Thai luxury car industry. When services are packaged with core products, this package attempt is classified as 'service encapsulation'. The study explores the role of service encapsulation in Thailand and the key players who deliver values of service encapsulation.

A mixed research methodology approach was used, starting with 30 face-to-face interviews with executives who run Thai luxury car companies and other key stakeholders. Findings and outcomes are used to design the questionnaire of 'Service Encapsulation in Thailand Luxury Car Industry'. The survey includes 206 survey participants. Outcomes from the qualitative and quantitative parts are integrated with the literature on innovation and service innovation to come up with a Service Encapsulation Commercialization Framework. The framework aims to provide insight on the interplay among four key elements: internal parties, external parties, social factors and service encapsulation enablers, based on the original work of Sundbo and Gallouj (2000). The study provides insights on how organizations can maximize returns on innovation through service encapsulation, by using the Thai luxury car market as a case study.

Declaration

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification for this or any other university or other institute of learning.

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*To my father for inspiration
To my mother for belief
To my wife for strength
To my kids for making me 'a better man'*

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Chapter 1 - Introduction

1.1 Research background

As indicated by Howells (2004), individual product and service innovations not only seldom add any value in isolation but also have a complex interplay between services and good in the innovation process. Moreover, the classic argument made by Miles (1993) also illustrates that services also try to overcome their limitations through innovation, adopting new technologies and new forms of work organization. It is well accepted that innovation in services typically results in increased customer satisfaction and loyalty and adding service element can enhance performances of products and services (Johnson and Clark 2008). Nevertheless, even if the roles of service have become more important, Susman et al. (2006) identified a significant shortfall in fundamental research on service innovation when embedded within a manufacturing firm.

Business communities and academia are prone to assume that good services will directly contribute to commercial success. With regard to this simple assumption, there is a lack of academic assessment of the role that service contributes toward the success of an associated product's innovation and its commercial outcomes. There is also a lack of research attention to what are the opportunities and barriers of packaging a service with a product, or so called 'service encapsulation', nor the questions of what are the roles of internal and external parties who are involved in a product's innovation and the performance of that product's commercialization. World-class innovation can excel in one market and fail miserably in other markets (More 2011). Since manufacturing-based and service-based organizations devote investment to innovations, it is important to understand the mechanism and interplay between product and service innovation, and effects from service encapsulation, with an ultimate aim to maximize the return on innovation through service encapsulation.

The automotive industry comprises many unique characteristics such as high capital investment, global products for local markets, change in customers demography, and rapid emergence of new niches. The role of service also becomes a centre of product satisfaction and customer loyalty. Since the typical

organization structure of automotive car companies is a multi-national corporation (MNC), it represents a complex task to manage global business across countries with such diverse groups of customers. Moreover, many scholars raise a concern that product-based differentiation in the automotive industry is increasingly difficult and companies cannot compete on product alone (Godlevskaja et al. 2011). Automotive companies also realized enormous growth opportunities in the service area (Horvath and Partners 2007).

This research explores roles of innovation and how service encapsulations with the core product will bring commercialized values together with high level of customer loyalty to the organization. Also, this research identified key factors that contribute to the success of service encapsulation. This research uses the Thai luxury car industry as a case study. Research outcomes will contribute to both the academic area and business practical areas. Academia, scholars, management at MNCs and local business partners can gain relevant insights on expectations of innovations from different stakeholders, service encapsulation operating model, what constitutes the success of service encapsulation and how to measure innovation success as outcomes driven by service encapsulation.

1.2 Research Questions

To clearly understand the concept of how Thai luxury carmakers can maximize returns on innovation through service encapsulation, the study would start from an understanding of the Thai luxury car industry. Thai automotive industry has a long history of introducing innovations and implementing related services. Some services are even required by law such as product warranties while some services are introduced to gain competitive advantage over other competitors. However, no studies have been conducted on what constitutes success factors in innovation commercialization and what contributions to a success of service encapsulation.

RQ 1: What are the roles of innovation in the Thai Luxury Car Market?

To successfully compete in the automotive industry, innovation plays a significant role in order to differentiate automotive products. This study investigates critical roles of innovation in comparison to other luxury buying criteria such as quality, image, and so on. It is a common expectation from luxury

car buyers that luxury cars should be innovative and technology advance. Interestingly for the case of Thai luxury car market, a carmaker who perceived as a leader of innovation fails to capture the market leadership and the products are recognized as unreliable and incur high maintenance cost. Therefore, roles of product innovation and service innovation must be investigated thoroughly.

RQ 2: What are the roles of Service Encapsulation in the Thai Luxury Car Market?

The process of offering services associated with the core product and service is called 'service encapsulation'. Thai luxury carmakers have attempted to offer service encapsulations without understanding its full implications and limitations. Service encapsulation requires close collaboration between service encapsulation players. Service encapsulation is also the critical part to create consumers' loyalty and, ultimately, brings commercial success to organizations (Susman et al. 2006). This question provides an opportunity to explore the service encapsulation delivery model. Outcomes of the study would also indicate what prevents organizations from delivering successful service encapsulation.

RQ 3: How can Thai luxury carmakers maximize returns on innovation through service encapsulation?

This question will explore the concept and definition of returns on innovation in the luxury car industry. Since there is no single definition and agreed set of returns on innovation, the study would propose common sets of returns on innovation that are agreed among the key luxury carmakers. It is very important to draw a linkage between service innovation literature and outcomes and findings from empirical studies and document analysis to draw a conclusion on the framework that helps explain the relationship between actors, service encapsulation delivery, and commercialization values. The study must help to explain the situation of each key player in the Thai luxury car market.

1.3 Scope of investigation

This research investigates roles of innovation, roles of service encapsulation, service encapsulation delivery model and service encapsulation

commercialization framework with an industry focus on Thai luxury cars. The investigations into the Thai luxury car industry are executed by using three research themes; 1) roles of innovation in Thai luxury car industry – the other side of innovation, 2) roles of service encapsulation in Thai luxury car industry – where 1 plus 1 is less than two, and 3) maximizing returns on innovation through service encapsulation – integrated work of qualitative analysis (face-to-face interviews), quantitative analysis (questionnaire), literature and industrial practice.

For the first theme, executives from luxury carmakers tend to put high emphasis on innovations. Outcomes from executive face-to-face interviews reveal that executives from luxury car companies pride themselves on the long history of their brand as an innovation leader. Being the first to introduce innovations is considered a priority for some luxury carmakers to differentiate themselves apart from competitors. In contrast, outcomes from face-to-face interviews and questionnaires regarding the role of innovation from other stakeholders contradict the beliefs of luxury carmakers. Nevertheless, being the first to introduce innovation has no higher (if not lower) priority than to strategize, educate the public, train dealers and communicate such innovation to customers.

The second theme explores the concept of service encapsulation as introduced by Howells (2004). In order to deliver service encapsulation, there are three parties involved in the process; 1) internal – product or brand owners, 2) intermediary – parties who interact with customers on behalf of carmakers, and 3) external – those who provide non-core services to support service encapsulation. The interplays and strategies to cooperate and partner are highlighted in the service encapsulation delivery model. Lastly, barriers to constructing value driven service encapsulation are highlighted as outcomes from the case interviews.

The last theme aims to provide a holistic and integrated picture of how luxury carmakers can maximize returns on innovation through service encapsulation. The research starts by introducing the concept of returns on innovation in the context of the luxury car industry. Four service encapsulation success factors were identified, based on the logical steps for luxury carmakers to embrace on the service journey. Outcomes from empirical studies, including face-to-face interviews and service encapsulation questionnaires, were then integrated with

the literature on innovation and service innovation. The service encapsulation commercialization framework was formulated by modifying the work of Sundbo and Gallouj (2000).

In conclusion, the study investigates the Thai luxury car industry by conducting qualitative and quantitative analysis. The empirical findings and explanations are based on data collected in fieldwork carried out between April 2010 and May 2012. This result can only be generalized to the Thai luxury car market under investigation within this period.

1.4 Methodological Approach

This research adopted the exploratory design which begins with giving priority to the collection and analysis of qualitative data in the first phase. Building from the exploratory results, the researcher conducts a second, quantitative phase to test or generalize the initial findings. The researcher then interprets how the quantitative results build on the initial qualitative results (Creswell and Clark 2011). Mixed methodology comprised of two research strands.

The qualitative strand included face-to-face interviews with 30 interviewees. Once results from the face-to-face interviews were analyzed, they helped to shape up research questions as well as helping to design the service encapsulation questionnaire which used as the quantitative strand. Questionnaires analysis was performed based on 206 questionnaires out of 352 questionnaires sent. Qualitative analysis and quantitative analysis were then consolidated to draw conclusions and findings together with knowledge derived from the literature and document analysis.

On the one hand, using the interview method can provide researchers with insightful data and real understanding from actors who are involved in innovation, service encapsulation and attempts to maximize returns on innovation through service encapsulation. On the other hand, using questionnaires provides quantitative outcomes to triangulate outcomes and findings from semi-structured interviews.

1.5 Unique roles of the author as an insider and outsider of Thai luxury car industry

The conduct of this study has spanned five years. During this five-year period, the roles of the author within the luxury car industry have changed quite dramatically. In 2007-2008 during the development of the research topic, the author worked with BMW Group Thailand as a Director of Dealer Development. Working in the luxury car market allowed the author to gain unique knowledge, insight and information, together with the real business outcomes that justify the economic and commercial value of product innovation, service innovation and service encapsulation. However, working with the major player in the luxury car industry also presented a limitation. When gathering information on BMW's direct competitors, the source of data often reacted in a sceptical manner. Some even refused to provide information due to a fear of losing business confidentiality.

However in 2010, the author changed career and resigned from BMW. The author had changed status from a player in the industry to an observer of the industry. New research opportunities also opened up significantly, especially with the new opportunities to assess information such as executive interviews with the players among Thai luxury carmakers. Changing roles from an employee in the leading Thai luxury carmaker to an observer who had no stake in the industry, this unique opportunity gave valuable information and insights into the Thai luxury car industry. Table 1 summaries advantages and disadvantages of author as an insider and an outsider of luxury car industry.

Table 1: Roles of author in Thai luxury car industry during 2007 - 2011

	Work with a luxury car company (2007 – mid-2010)	Work outside a luxury car industry (mid-2010 onward)
Advantage	<ul style="list-style-type: none"> ▪ Access to luxury car industry information and key players ▪ Access to vision and strategic direction of the luxury companies that might not be available to the public ▪ Access to strategic and operational issues from the real companies 	<ul style="list-style-type: none"> ▪ Unbiased view and more objectivity toward the industry and players ▪ Gain more access to all key players in the industry
Disadvantage	<ul style="list-style-type: none"> ▪ Limited access to competitor data esp. executive interviews ▪ Potential of bias towards own company 	<ul style="list-style-type: none"> ▪ Unable to access information that might not be available to the public ▪ Had to rely on information provided by interviews, document analysis and media

Source: Author's personal analysis

1.6 Chapter Outlines

This thesis engages with a number of perspectives including roles of innovation, roles of service encapsulation and returns on innovation with the industry focus on Thai luxury cars. Chapter Two discusses the literature and literature gap analysis. Chapter Three introduces the research methodology. Chapters Four, Five and Six introduces frameworks and results of the study. Chapter Seven highlights lessons learned and management implications. The thesis ends with the conclusion in Chapter Eight.

Chapter One provides an introduction and the background of the study.

Chapter Two reviews literature in the areas of innovation, service innovation, service encapsulation, measurements of innovation successes, and the process of innovation management in a multi-national corporation (MNC). The literature explores the concept of luxury products and more specifically the luxury automotive industry. Literature gaps were also highlighted and research questions identified.

Chapter Three introduces the research methodologies used in this research. Mixed methods research is defined as research in which the investigator collects and analyzes data, integrates the findings, and draws inferences, using both

qualitative and quantitative approaches or methods in a single study or a programme of inquiry (Tashakkori and Creswell 2007). The qualitative strand starts from conducting face-to-face interviews to gather information and insights from key luxury car players and other key stakeholders. The quantitative strand starts from questionnaire analysis. Questionnaires were designed to capture a larger group of participants to confirm customers' perspective on the topic of luxury cars in Thailand.

There are two main themes in Chapter Four. Firstly, the chapter introduces the passenger car industry and luxury car industry in Thailand. Market development of the industry is introduced, to highlight the uniqueness of the Thai luxury car industry. Secondly, the chapter explores roles of innovation in the Thai luxury car industry. The chapter starts by conducting qualitative analysis from face-to-face interviews followed by quantitative analysis from questionnaires. Then, outcomes from both strands are merged and conclusions drawn. A key finding from this chapter is the innovation expectation matrix, highlighting different innovation expectations, concerns and demands from internal or brand owners, intermediaries or dealers, and end customers.

Chapter Five investigates the current service encapsulation available in the Thai luxury car industry. Since there are many parties who are involved in delivering service encapsulation, each party has their own interests and expected outcomes. The service encapsulation delivery model, which introduces interplay among three service encapsulation players, which are internal, intermediary and external, is proposed to structure findings and insights from qualitative analysis and quantitative analysis. The chapter is concluded by introducing barriers to service encapsulation in the Thai luxury car industry.

Chapter Six explores the concept of returns on innovation. This chapter incorporates feedback from face-to-face interviews and develops a set of returns on innovation in two categories; tangible returns and intangible returns. The chapter also explores the concept of maximizing returns on innovation through service encapsulation. Key service encapsulation success factors are introduced. Outcomes from empirical studies and literatures are integrated. An integrated outcome is the 'Service Encapsulation Commercialization Framework', modified from the original work of Sundbo and Gallowj (2000).

Chapter Seven links findings from analysis in Chapter Four, Five and Six to draw a conclusion on management implications of this research. This chapter highlights management implications from three main findings: innovation expectation matrix (chapter four), service encapsulation delivery model (chapter five), and service encapsulation commercialization framework (chapter six). Then, management actions for three main parties: headquarters, local subsidiary and intermediary are identified accordingly.

The thesis is concluded with Chapter Eight. The chapter provides a summary of the research process, findings and discussions. This chapter highlights the unique contribution of this research in both academic and practical fields. This chapter is concluded by highlighting potential future research that can be conducted.

Chapter 2 - Literature Review

This study explores the theme of ‘maximizing returns on innovation through service encapsulation in the Thai luxury car market’. The structure of the literature reviews is illustrated in Figure 1. As this research is multidisciplinary, six main areas of literature are reviewed, including general concept of innovation, service innovation, service encapsulation, measurement of innovation success, luxury car industry (more details and analysis are provided in Chapter 4) and innovation management in MNCs. This chapter starts by discussing the distinctive characteristics between product innovation and service innovation. As the luxury car industry is a global industry, the relationship between headquarters and local subsidiaries in terms of innovation management become very important and influence the success of a firm’s commercial performance. Ultimately, firms must be able to measure their outcomes from innovation and the general concept of measurement of innovation success is discussed.

Figure 1: Structure of literature reviews



Sources: Author’s Personal Analysis

This chapter is divided into eight sections. The first section explores the literature on the general concept of innovation (section 2.1). Since this study cuts across the topics of service innovation, section 2.2 examines the service innovation literature in more details. The combination and bundling of products and services is called service encapsulation and the literature on service encapsulation is explored in section 2.3. These literature reviews lead to the measurement of innovation success (section 2.4) and the luxury car industry (section 2.5). The innovation management in MNCs plays a significant role in the success of innovation and relevant studies are highlighted in section 2.6. Section 2.7 highlights management practices and the conceptual framework. Lastly, section 2.8 concludes the literature review chapter.

2.1 Concept of Innovation

The roles of innovation as a key factor for economic growth and an essential element of competitiveness for every industry are widely recognized (Beckeman and Skjoldebrand 2007). Innovation has been and continues to be an important topic of study for a number of different disciplines, including economics, business, engineering, science, and sociology. Despite the fact that innovation has been studied in a variety of disciplines, the term 'innovation' is often poorly understood and can be sometimes confused with related terms such as change, invention, design, and creativity. The first emergence of innovation theory can be attributed to Schumpeter's Theory of Economic Development of 1911 (Schumpeter 1934). Schumpeter's entrepreneur concept brings innovation into economic theory. The challenge of innovation is found in its lack of a complete and comparable definition (Wan et al. 2005). Damanpour and Gopalakrishnan (1998) also argued that different definitions of innovation tend to overlap and depend on an organization's environment. Moreover, practitioners and investigators often treat innovation as an all-inclusive term, even though they refer to very different events or processes (Cooper 1998).

The focus of studies of innovation has also been evolving over time. Much of the literature on innovation in the past has often described it in one-dimensional terms referring to a process or product offered as either a process innovation or product innovation. Existing research has largely focused on manufacturing (Hauknes 1996), and numerous scholars express a need for more knowledge about service innovation (de Brentani 1995). Nevertheless, scholars are starting to observe similar patterns between the traditional view of innovation in the product sector and in emerging sectors like the service industry. Gallouj (2002) states that the manufacturing sector is becoming increasingly more service-oriented while the service sector is becoming more industrialized, but there is room for mutual improvement. Andersen et al. (2000) also stated that it is no longer satisfactory to treat services and non-services as independent creators of innovations, because there is an existing mutual dependence.

Moreover, many recent studies also introduce the role of 'intangible innovation' or 'perceived innovation' such as branding, and design aesthetics; and the emotional side of products, which may even have an equal role to 'tangible

innovation', typically comes from new technologies and new product features. As Slater (2006) pointed out 'branding helps innovation providers reassure and influence consumers' consumption'¹. Aaker (2004) also highlighted that a lack of effective branding can doom an innovation to failure.

By not having a clear definition of innovation, both the management and study of innovation would continue to be encumbered with conflicting and inconclusive findings. Box 1 illustrates definitions of innovation reflecting the variety and focus of scholars when research studies have been conducted. In this thesis, the definition of innovation is taken as 'the development of new methods in order to gain superior market positioning and establishment of new management systems through the production, adoption and exploitation of products, services and processes'.

Box 1: Definitions of innovation

Definition of Innovation
<p>There is no generally accepted definition available yet, however, there are many attempts to define innovation.</p> <ul style="list-style-type: none"> • Innovation is the process of making changes, large and small, radical and incremental, to products, processes, and services that results in the introduction of something new for the organization that adds value to customers and contributes to the knowledge store of the organization (Cormican and O'Sullivan 2004). • Innovation is related to the adoption of new products and/or processes to increase competitiveness and overall profitability (Tyler 2001). • Drucker (1998) defines innovation as, 'the means by which the entrepreneur either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth'.

In conclusion, the concept of innovation is the main factor that boosts the competitiveness and economic growth. The scope of innovations can range from firms' activities on product development, to process delivery and service offering of all industries. The definitions of innovations are scattered and varied, depending on different ontological and epistemological positions. In the view of management studies, innovation is defined in the form of products, processes, and services leading to an increase of firms' competitiveness and leading to superior commercial performance. Innovation is not only about changes, but also linked to achieving a better market position, a new way to introduce products and services, business models and new method to exploit market positions.

¹ Consumption: is the primary motivating force in the wealth or utility maximizing paradigm. All activities are directed towards consumption, either of traditional goods and services, or of personal and perhaps unique activities.

2.2 Service Innovation

2.2.1. What is service innovation?

The early literature on innovation included studies that dealt mainly with innovation process and types of innovation. The work of Joseph Schumpeter has greatly influenced theories of innovation. He argued that economic development is driven by innovation through a dynamic process in which new technologies replace the old, a process he labelled 'creative destruction'. In Schumpeter's view, 'radical' innovations create major disruptive changes, whereas 'incremental' innovations continuously advance the process of change. He proposed a list of five types of innovations: introduction of new products, introduction of new methods of production, opening of new markets, development of new sources of supply for raw materials or other inputs and creation of new market structures in an industry (Schumpeter 1934). Tidd (2001) defined 4 categories of innovations which depend on the core innovation concept (overturned or reinforced) and links between knowledge elements (unchanged and changed). Outcomes were four innovation categories which are incremental innovation, modular innovation, discontinuous innovation, and architectural innovation.

Metcalfe and Miles (2000) defined services as 'activities directed at creating changes, transformations (of form, place or time of availability, and the entities involved may be material objects, goods, people, the natural environment or symbolic representations, data, text, etc.) in some entities. Hipp and Grupp (2005) further highlights some peculiarities of service products which are commonly found in literature such as: heterogeneity of different service industries, close interaction between service provider and customer (integration of the external factor), and highly intangible content of service products and processes (information knowledge) and thus the need for knowledge-information creating and transforming processes. Gallouj (2002) also indicated a traditional view of services that 'were once characterized by low productivity, low capital intensity, low skill levels, and lacking innovative capacity'. Furthermore, the close interaction with customers is one of the key elements that distinguish services from products, whether through technology or interpersonal interactions (Metcalfe and Miles 2000).

In recent years policy makers have begun to consider the potential for promoting service innovation as part of their economic development strategies. Such consideration has, in part, been driven by the growing contribution that service activities make to national and regional economies. In the same vein, companies are constantly seeking to provide better services, regardless of whether they are in a 'pure' service business or in a manufacturing industry that must increasingly rely on its service operations for continued profitability (Berry et al. 2006).

The importance of innovation in the services sector and of the services sector's contribution to economic growth is increasingly recognised and has led to a number of studies on innovation in services (de Jong et al. 2003). In practice, innovation in services is less disciplined and less creative than in the manufacturing and technology sector (Chesbrough 2005). Innovations in services are often small improvements integrated with daily work. The innovation process in services is generally very interactive, involving many managers and employees. It involves employees' bottom-up suggestions and strategy-making top-down (Sundbo 1996). Box 2 provides descriptions of service innovation suggested by scholars.

Box 2: Definitions of service innovation

Definition of Service Innovation
<p>There is no generally accepted definition available yet, however, there are many attempts to define service innovation.</p> <ul style="list-style-type: none"> • 'Innovations in services are a mix of reproduced (although incremental) innovations and 'small' non-reproduced changes to solve single customers' problems (what we will also call ad hoc innovation). The latter is particularly a result of the customer interaction process' (Sundbo and Gallouj 2000). • 'A service innovation is a new service of such a renewal of an existing service which is put into practice and which provides benefit to the organization that has developed it; the benefit usually derives from the added value that the renewal provides to the customers. In addition, to be an innovation the renewal must be new not only to its developer, but in a broader context, and it must involve some element that can be repeated in new situations, i.e. it must show some generalizable features. A service innovation process is the process through which the renewals described are achieved' (Toivonen and Tuominen 2006).

Service innovation is rarely R&D based and is often market or customer based. Service innovations are generally more incremental, whereas product innovations can be more radical (Tether 2005). Service innovations seem generally less technologically driven than manufacturing innovations (Aa and Elfring 2002). Miles (2001) stated that service innovations become increasingly

more systematic. Yet in practice, innovation in services is less disciplined and less creative than in the manufacturing and technology sector (Chesbrough 2005). Service innovations usually require less R&D, require less in fixed assets, and need less investment on patents and licenses for the development of new services (Brouwer and Kleinknecht 1997).

Though capital investment may be low, organizational aspects play a larger role in the success of service innovation. One common barrier to innovation in developing service innovation is the lack of robust human resource strategy. For example, a fatal flaw for a service company can be the lack of well-educated and capable co-workers committed to the firm's mission, which can have a larger influence on the success of new services than on new manufactured products (Susman et al. 2006). Nevertheless, the development of service innovations is becoming very market and customer based. Services are often overshadowed by manufacturing innovation due to there is difficulty in defining and measuring serviced sector activities (Andersen et al. 2000).

In summary, service innovation becomes increasingly important at the national and corporate level. The nature of service innovation is incremental and heavily influenced by the interaction between organization, customers and employees. Service innovation requires good human resources staff who understand the customers' demands and are capable of delivering good and innovative services.

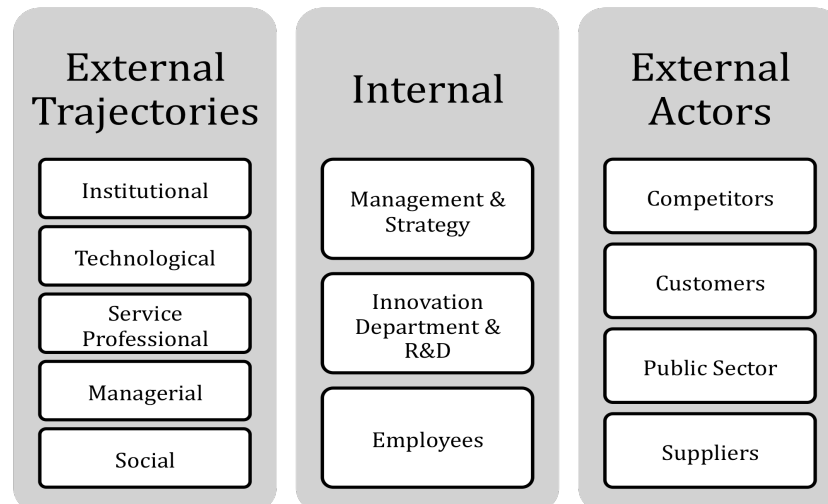
2.2.2. Driving Forces behind Service Innovation

Service innovation is frequently organic, emergent and responsive. Innovation activities in services are rarely organized by formal R&D departments and are rarely regarded as R&D by service firms² themselves. According to Sundbo and Gallouj (2000: 21), sources of service innovation are based on 1) intrapreneurialism – focusing on human capital and resources within firms, 2) professional associations – emphasising innovation efforts and practices from professional knowledge within firms, 3) and external sources and intermediaries – relying on interactivity with clients, suppliers, consultancies etc. Furthermore,

² Service firm is defined as a business that makes its facilities and resources available to others for fees to achieve economy of scales and revenues. Examples of service firm are commercial banks, healthcare providers, and consulting & advisory services.

an innovation driving forces model, illustrated in Figure 2, was developed by Sundbo and Gallouj (2000) in order to identify loose relationships among driving forces behind service innovations.

Figure 2: Driving forces behind service innovations
Driving Forces behind Service Innovations



Sources: 'Innovation as a loosely coupled system in services' by Sundbo and Gallouj (2000: 21)

As shown in Figure 2, external forces can be divided into trajectories and actors. Trajectories are ideas and logics that are diffused through the social system. According to Sundbo and Gallouj (2000: 22), there are five trajectories as follows:

- 1) Service professional trajectories – methods, general knowledge and behavioural rules that exist among the different service professionals,
- 2) General management ideas – ideas for new organizational forms such as motivational systems,
- 3) Technology trajectories – new logics for using technology that generally influence service products and production processes,
- 4) Institutional trajectories – the general trend of the evolution of regulations and politician institutions such as the European Research Programs,
- 5) Social trajectory – the evolution of general social rules and conventions such as environmental consciousness.

Meanwhile, internal driving forces create and facilitate service innovations. They are composed of the management and their strategy, the employees, and the innovation department or R&D department. As service innovations are often market driven, the management of the marketing department plays a key role. Next, the involvement of employees in the innovation process is necessary for service innovation. The innovation department or R&D department has the task to induce innovation ideas among the employees and managers and to collect these ideas. Lastly, external actors refer to persons, firms, or organizations whose

behaviour has importance for the service firms' opportunities for selling services and their innovation activities. Sundbo and Gallouj (2000: 22) identified four actors influencing service innovation, which are:

1) Customers – they give information as well as contributing to the innovation process in the case that they co-produce new service products with the service provider, 2) Competitors – generally, with offensive innovation strategies, service firms may imitate competitors' innovations, 3) Suppliers – suppliers can assist service firms to create new service products, especially knowledge business service suppliers. Suppliers and service firms co-operate to develop service products, 4) Public sector – the public sector can support and deliver the research and education necessary to innovation processes. Also, the public sector can regulate the service sector.

In summary, to exploit sources of innovation and manage the driving forces behind service innovation, innovation management capabilities are crucial to service firms. As services are diverse and heterogeneous, the ways of managing innovation activities in service firms are various and depend on several factors.

2.2.3. Service innovation in manufacturing firms

Scholars suggested that there is a significant shortfall in fundamental research on service innovation, particularly when embedded within a manufacturing enterprise (Susman et al. 2006). Research on 'hybrid' innovation models combining services with products is extremely limited, led primarily by European teams (Susman et al. 2006). The introduction of service in manufacturing firms required new skills of close interaction and two-way communication between firms and customers. Technology is also less important for the development of new services, as the face-to-face relationship-building component often becomes more important (Susman et al. 2006). Box 3 illustrates the benefits that manufacturing firms can realize by providing services as highlighted by scholars. Impacts are not only in the areas of commercial performances but also in the areas of customer satisfaction and loyalty.

Box 3: Benefits that manufacturing firms can realize by providing services

Benefits that manufacturing firms can realize by providing services

There are many reasons why the addition of services can provide significant growth opportunities, greater stability, and higher profit margins to firms. These reasons are:

- Improving predictability of sales and cash flow: in addition, many product categories are becoming more saturated with tough competitors competing for market share. This results in 'commoditization' of products and hence lower profitability.
- Adding services can help consolidate and protect the core product businesses. Services can differentiate a company from competitors and establish a closer relationship with customers. It is relatively easy for a competitor to provide a better and/or lower cost product, but much more difficult to replace an 'intimate and trusting' relationship between suppliers and customers.
- Innovation in services typically results in increased customer satisfaction and loyalty. Typically, service is about transferring additional values and functions to those gained by merely owning or leasing a product to better satisfy customer needs.

Source: Service Innovation in Manufacturing Companies (Susman et al. 2006: 15)

In conclusion, service innovation has drawn attention from scholars and practitioners, due to the huge potential to contribute to the competitiveness of firms. The traditional view often perceives service innovation as unstructured, opportunities-based, and lacking of the typical concrete R&D approach. Manufacturing firms are only now realizing the benefits of service elements that help to bring steady income and increase customer loyalty. However, there is a lack of studies on how manufacturing firms can strategize their service side to cope with customer demands and help to improve their commercial performance.

2.3 Service Encapsulation

2.3.1 Product and Service Consumption

Howells (2004) suggested that individual product and services innovations seldom add any value in isolation; they must be integrated and physically 'bundled' with a wide range of other physical and process technologies to be applied. Packaging services and products together plays a vital role in consumption. The focus of business strategy is now moving from selling physical products to combining products and services to solve customer problems and create value (Godlevskaja et al. 2011). Adding a service element helps the commercial performance of a product. The service element can enhance the

performance of products and services offered in isolation. Service adds not only outcomes but also experiences to end-customers (Johnson and Clark 2008). Product innovation alone might not directly lead to consumption. A particular innovation can appear to create competitive value by itself, but may not be compatible with the physical and process infrastructure in which it must be embedded (More 2011).

Along with the awakening to the domination of services in the world's economies, there is a growing emphasis in business practice on creating meaningful, memorable customer experience (Meyer and Schwager 2007). An experience occurs when a company intentionally uses services as the stage, and goods and props, to engage individual customers in a way that creates a memorable event. Experience involves the emotion and perception of customers on offerings (products, services, and processes) and interactions with representatives of companies during processes of production and delivery offerings. The service economy has begun to move towards 'an experience economy' (Pine and Gilmore 1998). Research shows meaningful customer experiences and the resulting emotional bonds between customers and suppliers are more important than rational motivations in creating customer loyalty (Crosby and Johnson 2007). Experiential services are 'services where the focus is on the experience of the customer when interacting with the organization, rather than just the functional benefits following from the products and service delivered' (Voss and Zomerdiijk 2007).

In conclusion, combining product offering with service offering often yields a better commercial result and enhances customer satisfaction and loyalty for most organizations. Customers are now valuing experiential services that are delivered at various touchpoints³ (customer interaction point). Experiential service requires all parts of organizations to work seamlessly to offer good and innovative service to end customers.

³ Customer touchpoint is defined as 'all physical, communication, and human interactions that customers experience during the relationship cycle with the company. The quality of touchpoint experiences drives perception, actions and relationships (Clatworthy 2011).

2.3.2 What is 'Service Encapsulation'?

Based on the work of Howells (2004: 23-24), services that encapsulate, or act as 'wrappers' to, goods can be seen in two key dimensions: (1) existing service encapsulating new goods (or services) and, (2) new services encapsulating old goods (or services). More specifically they can be seen to operate in a number of different ways:

Existing, familiar services encapsulate new goods (or services), in turn, providing a 'familiariser' effect – by providing a familiar, trusted service to a new good, 'buffer' effect – once the good has been adopted, enabling the consumption of a new good in exactly the same consumption service format as the former, and a 'facilitator' effect – by encouraging and helping consumers to learn new practices and routines through an existing service 'window' or framework to use a new good.

New services encapsulating existing goods (or services). Here services are used to improve the acceptability, flexibility and performance of existing goods and these attributes are outlined. New services encapsulating existing goods can provide a number of revitalising and innovative roles in terms of: 'sweetener' effect – by improving the acceptability of a good through a new service format, 'flexibility' effect – new services associated with an existing good (or service) may improve flexibility of use, 'performance' effect – a new service may improve the performance of the good, and 'functionality' effect – new services may allow an existing good to be used in a different way (Robertson and Yu 2001).

Services in this way can be seen as playing an important role in the consumption of innovations by enabling consumers to interact and accommodate these new goods and services more easily. However, there is often a complex interplay between services and goods in the innovation process; changes in one sphere often 'spark off' changes in the other sphere (Howells 2004). As Howells (2004) also suggested, when it comes to the process of innovation consumption, there is no such thing as stand-alone product consumption. Typically, a product will be wrapped around by various services or so-called 'service encapsulation'. Box 4 illustrates the opportunities for service encapsulation in the automotive industry, where three groups of services can be added to the core manufacturing products.

Box 4: Opportunities for service encapsulation in the automotive industry

Opportunities for service encapsulation in the automotive industry

Scholars have discussed the opportunities for service encapsulation in the automotive industry. Wise and Baumgartner (1999) discuss three groups of services, which can be added to the core product of a manufacturing company.

1. The first group is 'embedded services', which refers to services, which are built into a product. Examples of such services for the automotive industry (passenger cars) are traditional maintenance and repair services. Companies manufacturing the core product have all the competence to provide embedded services, while freeing the customer from related time and labor costs.
2. In line with this, there are services which are not built into products but which still lie within reach of product manufacturers. These are the so-called 'comprehensive services', such as operation lease, finance and insurance for the automotive industry.
3. A third group of services (or a third business model to be used by manufactures) is 'integrated solutions'. This is based on the idea of combining physical products with services while creating a total offering, used to satisfy customer needs such as offering a luxury lifestyle and privilege access to private club for the case of luxury automobile

2.3.3 Design of New Service Offering

Service design requires an understanding of service delivery process and customers' expectation. Customers' experience is typically unfolded over time through interactions at many different touchpoints. To design a new service successfully requires active involvement from a much broader set of functional specialities (such as systems design, product specialists and frontline personnel) than in the manufacturing sector (Shostack 1984). A well-designed service that is pleasing to experience can provide the firm with a key point of differentiation from competitors. A smoothly delivered service with a positive outcome is more likely to result in favourable service quality and brand image evaluations, which both influence customer loyalty since recurrent service quality problems are often the result of poor design (Stuart 2006).

In order to design a new service offering, there are many techniques to capture the essence of a customer-focused approach for service innovation and service improvement such as service blueprinting (Shostack 1984). While the rudiments of service blueprinting were introduced two decades ago, this method has evolved significantly as a useful approach for addressing many of the challenges in service design and innovation and is particularly amenable to customer experience design. In comparison to other process oriented design techniques and tools, service blueprints are first and foremost customer-focused, allowing firms to visualize the service processes, points of customer contact, and the physical evidence associated with their service from their customers' perspective

(de Jong and Vermeulen 2003). Blueprints also help to reinforce customer-orientation among employees as well as to clarify interfaces across departmental lines. According to Zeithaml et al. (2006), service blueprinting provides a common platform for everyone – customers, employees, and managers – to participate in the service innovation process. There are five components of a typical service blueprint: 1) customer actions, 2) onstage/visible contact employee actions, 3) backstage/invisible contact employee actions, 4) support processes and 5) physical evidence.

In conclusion, Howells suggested that service encapsulation is the packaging and bundling of services to existing products and/or services to create better consumption opportunities, enhance firms' market positioning, increase customers' loyalty and satisfaction, and improve firms' commercial performances. Service blueprint is one of the tools that widely recognized since it provides visibility of the whole process and engages all parties in the organization in the design process. Nevertheless, there are limited studies that explore the service encapsulation concept in empirical business practice. Whether or not encapsulating services to the existing products will enhance the commercial performance of the product has never been investigated. There is also lack of knowledge on the success criteria and key success factors that help organizations become successful when encapsulating new services to existing products or services.

2.4 Measurement of Innovation Success

Researchers have long been investigating the commercial aspects of innovation. Innovation, by a widely shared definition, means the commercialization of invention (Schumpeter 1934) and innovation is the first commercialization of the idea (Fagerberg 2003). Kelm et al. (1995) regards innovation commercialization as a transitional phase in which the organization becomes less reliant on its technological capabilities (important during the activities of initiation), but more dependent on market dynamics. Achievements of commercial results are well regarded as outcomes from innovation. The commercial success of an innovation requires scientific, technological, organizational, financial and commercial activities (Samsonowa 2012). Von Hippel (1988) raised the point that the roles of consumption and demand in the innovation process were largely neglected in

the past. Innovation has been typically looked at only from the aspect of innovation creation i.e. types and processes. Cordero (1990) raised the point that it is necessary to measure marketable output, resources to commercial units, and technical outputs (as resources) to evaluate the performance of the combined commercial units. Researchers also raised concerns that there must be a proper process of innovation value realization to measure outcomes from innovation efforts.

According to Samsonowa (2012), the measures of innovation currently available do not adequately take account of the full role of innovation in today's economy, since the performance management systems often apply inappropriate performance measures described as 'what we measure has nothing to do with what we are doing'. Scholars also observed that prior research had not yet developed a definitive measure of innovation (Nohria and Gulati 1996). Innovation output has been measured by productivity growth, turnover from new products and patents, however difficulties in measuring service output and service quality contribute to the difficulty of measuring the impact of innovation in a service firm (Preissl 2000). Outputs should be measured to determine whether they help accomplish objectives (effectiveness); resources should be measured to determine whether minimum amounts are used in the production of these outputs (efficiency) (Cordero, 1990). Holmen and McKelvey (2007) suggested that innovation measurement does not appear to take place routinely within management practice, and when it does, it tends to focus on output measures.

Tidd (2001) also suggested that measuring innovation inputs and outputs is difficult, but establishing the relationship between these measures of innovation and firm performance is even more problematic. Defining more and more areas to measure innovation also brings another challenge, in that researchers' opinions seem to divide into two main topics. Firstly, it is questionable whether innovation alone makes a direct contribution to the overall firm performance and, secondly, there is no evidence to support the relationship between different aspects of innovation measurement indicators. Cordero (1990) suggested that there is no measurement that is entirely satisfactory and the use of multiple measurements is necessary. Drake et al. (2006) suggested that there are two broad classes of performance measure: the first is concerned with accounting and

financial performance such as profitability, return on investment (ROI) and share price; and the second is market performance, which usually means the share of growth in comparison with the industry.

de Brentani (1995) conducted a research study to identify success factors in developing new business services. The research aimed to answer what makes new services successful and what causes failure. His research included 115 service-focused firms from many industries such as financial and management services, transportation and communication. Table 2 illustrates the new service performance measure as suggested by de Brentani (1995). Four composite measures, labelled as sales performance, competitive performance, cost performance and 'other booster', were identified and found to be similar to the new product performance measurement.

Table 2: Measurements of new service performance

Factor name and reliability	Performance variables comprising factors
Sales and Market Share Performance (70.0%)	Exceeded market share objectives Exceeded sales/customer use level objectives Exceeded sales/customer use growth objectives High relative sales/customer use level Large relative market share High overall profitability Strong positive impact on company image/reputation
Competitive Performance (13.4%)	Superior service 'outcome' to competitors (perceived) Superior service 'experience' to competitors (perceived) Unique benefits: perceived as superior to competitors Gave firm important competitive advantage
Other Booster (8.3%)	Enhanced sales/customer use of other products/services Enhanced profitability of other products/services
Cost Performance (8.3%)	Substantially lowered costs for firm Performed below expected costs Achieved important cost efficiencies for firm

Source: de Brentani (1995)

Samsonowa (2012) conducted a research study on managing the performance of industrial research in the ICT (Information & Communication Technology) industry, focusing on 106 ICT companies in Europe, CIS (Commonwealth of Independent States) and USA. The research goal was to empirically investigate the state-of-the-art of performance management in applied research organizations and to derive recommendations towards a systematic performance management model. Samsonowa (2012) suggested that there are 11 generic performance clusters based on common research processes, which are: technology transfer, new business opportunities, research portfolio management,

intellectual property creation, operational excellence, talent pool, image, publications, presence in communication, collaboration with academia, collaboration with partners and customers.

Cordero (1990) suggested that there are many quantitative and qualitative measures available, but both types are imperfect. Some quantitative measures are complex and expensive. Meanwhile, all quantitative measures miss important facets of outputs and resources. Qualitative measures are used to overcome these limitations of quantitative measures. Qualitative measures are less objective, less useful to establish measurable output and resource standards, and useless to allocate resources. These measures may also be used, along with output measures, to calculate return on innovation activities. In his research, Cordero (1990) also suggested three innovation performance measurement criteria, as illustrated in Table 3.

Table 3: A model of innovation performance measurement

Evaluation criteria	Level of these units	Use measures to estimate during the planning stage and record during the control stage
Technical	R&D	Resources to technical units and technical outputs
Commercial	Marketing, manufacturing, etc.	Resources to commercial units, technical outputs (as resources) and marketing outputs
Overall	Firm or SBU	Resources to technical units resources to commercial units, and marketable outputs

Source: Cordero (1990)

In conclusion, innovation activities require a huge investment of funds and attention from firms in order to make impacts on firms' competitiveness and business performances. However, the process of measuring the success of innovation is missing and lacks transparency. There are a number of researchers who have tried to suggest a general model of measurements of innovation success. However, those studies do not take into consideration the complex relationships between the efforts of product innovation, service innovation and service encapsulation that contribute to commercial success. Adams et al. (2006) suggested that commercialization studies are in urgent need of further development, from both theory and measurement viewpoints.

2.5 Luxury Car Industry

The growth of the world economy in the past two decades has offered opportunities to the new emerging nations and created a new wave of luxury consumers. The demand for luxury brands can reflect the owner's social status, as luxury brands are universally recognized as a statement of good taste in a global economy (Nueno and Quelch 1998). Several manufactured products attain the status of 'luxury goods' due to their design, quality, durability or performance that are notably superior to the comparable substitutes. As such, these luxury goods may retain or improve the basic functionality with which all items of a given category are originally designed. There are also goods that are perceived as luxurious by the public simply because they play the role of status symbols. Consumers are increasingly motivated to pursue products that provide emotional benefits on top of the product features. This is reflected in the escalating growth of the luxury industry (Hagtvedt and Patrick 2009). As for the market trend, the three dominant trends in the global luxury goods market are globalization, consolidation and diversification (Coste-Maniere et al. 2012). Globalization is a result of the increased availability of luxury goods, additional luxury brands, and an increase in tourism. Consolidation involves the growth of big companies and ownership of brands across many segments of luxury products. Despite the substantial body of knowledge accumulated during the past decades, researchers have still not arrived at an agreed definition of luxury. Box 5 provides a common definition of luxury.

Box 5: Definition of luxury

Definition of Luxury

The Merriam-Webster Dictionary defines luxury as 'a condition of abundance or great ease and comfort' or 'something adding to pleasure or comfort but not absolutely necessary.' Vigneron and Johnson (2004) cite Kapferer's (1997) description of luxury products as those that provide extra pleasure and flatter all senses at once, and expand on this description to argue that psychological benefits, rather than functional benefit, provided by luxury products are the key distinguishing factors that set luxury products apart from non-luxury products.

With regard to the automotive industry, 'luxury vehicle' is a marketing term for a vehicle that provides luxury, pleasant or desirable features beyond strict necessity at increased expense (Kapferer and Bastien 2009). A luxury car provides enhanced equipment, performance, construction precision, comfort, design ingenuity, technological innovation, or features that convey brand image, cachet, status, or prestige, or any other discretionary feature or combination of features.

Luxury carmakers in the industry have strategically positioned sub-segments of their products. Box 6 illustrates the luxury car market segmentation including carmakers and their products.

Box 6: Luxury car market segments

Luxury car market segments
<p>Premium compact segment The premium compact segment or small-luxury class is relatively new, having been initiated by several European brands in the mid-2000s. These cars are targeted at a niche market of young customers who have more refined taste. This includes Audi A3, BMW 1 Series, Lexus CT, and Mercedes-Benz B-Class.</p> <p>Entry-level luxury & Compact executive cars Compact executive cars are smaller than mid-size and large family cars. Executive cars are mostly rear-wheel drive with longitudinal engines, for improved stability and handling. Compact executive cars tend to have complicated suspensions, sportier transmissions and high revolution engines. This includes Volvo S60, BMW 3 Series, Audi A4, Mercedes-Benz C-Class and Lexus ES. Compact executive cars also generate the most sales volume for luxury carmakers.</p> <p>Mid-Luxury & Executive Cars Executive cars have similar dimension to mid-size cars and large family cars. Executive cars are engineered and positioned as premium vehicles with better performance and technology amenities. This includes Volvo S80, BMW 5 Series, Mercedes-Benz E-Class, Jaguar XF and Lexus GS. Executive cars are important to a luxury carmaker's bottom line and generate a significant amount of profits due to lucrative technology options.</p> <p>High-end Luxury & Full-size luxury cars Many high-end luxury cars are the showcases for the newest automotive technology. Several nameplates also offer long-wheelbase versions that offer additional rear legroom and amenities. This includes Audi A8, BMW 7 Series, Jaguar XJ, Lexus LS, and Mercedes-Benz S-Class.</p> <p>Ultra-Luxury Cars This includes brands like Rolls Royce, Bentley, Aston Martin, Maybach, Maserati, Porsche Panorama and top models from luxury carmakers like Audi, BMW, Mercedes-Benz, Lexus and Jaguar.</p> <p>Luxury SUV & Crossover Luxury SUV is the largest growing sector of luxury cars and normally generates higher profit margins. SUV is also becoming the key to bringing new customers to luxury dealerships. Luxury SUVs normally offer V8 engine, automatic transmission, luxury trim and sophisticated equipment. This includes Porsche Cayenne, BMW X series, Land Rover, Audi Q series, Lexus RX. Recently, Luxury SUV has focused more on design and sportiness over utility.</p> <p><i>Source: Author's personal compilation</i></p>

Many automotive companies, especially in the luxury car segment, constantly expand their service business and service scope: traditional after-sales maintenance and repair services are supplemented with finance and insurance services and re-formulated into service bundles (Godlevskaja et al. 2011). The automotive market is a very competitive market with extensive overcapacity (Becker 2006). At the same time growth in demand remains very limited. The battle for markets and clients in the industry is very fierce (Becker 2006). Increasing customer requirements as a result of improved market transparency,

availability of information and products aggravates the competitiveness of the market (Godlevskaja et al. 2011).

Product-based differentiation in the automotive industry is therefore increasingly difficult and companies cannot compete on products alone (Godlevskaja et al. 2011). Many automotive companies also realised enormous growth opportunities in the service area (Horvath and Partners 2007). Daimler AG and VW generate 8 - 20 percent of profits from new car sales; 10 - 11 percent comes from used car sales; and the rest is generated from financial services and after-sales (Daimler Financial Services, 2008; VW Financial Services, 2006). The development of a service offering is a dynamic process that requires a continuous adaptation to changing customer requirements, as well as technological changes (Kindstrom and Kowalkowski 2009). Various categories of services exist in the automotive market: maintenance and repair, insurance, finance, lease, museums/experience centres, test drives, sales consulting and so forth (Godlevskaja et al. 2011).

In conclusion, luxury cars are often referred to as automobiles that provide distinctive features, both tangible and intangible. In tangible terms, luxury cars provide superior quality in the areas of: performance, safety, comfort, design and new technologies. In intangible terms, luxury cars provide superior image, social acceptance, distinctive taste, and aesthetics. The automotive industry and luxury carmakers are actively seeking ways to integrate more services into their products to help increase revenues and achieve better customer satisfaction. Nevertheless, there is a lack of studies that explain the impact of product innovation and service innovation on commercial success in the luxury car industry.

2.6 Innovation Management in Multinational Corporations (MNCs)

Global competition has changed the principles of managing an innovation function in multinational corporations (MNCs). Sustaining competitive advantage relies heavily on the ability to access and process globally scattered market and technological knowledge to accelerate and improve innovation output (Doz et al. 2006). It seems that a global expansion strategy provides the opportunity to react quickly to technology changes and new market needs (Doz et al. 2006). Fallah and Lechler (2008) state that the principles to innovate

globally are different from those to innovate locally, and the innovation competencies of a firm are constantly challenged by the global competition. The technology and market knowledge global companies need is becoming more diverse and more dispersed. Table 4 illustrates how the management of global innovation requires a new global innovation paradigm, which is highlighted in five key management challenge dimensions.

Table 4: Management Challenges in the evolving global innovation paradigm

Management Challenges	Traditional innovation paradigm	Global innovation paradigm
Innovation strategy	<ul style="list-style-type: none"> • Grow from local to global market • Leverage economies of scale or scope 	<ul style="list-style-type: none"> • Grow from a global base • Presence in many smaller markets • Search for optimum efficiency and effectiveness
Organization structure	<ul style="list-style-type: none"> • Centralized, hierarchical, home-based 	<ul style="list-style-type: none"> • Decentralized • Organic network
Innovation processes	<ul style="list-style-type: none"> • Funnel process • Centralized screening • Hub & spoke communication 	<ul style="list-style-type: none"> • Decentralized screening • Token ring communication
Resource allocation	<ul style="list-style-type: none"> • Tendency for central allocation 	<ul style="list-style-type: none"> • Global allocation • Managed globally • Redistributed as necessary
Innovation culture	<ul style="list-style-type: none"> • Mono-cultural tendency • Push for cultural convergence 	<ul style="list-style-type: none"> • Cultural diversity and disparity • Cultural synergy

Source: Fallah and Lechler (2008)

For organization and location to materialize in innovation, it is essential for an MNC to develop and leverage company-wide as well as subsidiary-specific capabilities for the creation, transfer, assimilation, and exploitation of new knowledge and innovations (Luis et al. 2010). The evolution of subsidiaries of multinational corporations depends on the configuration between three sets of factors: headquarters, subsidiary and local environment determinants (Birkinshaw and Hood 1998). At the same time, subsidiaries contribute to the process of decentralization of activities by seeking more complex responsibilities in order to ensure their competitiveness and survival (Gavira and Ruy 2011). The new emerging markets also play a significant role in innovation management. Emerging economies can themselves be a context for and a source of value – creating new practices, products, and services for MNCs. The process through which innovations from emerging markets are translated and applied to developed markets has been labelled ‘reverse innovation’ (Immelt et al. 2009).

Additionally, a study by Oliver Wyman (2007) in a global automotive industry in 2005 suggested six different types of innovation originator in the automotive industry, based on different characteristics of strategic R&D fit, organization and culture, competence profiles and cooperation needs, organization and leadership, effectiveness and efficiency, value capture by innovations, and strategic barriers against copycats (imitator). Integration outcomes help explaining the innovator's innovation proposition, strategy, focus and collaboration among players in the global automotive industry. Table 5 illustrates an innovation strategy framework in the context of the global automotive industry, as suggested by Oliver Wyman (2007). It is worth mentioning that luxury carmakers belong to 'brand builder' and 'high-end optimizer'.

Table 5: Innovation strategy framework in global automobile industry

Innovation archetype	Innovation proposition	Focus and collaboration	Business case	Company examples
1. Brand builder	Brand-oriented Product innovations Mid-size volumes High-end customers	Specialized focus Strong supplier Coops and R&D Outsourcing	Brand image Premium Strong IP protection	BMW Mercedes-Benz
2. Fast follower	Improves Innovations and brings them to the mass-market	Medium focus Selective coops Extensive R&D Outsourcing	Low costs Fairly weak IP protection	Daewoo Hyundai
3. Mass-market adapter	Adapts and improves Existing product innovations	Broad focus R&D outsourcing of whole systems Limited network	Low costs Weak IP protection Brand image	Ford FM
4. Architectural revolutionizer	Focuses largely on process innovation Shifts from mass-to- niches markets	Network builder Modularization Limited R&D outsourcing	Cost-oriented innovations Fairly strong IP protection	Toyota VW
5. High-end optimizer	Premium product innovations by systems and components enhancement	Specialized focus Very limited R&D outsourcing	Innovations Strong IP protection Brand image	Porsche Hummer
6. Cost and process specialist	Innovations based on new manufacturing processes Customer orientation	Broad focus Medium R&D outsourcing Formal partners	Low-cost product Fairly strong IP protection	Kia Dada

Source: Oliver Wyman (2007)

As mentioned previously, MNCs have realized the opportunities emerging countries have to offer beyond their recognized manufacturing and market potential (Vives and Svejnova 2007). Nevertheless, manufacturing companies find it difficult to enter service-centred businesses, and thus fail to exploit the financial potential that such businesses offer. Most product manufacturing companies, such as global automotive makers, that invest heavily in extending their service businesses and thus increase their service offering and incur higher

costs, do not always get the expected corresponding higher returns. This is referred to as the 'service paradox' (Gebauer et al. 2005). Effective transition into a service-centred business requires a transition strategy as well as management of employee motivation and supporting organizational structure and culture (Susman 2006).

In conclusion, every competitive market and situation is unique. There are no simple or general solutions on the optimum innovation process for MNCs and their local subsidiaries. A winning innovation in one company can be a losing innovation for another. Thus, an innovation is not by itself good or bad, but depends totally on the unique and complex DNA of the company and the specific competitive situation (More 2011). Since there are limited published studies in the areas of how MNCs and their subsidiaries should organize themselves in order to develop the appropriate innovation management configuration for their global operation, therefore, MNCs need to understand how to capture the values of innovation and cascade them down from global to local operation.

2.7 Conclusion

This chapter has reviewed and explored various aspects of innovation definition in general, including the general concept of service innovation and service innovation in the manufacturing firm. Next, the chapter explored the concept of service encapsulation and the design of new service delivery. Research studies on measurements of innovation success and luxury car industry have been identified. Lastly, the innovation management in MNCs highlighted the challenges of MNCs to manage product innovation and service innovation in current fast-moving and highly competitive global businesses.

Ultimately, all efforts on product innovation, service innovation and process innovation introduction that are packaged and offered through the concept of service encapsulation must help firms achieve superior commercial performance. The achievement and success of innovation must be able to be captured by using measurement of innovation success. Studies on measurement of innovation success suggest three broad categories of measurement, namely: technical, commercial and overall competitiveness.

Chapter 3 - Research Methodology

This chapter formulates research themes and research questions to investigate maximizing returns on innovation through service encapsulation in the Thai luxury car market, to discuss a research approach and methods used for addressing the research questions, and to provide an introduction to the qualitative and quantitative strands used to construct exploratory mixed method research.

To construct the research questions, three themes are explained, based on the gaps found in the literature in the previous chapter. The themes cover roles of innovation in the Thai luxury car industry, roles of service encapsulation in the Thai luxury car industry and measurement of innovation success resulting from service encapsulation. To investigate these phenomena, a research approach was designed and particular research methods of, i) qualitative strand, including face-to-face interviews with 30 interviewees, and ii) quantitative strand, including questionnaires of 206 survey participants, was deployed to study these phenomena.

The literature gaps and conceptual framework are presented in section 3.1. Research questions are described in section 3.2. The research methods (exploratory mixed method with face-to-face interviews and questionnaire) are explained in section 3.4. The research design, data collection and analysis are illustrated in section 3.4. Section 3.5 highlights the limitations of the research. The chapter ends with a conclusion in section 3.6

3.1 Literature Gaps and Conceptual Framework

The review of literature explains three key fundamental issues that help to identify literature gaps and management practices in the luxury car industry. Firstly, the literature broadly mentions the important role of innovation and its contribution to consumption opportunities. However, as luxury car products become a global product, it is interesting to investigate the role of product innovation and the practices of product innovation introduction in local subsidiary operations. Each local subsidiary needs to strategize its own

innovation market introduction due to different markets have their own perceptions of and adaptation to innovations.

Secondly, all luxury carmakers are MNCs and operate in other markets through their local subsidiaries. The literature illustrates the point that, while an opportunity to modify the product innovation might be limited at the local subsidiary level, however, a local subsidiary is expected to introduce service innovations that need to be strategically encapsulated with the main product (luxury car). It is, therefore, very interesting to investigate the role of and driving forces behind service encapsulation in the local market, since the level of acceptance and perception of service encapsulation from customers' perspective might be different from market to market (e.g. headquarter and local subsidiary).

Finally the literature shows that the main factors that contribute to the commercial success of service encapsulation are still unclear and measurements of innovation success that can be applied in the case of luxury car industry are not yet identified. Whether good product innovation and service innovation will directly lead to commercial success, or whether or not there are other influential factors and barriers that luxury carmakers need to overcome in order to ensure commercial success, is still yet to be investigated.

Table 6 illustrates relationships of key debates/gaps, findings from the literature and management practices. Key debates/gaps will subsequently lead to research themes and research questions.

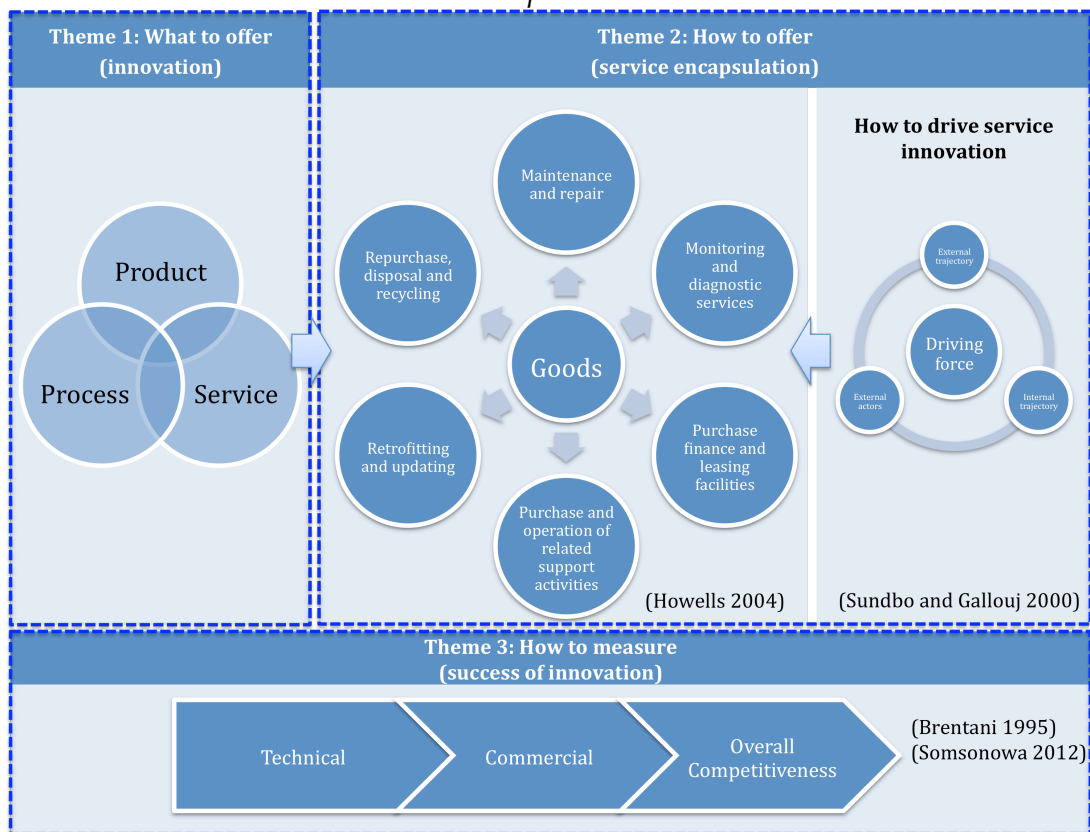
Table 6: Key debates/gaps, findings from literature and management practices

Key debates / Gaps	Findings from literature	Management practices
<p>How can MNCs design, offer and manage product innovation and service innovation that create commercial success and meet customers' demands?</p>	<ul style="list-style-type: none"> • Individual product and service innovations seldom add any value in isolation (Howells 2004) • There is a significant shortfall in fundamental research on service innovation when embedded within a manufacturing firm (Susman et al. 2006) • Innovation in services typically results in increased customer satisfaction and loyalty (Susman et al. 2006) • Product-based differentiation in the automotive industry is increasingly difficult and companies cannot compete on product alone (Godlevskaja et al. 2011) • For organization and location to materialize in innovation, it is essential for an MNC to develop and leverage company-wide as well as subsidiary-specific capabilities for the creation, transfer, assimilation, and exploitation of new knowledge and innovations (Luis et al. 2010) • Automotive companies realized enormous growth opportunities in the service area (Horvath and Partners 2007) 	<ul style="list-style-type: none"> • Local subsidiary often offers product and service as suggested by headquarter without assessing local demands and limitation. • Innovation offering strategy and implementation becomes very complex for MNCs that required local adaptation. • Carmakers need to further differentiate their product by leveraging on services. • Service can bring extra revenue and enhance customer loyalty
<p>Should organizations roll out service encapsulation?</p> <p>What are the opportunities and barriers of service encapsulation arising from internal and external parties?</p>	<ul style="list-style-type: none"> • There is a complex interplay between services and goods in the innovation process (Howells 2004) • Adding service element can enhance performances of products and services (Johnson and Clark 2008) • There are three groups of services that can be added to the automotive product which are embedded services, comprehensive services and integrated solutions (Wise and Baumgartner 1999) • There are three driving forces behind service innovation which are internal actors, external actors, and external trajectories (Sundbo and Gallouj 2000) 	<ul style="list-style-type: none"> • Various services have already been offered together with products without knowing the impact on product commercial performance and end customers. • Firms offer service encapsulation without understanding driving forces behind service innovation
<p>Does service encapsulation play a vital role in the success of innovation commercialization?</p> <p>What are the factors in service encapsulation that contribute to the success of innovation commercialization?</p>	<ul style="list-style-type: none"> • Innovation measurement does not appear to take place routinely within management practice (Holmen and McKelvey 2007) • There are two broad classes of performance measurement: financial and market performance (Drake et al. 2006) • All product manufacturing firms invest heavily in extending their service businesses increase their service offering and incur higher costs, but do not always get expected corresponding higher returns (Gebauer et al. 2005) 	<ul style="list-style-type: none"> • Firms value the importance of the measurement of innovation success. • However, how to measure innovation success is still unclear for most organizations. • Product firms still do not gain the most from their service efforts.

Source: Author's own compilation

There are three research themes that have been identified which aim to address key debates and gaps. Research themes are presented in the conceptual framework as illustrated in Figure 3. Manufacturing firms who see the value of offering services to their customer often try to find the right mix and priority between product offering and service offering. As innovation is defined as activities that bring superior market performance and commercial value to the organization, firms need to consider activities involving product innovation, service innovation and process innovation. The first research theme is on how firms, especially MNCs, prioritize their innovation offering and what the combination of product, service and process innovation should be in order to bring commercial value to the firm.

Figure 3: Conceptual framework – Maximizing returns on innovation through service encapsulation



Source: Author's own compilation

Recently, service innovations have gained attention from scholars and businesses due to their huge potential to contribute to firms' revenues and the nation's GDP. Sundbo and Gallouj (2000) suggested that there are three driving forces that drive service innovation, which are internal actors, external actors and external

trajectories. Howells (2004) also suggested the typical service encapsulations that are often packaged with the main products and services such as financial service, insurance, technical update of equipment, maintenance and repair. However, there has been no study to assess the effectiveness and outcomes of typical service encapsulation offerings. Roles of service encapsulation providers who deliver values to customers need to be investigated. The second research theme aims to address interactions of service encapsulation providers and the process of customers' value fulfilment.

Lastly, firms normally assume that, by offering services together with products, it should bring customer satisfaction and improved commercial performance. In fact, not a single service encapsulation offering yields the same financial outcomes and customer satisfaction outcome. The last research question aims to investigate what contributes to the effectiveness of service encapsulation implementation and how to measure return on innovation that driven by service encapsulation. Literatures indicate that there are three clusters of measurements of innovation which are technical, commercial and overall competitiveness (de Brentani 1995) and 11 clusters of performance indicator based on the research process (Samsonowa 2012). The research also investigates factors that contribute to the success of service encapsulation by drawing from previous works of scholars, industrial research and empirical studies.

3.2 Research Questions

This research investigates roles of innovation, roles of service encapsulation, service encapsulation delivery models and service encapsulation commercialization platforms in the Thai luxury car industry. Research questions are driven from the conceptual framework as previously mentioned.

RQ 1: What are the roles of innovation in the Thai Luxury Car Market?

To successfully compete in the automotive industry, innovation plays a significant role to differentiate automotive products. However, there is no study to assess the optimal level of innovation introduction and whether the offering might reach the counter productive level. The study must prioritize innovation in comparison to other luxury buying criteria as perceived values by consumers. It

is unarguable that innovation is the backbone of luxury car marketing and can often be used as a differentiation factor.

RQ 2: What are the roles of Service Encapsulation in the Thai Luxury Car Market?

The second theme explores the concept of service encapsulation as introduced by Howells (2004). In order to deliver service encapsulation, there are three parties involved in the process; 1) internal – product or brand owners, 2) intermediary – parties who interact with customers on behalf of carmakers, and 3) external – those who provide non-core services to support service encapsulation. Research outcomes help to construct the service encapsulation delivery model highlight the roles of service encapsulation parties, interactions, and strategies to build and sustain relationship among parties.

RQ 3: How can Thai luxury carmakers maximize returns on innovation through service encapsulation?

This question explores the concept and definition of returns on innovation in the luxury car industry. Since there is no single definition and agreed set of returns on innovation, the study will propose common sets of returns on innovation that are agreed among the key luxury carmakers. Service encapsulation also requires the full understanding of key success factors that contribute to the success of service encapsulation efforts. Then, outcomes from empirical studies, including face-to-face interviews and service encapsulation questionnaires, were integrated with the literature on innovation and service innovation. The service encapsulation commercialization framework was formulated by modifying the work of Sundbo and Gallouj (2000).

3.3 Research Methodology: Mixed Methodology

Mixed methods research is defined as research in which the investigator collects and analyzes data, integrates the findings, and draws inferences, using both qualitative and quantitative approaches or methods in a single study or a programme of inquiry (Tashakkori and Creswell 2007). Mixed methodology has

been called the 'third methodological movement' following the developments of first quantitative and then qualitative research (Tashakkori and Teddlie 2003).

The development of mixed methodology came from the scenario that research problems suited to mixed methods are those in which one data source may be insufficient, results need to be explained, exploratory findings need to be generalized, a second method is needed to enhance a primary method, a theoretical stance needs to be employed, and an overall research objective can be best addressed with multiple phases, or projects (Creswell and Clark 2011). The limitations of one method can be offset by the strengths of the other method, and the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach by itself (Creswell and Clark 2011).

In Table 7, Johnson and Onwuegbuzie (2004) had highlighted strengths and weaknesses of mixed research. The implications of strength of mixed methodology to this research is the mixed methodology provides opportunities to investigate broader and more complete range of research questions and to diverse groups of stakeholders such as executive, dealer owners and customers that related to Thai luxury car market. Convergence and collaboration of findings can not only strengthen conclusions but also increase generalizability of results as well.

Table 7: Strengths and weaknesses of mixed methodology

Strengths and weaknesses of mixed research (Burke and Anthony, 2004)	
Strengths	Weaknesses
<ul style="list-style-type: none"> • A researcher can use the strengths of an additional method to overcome the weakness in another method by using both in a research study • Research can generate and test a grounded theory • Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach • Can provide stronger evidence for a conclusion through convergence and collaboration of findings • Can be used to increase the generalizability of the results • Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice 	<ul style="list-style-type: none"> • Can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently • Some of the details of mixed research remain to be worked out fully by research methodologists • More expensive and more time consuming • Methodological purists contend that one should always work within either a qualitative or a quantitative paradigm

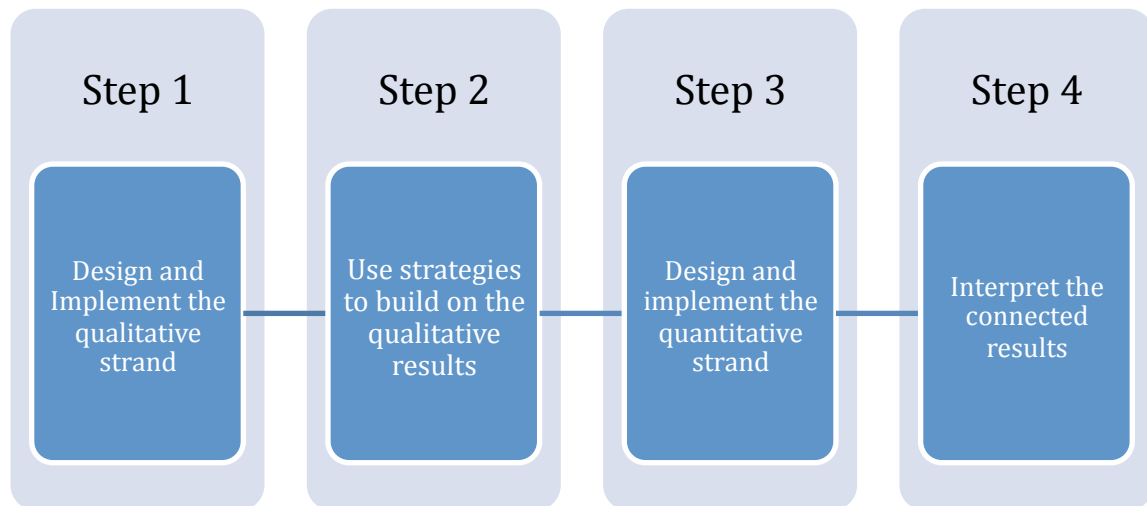
Source: Johnson and Onwuebuze (2004)

In mixed methodology, there are always two research strands. Creswell and Clark (2011) defined the meaning of research strand as ‘a component of a mixed methods study that encompasses the basic process of conducting quantitative or qualitative research: posing a question, collecting data, analysing data, and interpreting results based on that data.’ Roles of qualitative and quantitative strand together with the timing and sequences of each strand play a critical role in the design of mixed methodology. This study adopted an exploratory sequential design. The exploratory design is useful when the researcher wants to generalize, assess, or test qualitative exploratory results to see if they can be generalized to a sample and a population (Creswell and Clark 2011).

The exploratory design procedures consist of four steps which are summarized in Figure 4. This design starts with the collection and analysis of qualitative data to explore a phenomenon. In the next step, researchers using this design build on the results of the qualitative phase by developing an instrument, identifying variables, or stating propositions for testing based on an emergent framework. These developments connect the initial qualitative strand to the subsequent quantitative strand of the study. In the third step, the researcher implements the quantitative strand of the study to examine the salient variables using the developed instrument with a new sample of participants. Finally, the researcher

interprets in what ways and to what extent the quantitative results generalize or expand on the initial qualitative findings.

Figure 4: Exploration design in mixed research methodology



Source: Creswell and Clark (2011)

It is worth mentioning that the exploratory mixed methodology design typically emphasizes the qualitative aspect, so the inclusion of a quantitative component can make the qualitative approach more acceptable to quantitative-biased audiences (Creswell and Clark 2011). Due to the two-phase structure of the exploration design and the fact that only one type of data is collected at a time, the design has specific advantages of simplicity to describe, implement, and report outcomes.

3.4 Research Design, Data Collection and Analysis

Following Robson's (1993) framework for research design, the research needs to specify five important elements; research questions, purpose, theory, methods and sampling strategy. First, a set of questions should be specified in accordance with the purposes of the research and theory. Secondly, research questions refer to a set of questions seeking to find an answer to what the research is asking. They must be feasible and linked to the purposes of the study given available time and resources (Robson 1993). The use of document analysis can strengthen the validity and reliability of the qualitative result (Teddlie and Tashakkori 2009).

3.4.1 The Exploratory Mixed Method Design

Ultimately, the research design aimed to provide answers to the research questions. The principle of this design also incorporated a realistic timeframe and realistic assessment of data within the scope of the research. In this research, the design comprised four phases. The first phase was to further develop the initial conceptual framework on the roles of innovation and the roles of service encapsulation in the Thai luxury car market by reviewing the literature. The taxonomy of concept of innovation, service innovation, service encapsulation, barriers and opportunities of service encapsulations, measurements of innovation success, luxury car industry, and innovation management in MNC are investigated. Confirmation of the conceptual framework and research questions were also part of the first phase.

The second phase was to reconfirm the conceptual framework by conducting face-to-face interviews with the top executives and key players who were the policy makers, senior executives and business owners in the Thai luxury car industry. Interviewing the policy makers and owners gave a perspective on how senior management of luxury car companies, managerial level, dealer owners, and other stakeholders viewed roles of innovation in their industry. The objective here was to identify patterns of interrelationships between internal and external factors based on the conceptual framework, and to explore new variables that impact Thai luxury carmakers. The investigations focused on relationships between product orientation, process orientation, market orientation and organization orientation toward roles of service encapsulation in the success of innovation commercialization, the degree of difficulty posed by each external and internal barrier towards service encapsulation, and the influence of firm characteristics on a firm's service encapsulation.

The third phase was to collect insights and feedback from consumers by using a questionnaire regarding different features of luxury car products, the importance of product innovations, service innovations and service encapsulations. Conducting questionnaires with existing and potential luxury car customers was expected to reveal interesting findings, including similarities and contradictory results from executive face-to-face interviews. Outcomes from questionnaires were used to compare, confirm and triangulate face-to-face interviews. Using

questionnaires is more objective and responses are gathered in a standardized manner. Questionnaires have high potential to assess larger groups of participants (Creswell and Clark 2011).

In the last phase, two strands of mixed methodology were merged and conclusions were drawn. On the one hand, using the interview method for the executive interviewees could provide researchers with insightful data and real understanding, especially from the policy makers' point of view. On the other hand, using questionnaires provided existing and potential customers' quantitative outcomes to triangulate outcomes and findings from executive interviews. Results of both qualitative and quantitative methods were triangulated to verify findings and solidify conclusions from the study. Triangulation was undertaken to ensure an in-depth understanding of the case in question. The combination of multiple methodological practices in a single study was best understood as a strategy that contributes rigour, breadth, validity, richness and depth to any inquiry (Denzin and Lincoln 2000).

As previously described, this research adopted the exploratory design which began with a priority of the collection and analysis of qualitative data in the first phase. Building from the exploratory results, the researcher conducted a second, quantitative phase to test or generalize the initial findings. The researcher then interprets how the quantitative results built on the initial qualitative results . Table 8 summarized the research design highlighting four steps, procedures and products or outcomes from each step. Mixed methodology often engaged extensive data collection from both qualitative strand and quantitative strand. In this research, the face-to-face interviews were conducted with 30 participants who were executives from Thai luxury car companies, policy makers, dealer owners and players in the Thai luxury car market. In addition, the 206 questionnaires provided feedback from current luxury car owners and potential luxury car buyers.

Table 8: Exploratory mixed method research design

Step	Procedures	Products
Qualitative Strand – Face-to-face interviews		
Design & data collection	<ul style="list-style-type: none"> State qualitative research questions and determine the qualitative approach N = 30 Conduct face-to-face interviews as guided by the interview protocol 	<ul style="list-style-type: none"> Face-to-face interview protocol Field notes Voice recordings Transcripts Organize documents
Data analysis	<ul style="list-style-type: none"> Analyze the qualitative data using procedures of theme development and those specific to the qualitative approach to answer the qualitative research questions and identify information needed to inform the second phase 	<ul style="list-style-type: none"> Codes and themes Similar and different themes and categories Present visual models, figures, tables
Interim Phase		
Develop an instrument	<ul style="list-style-type: none"> Refine quantitative research questions or hypotheses and the mixed methods question Determine how participants will be selected for the quantitative sample Design quantitative data collection instrument based on the qualitative results 	<ul style="list-style-type: none"> Design questions and scales for questionnaires Design on questionnaire protocol
Pilot testing	<ul style="list-style-type: none"> Conduct the pilot testing of quantitative questionnaire Conduct pilot test with five individuals 	<ul style="list-style-type: none"> Refine questionnaire 14 Questions 5 scales
Quantitative Strand - Questionnaire		
Data collection	<ul style="list-style-type: none"> Select a quantitative sample that will generalize or test the qualitative results N = 206 current and potential luxury car buyers Survey with 14 instruments and 5 demographic items 	<ul style="list-style-type: none"> Numerical item scores Prepare the data for analysis with SPSS Conduct descriptive analyses and statistical analyses
Data analysis	<ul style="list-style-type: none"> Analyze the quantitative data using descriptive statistics, inferential statistics, and effect sizes to answer the quantitative and mixed methods research questions 	<ul style="list-style-type: none"> Choose an appropriate statistical test Analyze the data to answer the research questions Represent results in statement of results
Interpretation		
Merging and conclusion	<ul style="list-style-type: none"> Summarize and interpret qualitative and quantitative results Merge and integrate results from qualitative and quantitative results Discuss to what extent and in what ways the quantitative results generalize or test the qualitative results 	<ul style="list-style-type: none"> Validated instrument to measure dimensions Assess how the research questions were answered Compare the findings with the literature Reflect on the personal meaning of the finding Implications and future research

Source: Author's own compilation

3.4.2 Qualitative Strand: Face-to-Face Interviews

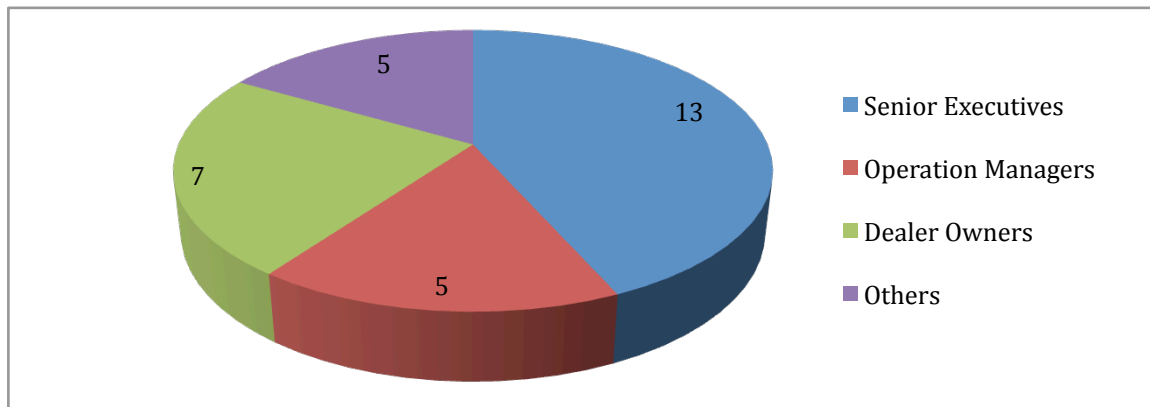
The first phase was to reconfirm the conceptual framework by conducting face-to-face interviews with the key players in the Thai luxury car industry. These

were semi-structured interviews with executives in luxury carmakers and other key stakeholders. This was carried out in parallel to the document analysis. The objective here was to identify patterns of interrelationships between internal and external factors, based on the conceptual framework, and to explore new variables that impact innovation, service encapsulation, opportunities and barriers of service encapsulation in Thai luxury carmakers. Once the analysis was completed, the output of this analysis was a concrete model to evaluate roles of service encapsulation in the success of innovation commercialization for Thai luxury car companies.

Participants

In terms of the number of participants, rather than selecting a large number of people or sites, the qualitative researcher identified and recruited a small number that will provide in-depth information about the central phenomenon or concept being explored in the study (Creswell and Clark 2011). Concerning the target sample, the face-to-face interviews were conducted with 30 interviewees. Figure 5 illustrated the job profiles of the 30 participants in face-to-face interviews. Four clusters of interviewees were senior executives, operation managers, dealer owners and others. Senior executives were the head of or the director at the local subsidiary. Operation managers provided views on the implementation and execution of policy and worked closely with car dealers. Dealer owners represented the local investor who often interacted with customers and bridged the gaps between global direction and local customer demands. The last group of 'others' represented other stakeholders that provided complementary information on the Thai luxury car market, such as motor journalists, fleet operators, and finance leasing companies. It is worth noting that most qualitative work used judgment sampling or purposive sample (e.g. Marshall (1996)).

Figure 5: Number of interviewees by job profiles



Design of Interview Questions

The questions in the face-to-face interviews were designed to give interviewees opportunities to express thoughts and opinions in the areas of product innovations, service innovation, service encapsulation, opportunities and barriers of service encapsulation and potential outcomes of encapsulated service in luxury cars (see Appendix II for the interview guideline). Questions were designed to answer the research question with the guideline from the previous works from scholars and industry research studies, as illustrated in Table 9. It is worth to mention that results from industry research studies were used due to the exclusivity and limited data availability on the Thai luxury car industry.

Table 9: Design of face-to-face interview questions

Research Question	Previous works of scholars and industry research studies	Face-to-face interview questions
RQ1 – what are the roles of innovation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Kotler et al. (2001), Model of Buying Behavior • Hausman (2000), A multi-method investigation of consumer motivations in impulse buying behavior • Dongyan and Xuan (2008), Car purchasing behavior in Beijing: An empirical investigation 	Qs1. Roles of innovation in your organization and industry
RQ2 – what are the roles of service encapsulation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Howells (2004), Innovation, consumption and service encapsulation • GfK's BMW Thailand Brand Monitor 2007 • JD Power Asia Sales Thailand Automotive Satisfaction Index (SSI) and Customer Satisfaction Index CSI survey 2010 – 2012 	Qs2. Roles of service in the commercial success of product innovation in your organization and industry Qs3. What are the opportunities for packaging (encapsulating) services in your products? Qs4. What are the barriers to packaging (encapsulating) services in your products?
RQ3 – how can Thai luxury carmakers maximize returns of innovation through service encapsulation?	<ul style="list-style-type: none"> • Sundbo and Gallouj (2000), Innovation as a loosely coupled system in services • BMW Thailand's Dealer Attitude Survey 2007 	Qs5. What are the external parties that have the greatest impact on service encapsulation? Qs6. Does service encapsulation need internal parties' support to become a success? Qs7. What are the criteria for the success of innovation commercialization in Thailand luxury car industry? Qs8. Will service innovation become more critical in the future or less critical in the future in your organization and industry?

Source: Author's personal compilation

To answer the first research question on the roles of innovation in Thai luxury car industry, Qs1 was designed to investigate the roles of innovation in automotive firms and the automotive industry. This question built on the scholarly works of Kotler et al. (2001) on the generic model of buying behaviour, and Hausman (2000) on assessing factors that impact on impulse buying behaviour. Dongyan and Xuan (2008) also conducted similar work on key purchasing and decisions for the automotive industry in Beijing. This question asked interviewees to rate the importance of innovation in the automotive industry from: 1 – not at all to 5 – very critical. Liker-type scale statements were chosen to evaluate interviewees' attitudes in the study and the Likert-type scale has been extensively used by

persuasion researchers for over three decades. The original scale of this type was developed by Rensis Likert⁴.

Qs2 – Qs4 addressed the second research question on the roles of service encapsulation in the Thai luxury car industry. These three questions were designed by building on both scholarly work on service encapsulation (Howells 2004) and industry research studies from private companies such as JD Power Asia Pacific, who conduct a yearly evaluation on sales and service satisfaction (SSI) on Thailand's automotive industry. GfK, who was the international market research firm was hired by BMW Thailand, conducted the report on brand monitor and relevant survey in 2007 to assess the level of customer satisfaction and roles of service. These three questions assessed insights and opinions of interviewees on the roles of services, how service can yield better commercial performance and what the opportunities and barriers are in the Thai luxury car market.

Qs5 – Qs8 were designed to address the last research question on how Thai luxury carmakers can maximize returns on innovation through service encapsulation and which factors contribute to the success of service encapsulation. These questions were developed by adapting the work of Sundbo and Gallouj (2000) on driving forces behind service innovation. Outcomes of BMW Thailand's Dealer Attitude Survey conducted in 2007 were also used to find opportunities and barriers identified by BMW Group Thailand dealers.

Interview Method

There are a variety of means of enhancing and enlarging the amount that one can learn from an '*elite interview*' with a senior company executive. As mentioned by Thomas (1993), corporate executives are often well connected people, deeply enmeshed in social, political, economic, religious and even family networks made up of other corporate executives or senior level people. To explore such complex phenomena, talking to individuals who have direct experience in that situation is likely to provide rich information (Manson 2002) and information comes from

⁴ Likert, R. (1932) 'A Technique for the Measurement of Attitudes', Archives of Psychology

the meanings which interviewees attach to the situation (Easterby-Smith et al. 1991).

Interview Protocol

Semi-structured and face-to-face interviews were used. Some interview questions were prepared as a guideline to gather data. All interviews were conducted in either Thai or English, depending on the language preference of interviewees. The interview guide was prepared in both Thai and English. It is noteworthy that research interviews are one of the most extensively used techniques, owing to their versatility, appropriate for both qualitative and quantitative research (Yin 2009). Interviewees were approached by phone call, posting letters or emails asking for interviews (see details in Appendix II). An interview guide was attached to an email. At the start of the interviews, confidentiality was discussed and permission for recording interviews was asked, as suggested by King (2005). Most interviews were conducted face-to-face, and three were done via telephone (two journalists and one dealer owner). Emails were sent to all the respondents who had been interviewed in order to express thanks for the valuable time they contributed to this study. In total, thirty interviews were conducted between April 2010 and May 2012. To supplement the data collected from interviewing, secondary data was gathered from web sites, annual reports of luxury carmakers and trade media.

Data Analysis

Analysis of text – from thirty interview transcriptions, annual reports, trade media and information from websites – was used to find emerging themes or patterns. Creswell and Clark (2011) suggested two qualitative data analysis strategies. The first strategy is the categorical strategy, which breaks down narrative data and rearranges them to produce categories that facilitate comparison. The second strategy is the contextualizing strategy, which interprets the narrative data in the context of a coherent, whole ‘text’ that includes inter-connections among statements, and events. Pattern matching attempts to establish a connection between a theoretical pattern and an observed or operational one (Hyde 2000). It is worth noting that the research questions and

themes of this study emerged while conducting the fieldwork and analysing the data. Outcomes from face-to-face interviews also identified dimensions and variables, and were used as the guideline to produce the questionnaire in the quantitative strand.

Issues of validity are often raised in qualitative research. These issues led to the application of the theory of sampling, with interviewees from key Thai luxury car players like Audi, BMW, Lexus, Mercedes-Benz, and Volvo in order to triangulation of various sources, and respondent validation. Moreover, outcomes and patterns that emerged from face-to-face interviews helped to design questionnaires in the quantitative part to provide better opportunities for generalizing the results with validity and trustworthiness.

3.4.3 Interim Phase: Instrument Development

Outcomes and patterns from the qualitative strand of face-to-face interviews helped to refine the research questions, and suggested how to proceed on the quantitative strand of questionnaires to investigate explanations and findings on roles of innovation, roles of service encapsulation and innovation commercialization through service encapsulation. Pilot testing allows researchers to focus on areas of the research that may be unclear or ambiguous to respondents (de Vaus 1991). It can also be used to test certain questions, and the process allows insight into the shaping of the study (Denzin and Lincoln 2000).

The scales and items that were used to measure the service encapsulation survey in Thai luxury car market were adapted from literatures. These constructs were luxury car buying criteria (GfK's Relevant Survey 2007) and vehicle performance and functionality (Perachio and Mayers-Levy 1994). This question asked interviewees to rate the importance of innovation in the automotive industry). Liker-type scale statements from 1 – not at all, to 5 – very critical were chosen to evaluate interviewees' attitudes in the questionnaire.

To fine-tune the instrument, a pilot study to test the instrument design was conducted to polish the questionnaire, assess the clarity of instruction and the sequence of each section, and identify possible problems. Pilot testing was done by inviting eight individuals, comprising two DBA students, two faculty

members of a local Thai business school, two current luxury car users and two potential buyers. After conducting the pilot test, the questionnaire items were reordered, shortened, and finalized for main data collection. The new questionnaire instrument consisted of 14 questions including 5 demographic questions, and was in total 7 pages long. Table 10 illustrates the linkage of the design of survey questions which derived from research questions and outcomes from qualitative analysis.

Table 10: Design of questionnaire questions

Research Question	Outcomes from Qualitative Analysis	Contribution from Questionnaires
Q1 – what are the roles of innovation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Key buying criteria of luxury car consumers • Strengths of each luxury car brands • Innovation management process in MNCs • Roles of product innovation and service innovation in Thai luxury car market 	Qq1. Please rank the top three luxury car buying criteria Qq2. Luxury car brands that capture customers' minds using distinctive characteristics (choice of: Audi, BMW, Lexus, Mercedes-Benz and Volvo) Qq4. Please identify Innovative products in automotive industry that you can recall Qq5. Please identify Innovative services in automotive industry that you can recall
Q2 – what are the roles of service encapsulation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Key differentiation of luxury car from non-luxury car • Importance of product innovation and service innovation • Services that are recognized and valued by customers • Future demands for service in luxury car 	Qq3. Do you agree that luxury cars offer the following distinctive features when compared to other passenger cars? Qq6. Please rate the level of importance of production innovation and service innovation Qq7. Please rate the following service offering values that you perceive Qq8. Please identify other services that you may need
Q3 – how can Thai luxury carmakers maximize returns of innovation through service encapsulation?	<ul style="list-style-type: none"> • Opportunities and barriers of service encapsulations • Key dimension and factors that contribute to the success of service encapsulation • Service encapsulation as a contribution to brand loyalty • Preferred luxury car brand for future purchases and reasons 	Qq9. When you consider buying products/services from car companies, how do you rate the level of importance of the service encapsulation factors? Qq10. Please rank the following key criteria that keep customers with the luxury car brand Qq12. Do you have any plans to purchase a luxury car in the future? Qq12.1 If yes, please state brand Qq12.2 If you plan to purchase a luxury car, please specify reasons

Source: Author's personal compilation

3.4.4 Quantitative Strand: Questionnaire

This research utilized self-administered questionnaires, which is a system for collecting from or about people to describe, or explain their knowledge, attitudes, and behaviour (Bourque and Fielder 2003). After developing the appropriate survey instrument, the sampling design is needed to obtain a sample that is representative of the target population. While the unit of analysis of this research is an individual, the target population is defined as local consumers (Thai or non-Thai) who belong to one of three criteria⁵: i) current luxury car owners, ii) have plan to buy a luxury car in the future, and iii) current non-luxury passenger car owners. Respondents were asked whether they fit with at least one of three criteria as a filter question before proceeding to questionnaire. There are challenges associated with the selection of a sample, mainly due to the limited number of local consumers who currently own or have plans to purchase luxury cars.

Under time and financial constraints, the potential respondents were selected based on convenient sampling. The use of these techniques in the current study was deemed reasonable, as the aim was not to estimate all the characteristics of the entire population, but rather to explore the relationship between variables (Lonner and Berry 1986). The convenient sample was selected by visiting the motor show, up-scale hotels and shopping centres that yielded a higher chance of identifying luxury car users and potential buyers. Besides deciding on sampling techniques, necessary sizes of the sample had to be decided. Since the average annual sales volume of Thai luxury cars during 2009 – 2011 was 10,780 units per year⁶, there were 206 samples collected from this questionnaire, or around 1.9% of total annual sales of luxury cars in Thailand, which was deemed appropriate.

Data Collection

The paper-based and web-based questionnaire surveys were employed to collect the quantitative data. This mixed-mode design was recognized as an appropriate means for generating a desirable sample size since it helped to increase the

⁵ from GfK Relevant Survey (2007)

⁶ Thailand Ministry of Transportation

number of survey responses and to reduce cost (Czaja and Blair 1995). Although the author was aware of the possibility of sources of response differences, responses from paper-based and web-based surveys needed not yield high discrepancy between results. This was because both types of survey are self-administered questionnaires which involve similar visual form and less human interaction (Dillman 2007).

The paper-based survey included a one-page cover letter and 6 pages questionnaire (see Appendix III). A cover letter was written to ask any potential respondents to take part in this study and to provide a summary of the purpose of the study, the time required for completion, and the confidentiality of information. A cover letter also explained terminology that was relevant in this research, such as classification of luxury car, definition of product innovation, service innovation and service encapsulation. The potential respondents who were interested in participation were then asked to fill out the questionnaire. The survey took approximately 15 minutes to complete, with 14 questions plus 5 demographic questions. Each questionnaire was checked at the time of completion to reduce the number of incomplete responses.

Concurrently, the web-based survey was implemented as a supplementary mode to the paper-based survey, mainly in order to increase the access to potential respondents. The web questionnaire was sent to potential respondents using a list that was developed through personal contacts and referrals. The web-based survey was developed and administrated using QuestionPro⁷, an online survey web portal. The benefit of the interactive system is that the information about partly completed or uncompleted surveys is available, which can help to estimate the non-response rate. In addition, the software offers respondents the ability to postpone and resume their responses at another time. The program was also set to prevent multiple submission of the survey reducing a source of bias (Schmidt 1997). A major benefit of a web-based survey is also the real time return speed of completed questionnaires (Crawford et al. 2001).

The respondents were sent an email invitation with the same explanation as the paper-based cover letter, notifying them about the research project and its

⁷ www.questionpro.com

purpose. In the email message, a hyperlink was attached for them to complete the web survey. The cover screen gave similar messages to the cover letter. Table 11 summarizes number of survey distributed via paper-based and web-based including number of completed survey, non-respondents and response rate. In total, 352 survey invitations had been sent out, 111 invitations via paper-based and 286 via web-based.

Table 11: Response rates of paper-based survey and web-based survey

Research Question	Paper-based survey	Web-based survey
Total distribution	111	286
Completed surveys	111	95
Non-respondents	-	80
Response rate (%)	100%	54.3%

Source: Author's personal compilation

The number of non-respondents might raise questions of validity and potentially omitting a certain profile of respondents. Consequently, the survey of non-respondents was conducted in March 2013 by selecting four key questions from the full questionnaires, including the question on reasons for not completing the questionnaire since the first invitation, and statistical outcomes were used to conduct a test of significance and confirm that there were no significant differences between respondents and non-respondents based on t-statistics. As of April 2013, there were 16 non-respondents took the survey. The sample of survey of non-respondents is provided in Appendix IV; and outcomes from the non-respondent survey and tests of significance are provided in Appendix V. Reasons that non-respondents cited for why the invitation had not been completed were; 1) did not receive questionnaire (40%), 2) forgot, due to no reminder sent (20%), 3) sent completed survey – not sure why didn't receive (20%), and 4) Others = 20%.

Characteristics of Respondents

As of May 2012, 206 survey participants had taken the Service Encapsulation survey. From 206 participants, 100 participants or 49.5% planned to buy luxury cars, while 60 participants or 29.7% were still undecided. The number of cars owned by the 206 participants was 383 units; and 147 units or 38.4% were

classified as luxury cars. 37.9% were aged 31 – 40 and 19.2% were aged 41 – 50. 59.1% were males, and 40.9% females. 85.7% were Bangkok and greater Bangkok residents. The majority of survey participants or 98.5% had University Master Degrees and higher. 73.6% had monthly incomes of more than USD 1,667 per month.

Data Analysis

The strength of quantitative research is that it helps to generalize research findings, test and validate already constructed theories about how (and to a lesser degree, why) phenomena occur (Johnson and Onwuegbuzie 2004). Nevertheless, it is worth noting that quantitative analysis comes with the limitation that knowledge produced may be too abstract and general for direct application to specific local situations, contexts, and individuals.

In this study, descriptive statistics are deployed to give an overall view of mean, mode, standard deviation, and frequency. It is known that descriptive statistics are often not sufficient for most research purposes, including estimation and hypotheses testing (Bryman and Bell 2003). Therefore, inferential statistics are employed in this questionnaire data analysis. In inferential statistical analysis, tests of statistical significance provide information regarding the possibility that the results are due to chance and random error, versus a true relationship between variables. If the results are statistically significant, then the researchers conclude that the results did not occur by chance alone. A t-test was employed to investigate the differences between two groups of independent variables (Morgan 1998).

There are two types of data from questionnaires based on different set of scales. Categorical data have no numerical meaning and represents choices such as buying criteria and luxury car brand. For this categorical type of outcomes, descriptive analysis such as frequency, mode, and ranking of outcomes were deployed. Another types of data are ordinal data which represent numerical meaning. In this questionnaire, 5 likert-scales were used to demonstrate the numerical meaning such as scale of 1 – least important to 5 – most important. For ordinal type of outcomes, descriptive statistics such as mean, standard deviation,

and frequency were deployed together with inferential statistics such as test of significant were deployed. More specifically, t-test was conducted in ordinal outcomes to compare significant different between current luxury car owners and non-luxury car owners.

3.4.4 Merging of Results

According to Denzin and Lincoln (2000), the combination of multiple methodological practices in a single study is best understood as a strategy that contributes rigour, breadth, validity, richness and depth to any inquiry. As mention in the earlier section, in an exploratory mixed methodology, more weight was assigned to the qualitative strand while the quantitative strand was used to triangulate and generalized the findings from the qualitative strand (Creswell and Clark 2011). In mixed methods data analysis, the researcher needed to incorporate good procedures of data analysis for both quantitative and qualitative strands of the study. This involved preparing the data for analysis, exploring the data, analyzing the data to answer the research questions or test the research hypotheses, representing the data, interpreting the results, and validating the data, results, and interpretation.

While the outcomes of face-to-face interviews provided insights and perceptions from key players such as executives and dealer owners from Thai luxury car industry, outcomes might be biased and subjective, since interviewees might perceive incidents from their own perspectives. Questionnaires were designed for customers to provide comments and insights. Outcomes from the face-to-face interview were validated and compared with customer's perspectives from the questionnaire. Outcomes and discrepancies led to a new understanding on where and why gaps exist. Table 12 illustrated each chapter's findings driven by research questions, key questions, use of face-to-face interview and use of questionnaire and chapter finding based on the three research questions.

Table 12: Outcomes of merging of results to address research questions

Research Question	Key investigation	Use of face-to-face interview	Use of questionnaire	Chapter finding
RQ1 – what are the roles of innovation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Key buying criteria of luxury car consumers • Roles of innovation in Thai luxury car market 	<ul style="list-style-type: none"> • Collect data • Identify pattern • Analyze • Conclude 	<ul style="list-style-type: none"> • Compare • Contrast • Generalize 	<ul style="list-style-type: none"> • Chapter 4 – An Overview of The Thai Luxury Car Industry & Roles of Innovation in the Thai Luxury car Industry
RQ2 – what are the roles of service encapsulation in the Thai luxury car industry?	<ul style="list-style-type: none"> • Important of service innovation • Services that recognized and valued by customers • Future demands of service in luxury car 	<ul style="list-style-type: none"> • Collect data • Identify pattern • Analyze • Conclude 	<ul style="list-style-type: none"> • Compare • Contrast • Generalize 	<ul style="list-style-type: none"> • Chapter 5 – Roles of Service Encapsulation in the Thai Luxury Car Industry
RQ3 – how can Thai luxury carmakers maximize returns of innovation through service encapsulation?	<ul style="list-style-type: none"> • Opportunities and barriers of service encapsulations • Key dimension and factors that contribute to the success of service encapsulation 	<ul style="list-style-type: none"> • Collect data • Identify pattern • Analyze • Suggest frame • Conclude 	<ul style="list-style-type: none"> • Complement 	<ul style="list-style-type: none"> • Chapter 6 – Maximizing Return on Innovation through Service Encapsulation: A case study in the Thai Luxury Car Industry

Source: Author's personal compilation

3.5 Limitations & Contribution

The research investigated the Thai luxury car industry during the period 2007 to 2012. Any attempts to generalize the research beyond the research period and the researched industry might yield inaccuracy in results. Thai culture and Thai consumers also played significant roles in the research findings. The implications of this knowledge would probably be different from country to country, with different geographic parameters, consumers' demography, sets of cultures, values and norms, and history of luxury car industry and its players. Nevertheless, findings and insights might be applicable for future use, but discretion needs to be carefully applied.

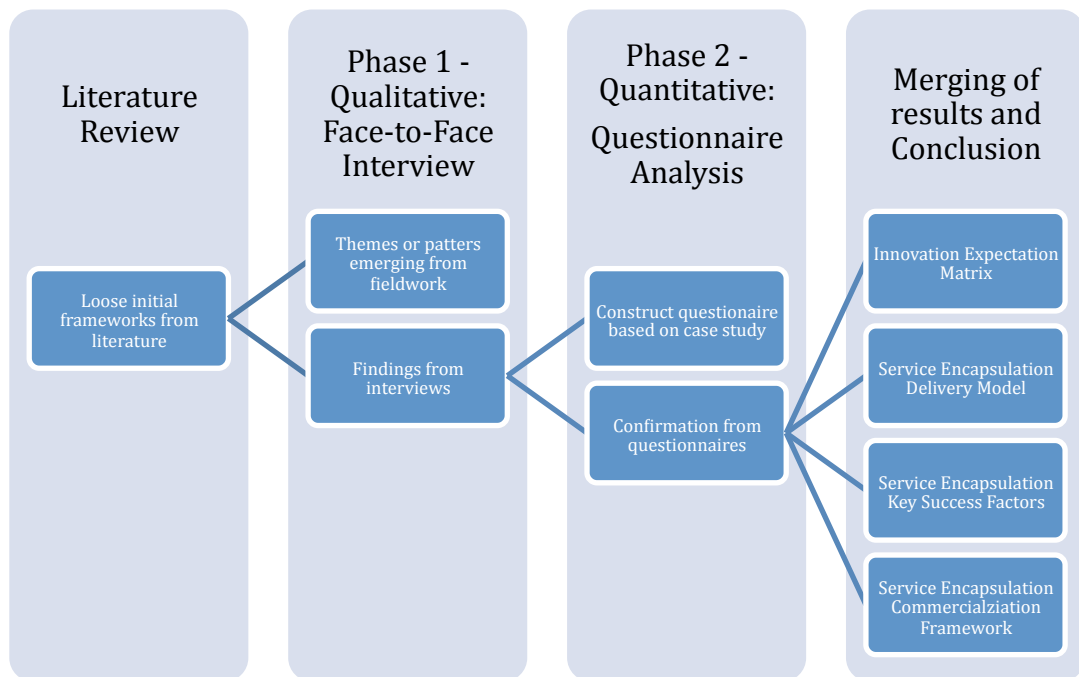
This study contributed to both theoretical and practical implications. From a theoretical standpoint, this study would help to explain the theoretical framework derived from various innovation management research studies on the role of innovation in product innovation, roles of service encapsulation and how luxury carmakers can maximize their returns on innovation through service encapsulation. In terms of practical contribution, this study was expected not only to provide a well-grounded understanding of the role of service encapsulation in the success of innovation commercialization in Thailand's luxury car industry. It would also shed some light on how luxury carmakers can maximize their innovation efforts through the leverage of the service element.

3.6 Conclusion

In this chapter, the principles of research design are discussed. There are three research themes in this thesis. The first theme discusses the roles of innovation in Thai luxury car market. The second theme discusses the current roles of service encapsulation and key barriers. The last theme discusses how organizations can maximize returns on innovations by introducing service encapsulation key success factors and a service encapsulation commercial framework. In order to address the research questions, mixed research methods were deployed in this research. The research started by gathering qualitative inputs through face-to-face interviews. Outcomes from case analysis helped to design a service encapsulation questionnaire. The questionnaire was launched to end consumers including current and potential luxury car consumers. The design of multiple-case study questions and questionnaire were closely linked and tied to each research question.

This study adopted an exploratory mixed methodology design which comprised four research phases as illustrated in Figure 6. The first phase was advanced by the review of the literature, followed by the second phase of conducting 30 face-to-face interviews. The third phase was to conduct questionnaires with 206 existing luxury car users and potential buyers. The last phase was the merging and concluding of the results from the first three phases.

Figure 6: Rationale of theory building



Source: Author's literature review

Chapter 4 - An Overview of the Thai luxury car industry & Roles of Innovation in the Thai luxury car industry

The automotive industry receives a high priority from the Thai government since it contributes greatly to the wealth of the nation. The Thai luxury car industry has many distinctive characteristics. The Thai luxury car industry has been an oligopoly dominated by a few players. Those few players have captured over 90% of the market share. This thesis begins by investigating roles of innovations based on perspectives from luxury car executives and other key stakeholders based on face-to-face interviews. Later, triangulating with consumers' perspective through the use of questionnaires validates findings from interviews. Quantitative analysis provides customers' perspective on luxury car buying criteria and insights on the distinctive characteristics of luxury car brands.

This chapter starts by providing information and statistics on an overview of Thailand Auto Markets with the focus on passenger cars and luxury cars (section 4.1). Section 4.2 presents backgrounds on innovation strategy by different luxury car companies in Thailand. Then, outcomes from qualitative analysis – face-to-face interviews are summarized (section 4.3). Next, outcomes from quantitative analysis – questionnaire are presented (section 4.4). Results from both research strands are merged and conclusions drawn on the roles of innovation in the Thai luxury car industry and gaps between research findings and results from literature reviews (section 4.5). The chapter is concluded in section 4.6.

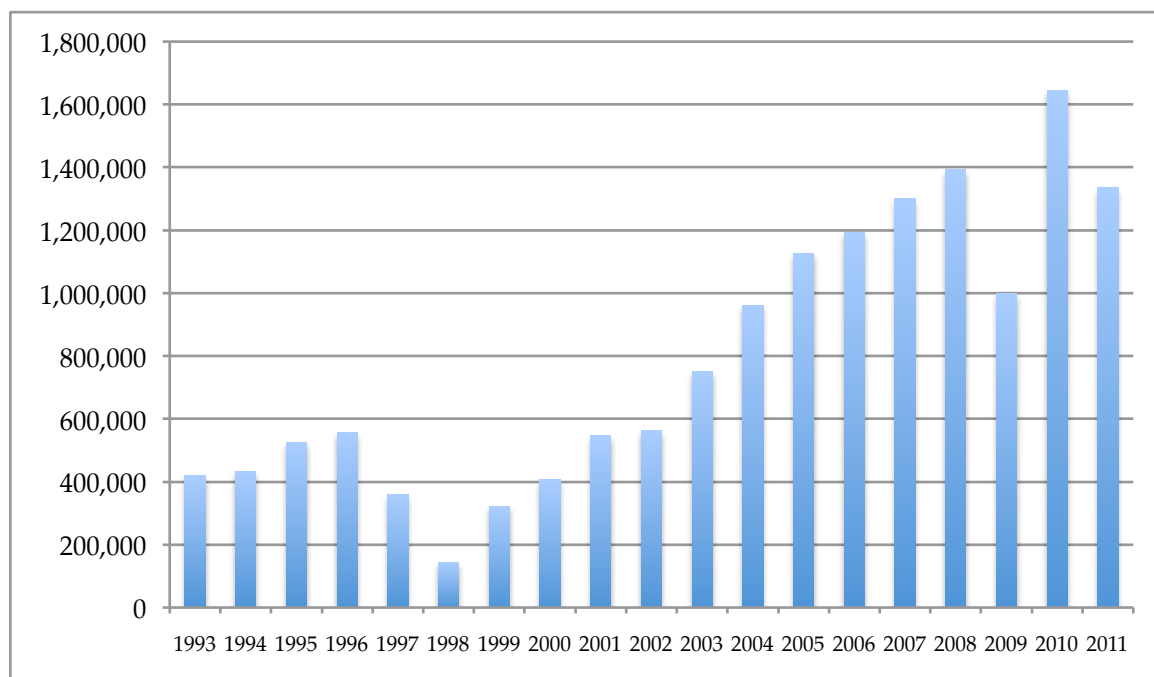
4.1 An Overview of Thailand Automotive Markets

Thailand has shown impressive economic growth over the past decade. Despite recent political instabilities, Thailand still has strong economic fundamentals, due to an optimistic private sector and strong foreign direct investment (FDI). In terms of local industries, the automotive industry ranks as the third largest sector, contributing nearly 12% of Thai's GDP, and employing a workforce of more than 300,000 employees (Ernst & Young 2008). Thailand produced 1,645,304 vehicles in 2010, a 100% growth since 2005 (Thailand Automotive Institute 2011).

Thailand is considered the export base for foreign assemblers for ASEAN region and more than 50% of production is exported.

There are 3 major segments in Thailand’s vehicle production: 1) four wheelers, 2) two wheelers and 3) trucks. A complementary network of component suppliers supports each segment. Figure 7 illustrated Thailand vehicles production during 1993 – 2011. In 2010, Thailand produced 1,090,445 pick-up trucks, which accounted for 66% of total production. Thailand is also the world’s largest exporter of pick-up trucks (Thailand Automotive Institute 2011). New vehicle sales in Thailand rose 21.1% year on year during the first six months of 2011, to 432,021 units. Meanwhile, despite delays to supplies following the March 2011 earthquake and tsunami in Japan, Thailand’s automotive production was up 5.4% year on year in the first half of 2011, while output should increase to 1.8 Million units in 2011, and to 2 Million units in 2012. Commercial vehicles are expected to account for 54% of Thailand’s vehicle sales in 2011.

Figure 7: Thailand vehicles product 1993 – 2011



Source: the Thailand Automotive Institute (TAI)

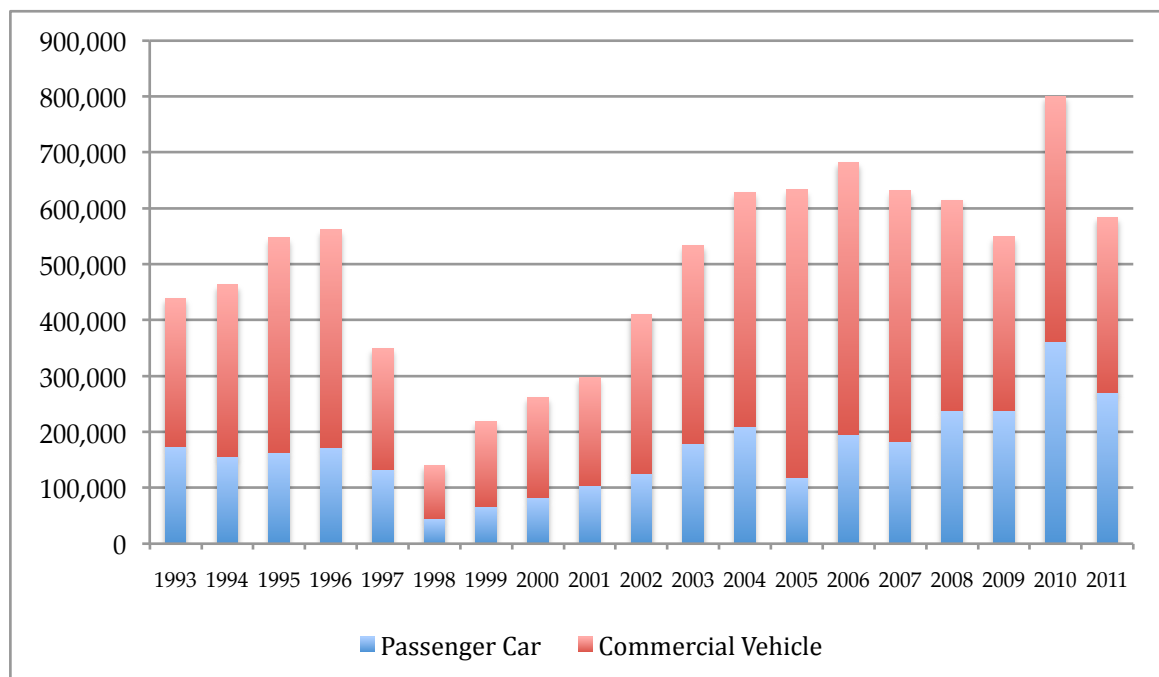
4.1.2 Overview of the Passenger Car Segment in Thailand

Starting from 1962, the Thai automotive industry was based on protectionism and local content requirements. It was in the 1980s that the country saw gradual

liberalization in trade and foreign direct investment (FDI) as part of ASEAN and Asia Free Trade Agreement (AFTA) integration. The key players in the passenger car segment are all international firms, dominated by 7 Japanese companies, 4 American companies, and 4 European companies. In 2010, Thailand produced 554,267 passenger cars, doubling the 2005 figures (Thailand Automotive Institute, 2011). Approximately 300,000 units were domestic sales, and export accounts for 40% of total passenger car production. The main markets for exports are located in Asia, namely the Philippines, Indonesia and Singapore. Emerging demand comes from Australia, the Middle East and Latin America.

The major players in Thailand are the Japanese big three namely Toyota, Honda and Nissan. Those three companies have set standards in terms of innovation, and new product categories (like SUV); while luxury car manufacturers secure their sales volume based on brand perception and the loyalty of their customers. Automakers invested US 1\$Billion in Thailand’s auto sector in 2010, and six of them have announced plans to launch environmentally friendly cars (or eco-cars) in the country. The development of such vehicles plays a key role in Thailand’s plans to become one of the world’s top ten countries for vehicle output by 2015. Figure 8 illustrates domestic sales for passenger cars and commercial vehicles during 1993 – 2011.

Figure 8: Domestic sales for passenger cars and commercial vehicles 1993 - 2011



Source: the Thailand Automotive Institute

4.1.3 Overview of the Luxury Car Segment in Thailand

Luxury vehicle is a marketing term for a vehicle that provides luxury, pleasant or desirable features beyond strict necessity at increased expense (Coste-Maniere 2012). The Thai luxury car industry is best described as an oligopoly where a few players have captured over 90% of the market share. Table 13 shows the total car population of luxury carmakers who have been competing in the Thai market. In the past, the Thai luxury car industry was dominated by European carmakers; players in the industry came from Germany (Audi, BMW and Mercedes-Benz) and Sweden (Volvo), while non-luxury passenger carmakers were Japanese and Korean brands, and new entry and mass-market category from Indian and Chinese brands.

Table 13: Total car population of Thailand's luxury carmakers (as of December 2011)

Luxury Carmaker	Total Car Population (units)
Alfa-Romeo	1,758
Audi	8,639
Bentley	220
BMW	85,038
Cadillac	183
Jaguar	2,068
Lexus	4,732
Mercedes-Benz	157,638
Rolls-Royce	273
SAAB	3,146
Volvo	54,581

Source: Thailand's Ministry of Transport

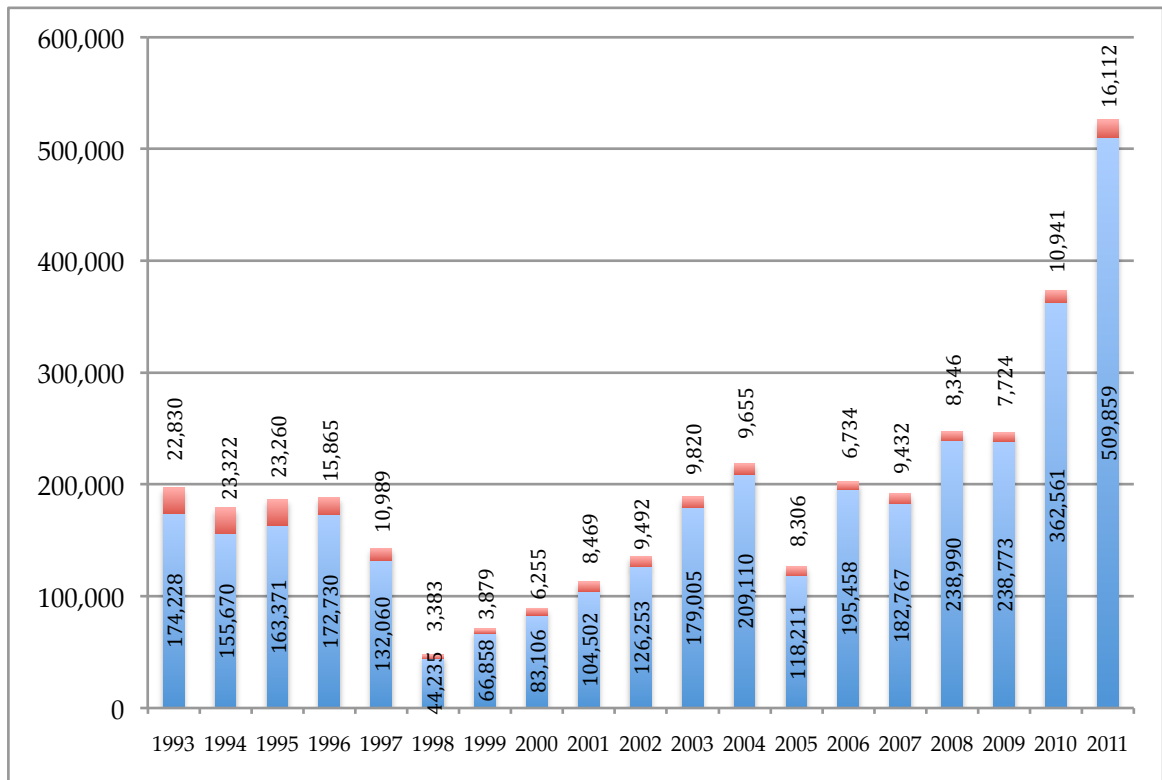
The love of luxury cars by Thais dated back to the year 1915. King Rama V imported the first car to the country and the brand was Mercedes-Benz. From then on, European cars gained superior status, and this privilege was reserved for the Royal family and a handful of wealthy Thai families. During 1970s, Thailand's open economy invited foreign investors to start their business in Thailand. During that time, Thai politics was stable and natural disasters were very uncommon in the country. Thailand has enjoyed a robust economic growth for many decades. Similar to many Asian cultures, wealthy Thai prefer to portray their social status through the acquisition of materials. These cultural norms have helped the luxury car sector grow quite significantly in the country. During the

economic growth era of the 80s, sales of luxury cars accounted for 17% of the total local vehicle sales in 1987.

During 1987 – 1994, the sales volume of luxury cars grew fivefold from 4,604 units to 23,322 units. Due to the rapid growth funded mainly by offshore loans, in 1997, Thai monetary reserves had been depleted. The Thai baht that was pegged to the US dollar, depreciated very fast. Eventually, the Thai government had to devalue Thai currency, which ignited the global economic meltdown in 1997 or so called ‘Tom Yum Kung Decease’. Luxurious and extravagant lifestyles took a direct hit. In addition, the devaluation of Thai currency made imported items much more expensive. Imported automobiles and parts experienced a more than doubling of prices from the pre-crisis era. Consequently, the sales of luxury cars crumbled from the peak of 23,322 units in 1995 to only 3,383 units in 1998, a decrease of 85.5%.

From 1998 onwards, the total market for luxury cars has been below 10,000 units. The sub-prime crisis in 2008 had an impact on the world economy. Thailand also took a direct impact. Luxury cars sold in 2008 was 8,346 units or 11.5% decline from 2007. Nevertheless, due to the growth in Generation X who have become more successful from their professional careers, and Thailand’s overall economic growth, sales of luxury cars are expected to increase again. Sales figures after the sub-prime crisis also confirm this speculation and luxury car sales from 2009 – 2010 had been increased by 41.6% (Ministry of Transport). Luxury car sales figures in 2011 have increased to 16,112 units at the impressive growth of 47.3% when compared to 2010. Figure 9 illustrates units sold of passenger compared to luxury car during 1993 – 2011.

Figure 9: Units sold of passenger cars compared to luxury cars during 1993 – 2011



Source: Thailand Ministry of Transportation and figures from Toyota Motor Thailand

In 1999, BMW AG in Munich decided to set up the BMW group of companies in Thailand. BMW Group Thailand comprised three companies; BMW Thailand, responsible for sales and sales related functions, BMW Manufacturing, responsible for BMW car assembly plants outside Bangkok, and BMW Financial Services, responsible for providing financial and leasing services to BMW owners as well as other car manufacturers. BMW Group Thailand’s sales company is referred to internally as National Sales Company or NSC. The study is focused primarily in the sales function area.

This set up is similar to Mercedes Benz Thailand, except that Mercedes Benz Thailand outsourced the vehicle production to the third party, Thonburi Car Assembly. For Volvo, Volvo set up a joint venture with a Thai local partner. The newly set-up company is responsible for the car assembly and car distribution together with another local dealership nationwide. For Lexus, the company experienced a hugely successful starts in the USA, and soon after in the UK and some European markets. However, the mother company, Toyota, was very reluctant to introduce the Lexus brand in an Asia country. Toyota officially

launched the Lexus brand in Japan in 2006. Other local subsidiaries like Thailand were requested to establish Lexus businesses. However, their move into the Thai market was very conservative.

For Audi, in 1995, Audi decided to compete in the Thai market. Audi also played it safe by entering agreement with the existing BMW importer, Yontrakit Co., Ltd. Under the authorized importer agreement, Audi can quickly capitalize on Yontrakit's local connection and set up 40 outlets nationwide within a few years of its operation. Unlike BMW, even though the sales volume of Audi at its peak reached over 1,000 units, Audi decided to increase their sales volume and market share through their importer. However, due to the problem of Audi's products being unsuitable for such a hot climate as Thailand, Audi brand was quickly perceived as unreliable with high repair costs and poor resale values. With these three combinations and Thailand's economic crisis, Audi's performance in Thailand was deteriorating very fast, in fact, so rapidly that it made Audi decided to leave Thailand and let their importers manage a minimal sales volume on their own.

For the remaining luxury carmakers like Jaguar, Porsche, Bentley and other brands, their sales performances are too trivial for them to be mentioned as real players in the luxury car sector. Table 14 summarizes the establishment of luxury car companies in Thailand.

Table 14: Summary of establishments of luxury car makers in Thailand

Brand	First entry to Thailand	Type of Current Business Operation	Investor	Sourcing of Automobile	Financial Subsidiary
Audi	1995 through local distributor & manufacturer – Yontrakit Motor	Year 2009, set up Sole Distributor agreement with Audi AG	Yontrakit	Complete Build Unit (CBU)	None
BMW	1963 through local distributor & manufacturer – Yontrakit Motor	Year 1998, set up a National Sales Company (NSC)	BMW AG	Complete Knock Down (CKD) manufactured by BMW Manufacturing and Complete Build Unit (CBU)	BMW Financial Service
Lexus	Through its mother company, Toyota Motor Thailand	Year 2005, set up a Subsidiary company under Toyota Motor	Toyota Motor Thailand	Complete Build Unit (CBU)	Toyota Leasing Thailand
Mercedes-Benz	1957 through local distributor and manufacturer – Thonburi Car Assembly	Year 1998, set up a National Sales Company (NSC)	Mercedes-Benz AG	Complete Knock Down (CKD) manufactured by Thonburi Car Assembly and Complete Build Unit (CBU)	Mercedes-Benz Leasing
Volvo	Through local distributor and manufacturer – Thai Swedes Motor	Subsidiary of a regional office, Volvo Singapore Ltd.	Swedes Motor Corporation (SMC)	Complete Build Unit (CBU)	None

Source: Author's compilation

4.1.4 Market Trend and Future Challenges

As for the global automotive industry trend, in 2009, China took over from the USA as the World's number one automotive consumption country. As shown in Table 15, China and India represent the most lucrative automotive markets by the sheer potential size of the markets and the potential for growth in the industry. Thailand still shows the signs of a growing market with car population per 1,000 people of 54 units.

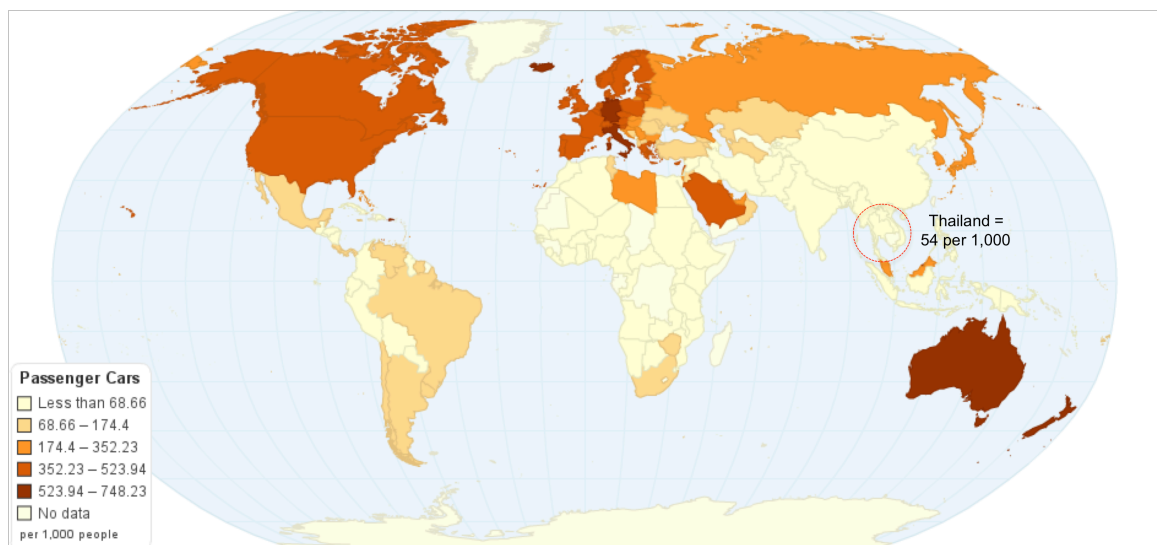
Table 15: World's top-ten automotive consumers and ASEAN market

Market	Units sold (Million)	Car per 1,000 people
1 st China	17.7	22
2 nd USA	12.6	451
3 rd Japan	3.9	325
4 th Brazil	3.5	158
5 th Germany	3.4	566
6 th India	2.9	8
7 th France	2.6	497
8 th Russia	2.4	205
9 th UK	2.2	462
10 th Italy	2.0	600
ASEAN	2.7	44
Thailand	0.6	54

Source: The World Bank Group's 2011 Worldwide Passenger Cars (per 1,000 people) and Deutsche Bank Research's ASEAN Auto Market (September, 2011)

Figure 10 illustrates the distribution of car population per 1,000 people which closely associated in the distribution of nation wealth. While most of developed countries reach the market maturity, most of developing countries show the market potentials for the automotive consumptions.

Figure 10: World map of car population per 1,000 People



Source: The World Bank Group's 2011 Worldwide Passenger Cars (per 1,000 people)

At this moment, margins in the automotive industry are sinking and core products and services are becoming more and more interchangeable. At present, no car manufacturer is earning much from the actual cars; rather, the profits are earned through financing and insurance services, as well as after-sales service such as spare parts and repairs (Dorner et al. 2011). Traditional service providers

are also recognizing the need to supplement their current core services with service innovation. An example of another industry is banks, who are aiming more intensely at process innovation, but also at additional services relating to the core financial products such as tax consultancy, pension planning and property valuation (Dorner et al. 2011).

As for the automotive sector in Thailand, the industry continues to show strong demand due to a strong economic performance of Thailand. There was also a significant leap in domestic demand for passenger cars for the year 2010, when sales picked up by 53.4% as compared to the previous year. Local financial institutions also helped to support local demand by relaxing credit for car buyers to be able to easily acquire cars through hire purchase or leasing. Furthermore, the domestic automotive market is assisted by the improving levels of personal income and decent road infrastructure in parts of the country. In 2009, Thailand had the third highest number of per capita car density of 62 cars per 1,000 people in ASEAN while Singapore has approximately 105 cars per 1,000 people⁸. This figure also indicates the Thai market's potential for domestic vehicle expansion.

While in other economic regions like in Europe employs around 12 million workers are directly or indirectly employed in the automotive industry (ACEA 2009). The automotive industry is also leading in innovation with 20 Million Euros in R&D; it is a major source of government income, generating more than 400 Million Euros and it is a large export industry (ACEA 2009). Characteristics of the industry and market trends are taken as criteria for evaluating the available service shapes for the automotive industry. Table 16 summarizes literatures on future challenges of the world's automotive industry.

⁸ Thailand Ministry of Transport, 2009

Table 16: Future challenges of an automotive industry

Automotive industry's future challenges	Supporting literature
Increasing customer mobility	Personal mobility is known as a support of economic, social and cultural activity and personal mobility has increased significantly in the past decade (Godlevskaja et al. 2011).
Changing customer requirement of products and services	A car has become a part of a lifestyle; entertainment, networking and infotainment became important criteria for selecting a car (Godlevskaja et al. 2011). People of various ages have different needs and requirements for both products and services. Customization becomes the priority.
Increasing range of products	Due to the 'law of variety' (satisfied customers changing brand because of variety attractiveness), many OEMs extend their product range to retain clients (Wallentowitz et al. 2009), whereas the number of variants per car model grows as well (Wallentowitz et al. 2009).
Rising product quality and complexity	Despite the automotive quality increase, since automotive industry significantly contributes to GDP, large industrialized economies encourage consumers through various tax incentives and subsidiary schemes for new consumption.
Building long-term customer relationships for sustainable market competitiveness	A relationship-building capability is important for every industry (Kindstrom et al. 2009). Continuous customer relationships and customer loyalty are significant factors, helping companies in the industry to remain competitive (Godlevskaja et al. 2011).
Falling profit margins from products	Due to decreasing profit margins from manufacturing products and stagnating demand, traditional manufacturing companies should review their role in the value chain and move towards providing services supporting product operations and maintenance (Wise and Baumgartner 1999)
Non-ownership mentality	A growing number of customers consume without ownership (Moeller and Wittkowski 2009). Automotive companies are expected to offer services which support the non-ownership trend (Godlevskaja et al. 2011).
Changing role of a product in company-customer relationship	As car sales became a reason to establish relationships, various services help companies maintain them (Godlevskaja et al. 2011).
Brand sensibility	Brand awareness becomes a very important factor for improving and sustaining market competitiveness (Cretu and Brodie 2007)
Emergence of ICT	Anywhere and any time customers expect access to information simple interfaces, customisation, personalisation and responsiveness (Karmakar 2004).
Disruptive technology	Technology advances can provide new service opportunities, introduce new challenges, and mask some service opportunities. Cusumano et al. (2006) refers to the so-called 'disruptive technology', meaning new technological innovations which can be used by companies as an opportunity to generate new services.

Source: Author's compilation

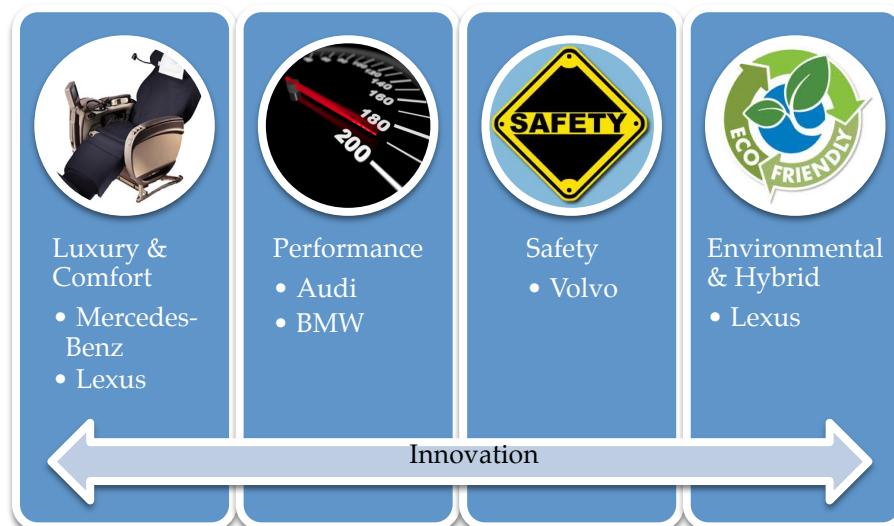
4.2 Innovation Strategy by different Luxury Car Companies in Thai Market

Outcomes from face-to-face interviews reveal a number of relevant outcomes and insights. Some interviewees put more emphasis on innovation that has to be close

to service provided to customers. The service is also product information⁹. Some luxury brands put even more emphasis not on the technical side of innovation but rather in design and product appeal. Innovation is not only technology but also the design¹⁰. Others stress the real usage of innovation and what it means in term of the real economical performance ‘Innovation is not only performance but also fuel efficiency since the resources are very limited. Innovation has to match with volume as well as to justify costs and to create sufficient market demands’¹¹. Ultimately, it appears that there is no single definition on the scope of innovation in the luxury car industry.

Even if luxury car customers focus more on image and prestige when they consider the luxury cars, customers also want tangible benefits to justify their buying since branding and image alone are purely intangible. Luxury carmakers also understand this logic very well. Each brand tries to differentiate themselves from the rest of the luxury carmakers. Figure 11 demonstrates that luxury car differentiation criteria are a combination of the following key criteria: 1) luxury & comfort, 2) driving performance, 3) safety, and 4) environmental friendliness. Each criterion can be achieved at some level of technology and innovation.

Figure 11: Luxury car product’s philosophy



Source: Modified from case interviews & document reviews

⁹ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

¹⁰ Interview with General Manager, MINI Thailand, 2 April 2010

¹¹ Interview with Managing Director, VW (Thailand), 28 June 2010

1. Audi

In 1995, Audi decided to compete in the Thai market. Audi also mitigated business risks by entering agreement with the existing BMW importer, Yontrakit Co., Ltd. Under the authorized importer agreement, Audi could quickly capitalize on Yontrakit's local connection and set up 40 outlets nationwide within a few years of its operation. Due to the problem of Audi products being unsuitable for such a hot climate as Thailand, the Audi brand was quickly perceived as unreliable with high repair costs and poor resale values. With these three factors, together with Thailand's economic crisis in 1997, Audi decided to leave Thailand in 2000. In 2009, Audi decided to re-enter Thailand through the sole distributor agreement with the local joint venture partners.

In Thailand, Audi's product differentiation factors are in the area of superior German engineering, with strong emphasis on its 4-wheels drive or 'Audi's Quattro' technology. Audi also stresses its sporty driving characteristics and superior design. Audi has few dealer networks with a poor perception of service quality and product reliability. Audi's resale value is also among the worst in the Thai automotive industry. Audi's main customers are people who used to experience their products in other overseas markets. Figure 12 highlights Audi's advertising campaign and product differentiation strategy in Thailand.

Figure 12: Audi's advertising highlighting Audi's product differentiation strategy



Source: Audi's advertising materials, Thailand Car Magazine, June 2011

2. BMW

For BMW, the philosophy of BMW is innovation and technology. BMW has used innovation and technology as a differentiation factor since the commencement of BMW Group in 1900. BMW started off as a motorcycle company. The brand has been deeply associated with speed, performance, and a strong sporty character that was carried over from the motorcycle era. BMW had invented many technologies like ABS (Anti-Break Lock System), Turbo Charge, and Airbag. In 1980s, BMW started to form up the more complete lines of their vehicles which comprised 3 series, 5 series, 7 series, Sport Car Model (like M1) and M Motorsport products. This full line up product strategy was proven to be very successful and, for most markets, BMW managed to sell more than Mercedes-Benz. BMW secured their image of young, sporty, sheer driving pleasure. Figure 13 highlights BMW's advertising campaign and product differentiation strategy in Thailand.

Figure 13: BMW's advertising highlighting BMW's product differentiation strategy



Source: BMW's advertising materials, Thailand Car Magazine, December 2011

3. Lexus

For Lexus, the company experienced huge success in the USA, and soon after in the UK and some European markets. However, the mother company, Toyota, was very reluctant to introduce the Lexus brand in Asian countries. Toyota officially launched the Lexus brand in Japan in 2006. Toyota Motors Thailand (TMT) started the Lexus business with 3 dealerships located only in Bangkok. Within the large organization at Toyota Motor Thailand, there is no dedicated team to focus on the Lexus brand. Lexus's product differentiation strategy focuses on reliability and customer satisfaction. Since Toyota has become a leader in hybrid technology, Lexus employs this technology in their luxury vehicles as well. Consequently, Lexus starts to leverage their green image and focus on environmental friendliness. Lexus' interior design also attracts Asian customers, who feel Lexus's interior is closer to the Asian philosophy of being warm and inviting. Figure 14 highlights Lexus's advertising campaign and product differentiation strategy in Thailand.

Figure 14: Lexus's advertising highlighting Lexus's product differentiation strategy



Source: Lexus's Advertising Materials, Thailand Car Magazine, January 2012

4. Mercedes-Benz

For Mercedes-Benz, their core product differentiation has always been luxury and comfort. Mercedes-Benz also focuses a lot on product reliability, since the majority of their customers are taxis, especially in Europe and fleet owners in other parts of the world. Mercedes-Benz is always very cautious about when to install any innovations or new product features into their vehicles, since it might

trade off with their products' reliability. In Thailand, Mercedes Benz observes BMW when it comes to innovation introductions. Once customers understand technology and innovation pioneered by competitors, Mercedes Benz will integrate these features into their products and have no need to communicate so much, since competitors have already done the hard part¹². Recently, Mercedes-Benz has tried to modify their brand image to young and sporty to capture the growing buying power of Generation X who wants to stay away from their parents' image of 'baby boomer'. Mercedes-Benz has shown that they have the flexibility to modify their vehicles to gain benefits from the fuel strategies that come with tax incentives from the government. Figure 15 highlights Mercedes-Benz's advertising campaign and product differentiation strategy.

Figure 15: Mercedes-Benz's advertising highlighting Mercedes-Benz's product differentiation strategy



Source: Mercedes-Benz's Advertising Materials, Thailand Car Magazine, June 2011

5. Volvo

In Thailand, Volvo was the brand that suffered the most in term of volume drop. At its peak, Volvo used to sell up to 5,000 units before the crisis. In 2004, due to the change of ownership from Volvo group of Sweden to GM, the local set up also changed. Volvo decided to downplay its presence in the Thai market and moved their operation office to Singapore in 2009. In 2009, Volvo's sales volume significantly dropped below 500 units. Volvo applies the product differentiation strategy by using safety as a key differentiation factor. Volvo invented a safety belt and introduced many safety related innovations like monocoque car body and safety cage concept. Due to the frequent change of ownership, Volvo has

¹² Interview with Former Director After-sales Service, BMW Group Thailand, 8 June 2010

been losing its appeal on luxury and brand perception. Figure 16 highlights Volvo's advertising campaign and product differentiation strategy.

Figure 16: Volvo's advertising highlighting Volvo's product differentiation strategy



Source: Volvo's advertising materials, Thailand Car Magazine, December 2009

4.3 Outcomes from Qualitative Analysis - Face-to-face interviews

4.3.1 Roles of Innovation in the Thai luxury car industry

Under the design of the interview questions, the first question was to ask all interviewees to rank how important were the roles of innovation in the Thai luxury car industry, from scales of 1 – least important to 5 – most important. All the executives from luxury car companies (13 interviewees) gave the rating of 5 (high important). While, 4 dealers owners gave the rating of 4 (fairly high important) and 3 dealer owners gave the rating of 3 (important). Two journalists gave the rating of 2 (fairly important).

Views from Thai luxury car executives were well captured by one interviewee comment: 'in the luxury car industry, innovation is the key driver for success. Without innovation, we can't be successful'¹³. Innovation can also be offered as a differentiation factor to distinguish luxury cars from other passenger cars. Luxury cars need to have innovation even if customers might not really know how to benefit from such innovation. Innovation is heavily associated with premium image¹⁴. Innovation has a critical role for the premium luxury car, since

¹³ Interview with President, BMW Group Thailand, 11 June 2010

¹⁴ Interview with Lexus' Dealer Principle, Lexus Auto City, 28 June 2010

customers have high expectations of excellent products, and good image. Customers are very proud owners of innovative products¹⁵.

Nevertheless, disagreements on the roles of innovation in the Thai luxury car market were shared among groups of non-luxury car company executives. Luxury car dealers believed that the main reason that brought customers to the luxury car segment was luxury image and brand perception. From the customers' point of view, their interest was not focused on innovation because they were after brand perception more than innovation¹⁶. While the brand core value of BMW is innovation and innovation is a principle for BMW¹⁷, BMW dealers believe that the reason that Mercedes Benz outperformed BMW in sales volume was that Mercedes Benz focused on brand perception and comfort rather than innovation. Mercedes Benz didn't put a lot of emphasis on innovations. They put emphasis on comfort and brand perception instead¹⁸. Moreover, the first thing that Thai and Asian people considered was brand value and image, not innovation¹⁹. Even the neutral observer like a journalist also agreed that innovation was a small part of the luxury car. Product and spare parts were more important. Eventually, the excitement of innovation will lose its appeal²⁰. The perception of the importance of innovation also differed from market to market. European and American people valued innovations more than Asian people²¹. In conclusion, even if luxury car stakeholders seemed to agree that the role of innovation was important, it was not as important as brand perception, luxury image and comfort.

4.3.2 What matters most is Innovation Communication

One interesting finding from face-to-face interviews revealed that, in order to appreciate the level of technology and innovation offered in the luxury car, dealers and customers needed to understand such technologies and innovations.

¹⁵ Interview with Manager Sales, BMW Group Thailand, 1 June 2010

¹⁶ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

¹⁷ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

¹⁸ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

¹⁹ Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), 21 June 2010

²⁰ Interview with Motoring Journalist, the Nation, 28 June 2010

²¹ Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), 21 June 2010

As Director of Corporate Communication from BMW Group Thailand elaborated:

'If you want to sell the innovative products, you have to convince the customers and to make them understand the product, and to make them desire the products. However, luxury car companies do not provide such good innovation communication to the third party. German engineers are very good at invention and innovation but they are not so good at communicating its benefits. Each carmaker has their own selling point but it totally depends on how they communicate to the third party. The luxury car has many features but fails to communicate.'

Failing to provide a good communication mechanism also resulted in a mismatch between innovations sought after by the luxury car buyer and provided by a carmaker. At the moment, customers paid for something that they can't use. Therefore, the value of innovation cannot be converted to customers' loyalty in the longer run²². If luxury carmakers invest more on something that is unnecessary, it will be a cost to customers²³.

In conclusion, innovation is not only about creating something new, but also delivering value to the end consumers. While the basic function of car is to be used as a means of individual transportation, luxury cars try to offer better and distinctive image, better product quality, superior performance and better safety features. Face-to-face interviews revealed interesting findings that while executives from luxury car companies stressed the important of innovation as the most important key factors to help luxury carmakers successful commercially. However, dealer owners wished luxury cars to have the right level of innovation for them to be able to convince customers and maintenance those innovations. Face-to-face interviews also provided insights that sometimes luxury carmakers provided innovations without a proper communication to end-consumers which distorted values and perception of such innovations.

4.4 Outcomes from Quantitative Analysis: Questionnaires

Empirical findings from qualitative analysis of face-to-face interviews helped in designing questions in the questionnaires. Outcomes from questionnaires were analyzed and results were presented as follows:

²² Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

²³ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

4.4.1 Perception of Distinctive Features between Luxury Cars and other non-luxury passenger cars

To understand what makes customers pay a premium to purchase a luxury car, the question of what features distinguish between a luxury car and non-luxury passenger cars was addressed to questionnaire participants. Quantitative outcomes helped to confirm distinctive features from customers' perceptions that customers were willing to pay premiums for. Table 17 illustrates descriptive statistics outcomes and t-test from Qq3 'do you agree that the luxury car offer the following distinctive features when compared to other passenger car?'. This table also illustrates the differences of results between current luxury car owners and non-luxury car owners by using t-test to systematically examine differences between two groups. Outcomes from t-test indicated that there were a number of statistical differences from both groups which are the criteria of: 'superior quality', ($t(200) = 6.13, p < .001$), 'more luxurious' ($t(200) = 2.96, p < .001$), 'more innovation product' ($t(200) = 0.01, p < .01$), 'better value for money' ($t(199) = 0.09, p < .05$), 'better service quality' ($t(200) = 0.84, p < .05$), 'safer product' ($t(200) = 0.01, p < .05$), 'more environment friendly' ($t(199) = 0.01, p < .01$), 'better social acceptance' ($t(199) = 2.34, p < .001$), and 'better quality of customer service' ($t(199) = 1.36, p < .05$).

Table 17: Descriptive statistic and t-test for Qq3 'Do you agree that the luxury car offer the following distinctive features when compared to other passenger cars?'

Currently own luxury car or not		N	Mean	Std. Deviation	t Value
Superior quality	Yes	92	4.50	.524	6.130***
	No	109	4.11	.598	
More luxurious	Yes	92	4.58	.559	2.965***
	No	109	4.17	.866	
More innovative product	Yes	92	4.22	.739	.006**
	No	109	3.89	.916	
Better value for money	Yes	91	3.63	1.092	.094*
	No	109	3.25	1.115	
Better service quality	Yes	92	3.75	1.145	.837*
	No	109	3.40	1.055	
Safer product	Yes	92	4.42	.615	.005***
	No	109	4.00	.882	
More environmentally friendly	Yes	92	3.62	1.118	3.155**
	No	108	3.12	1.002	
Better social acceptance	Yes	92	4.49	.719	2.340**
	No	108	4.16	.968	
Better performance	Yes	92	4.22	.739	1.499
	No	108	4.04	.796	
Better quality of customer service	Yes	92	3.84	1.051	1.365*
	No	108	3.46	1.114	
Better quality of dealership	Yes	91	3.60	1.042	.048
	No	107	3.33	1.088	

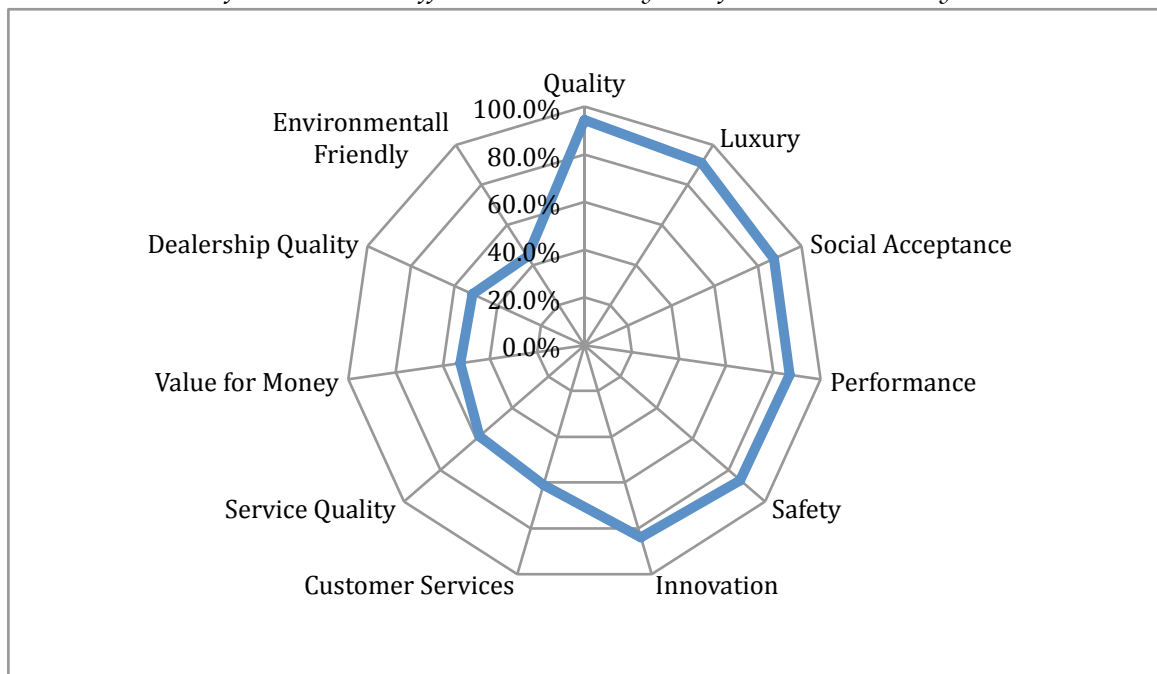
* $p < .05$, ** $p < .01$, *** $p < .001$

Top-three averaged scores represented the level of agreement that luxury car offers the following distinctive features were different between current luxury car owners and non-luxury car owners. Outcomes of top-three distinctive features for current luxury car owners were: 'more luxurious' ($mean = 4.58$, $SD = 0.56$), 'superior quality' ($mean = 4.50$, $SD = 0.52$), and 'better social acceptance' ($mean = 4.49$, $SD = 0.72$); while outcomes of top-three distinctive features from non-luxury car owners were: 'more luxurious' ($mean = 4.17$, $SD = 0.87$), 'better social acceptance' ($mean = 4.16$, $SD = 0.97$), and 'superior quality' ($mean = 4.11$, $SD = 0.60$).

Figure 17 illustrates the combined % of survey participations who agree (rating 4) and strongly agree (rating 5) about features that differentiate luxury cars from non-luxury cars. Survey participants perceive luxury cars had distinctive values

under the areas of: 'luxury' (90.9%), 'social acceptance' (87.4%), 'quality' (94.5%), and 'safety' (86.4%), 'performance' (86.9%). 83.9% of survey participants perceived that a luxury car had more innovative products. Interestingly, survey participants did not perceive a distinctive feature of luxury cars over other passenger cars under the areas that represent operational excellence. 48.5% of survey participants did not perceive that luxury cars perform distinctively under 'quality of dealership'. 41.7% of survey participants did not perceive that luxury cars performed better under better quality of 'customer services'. For 'environmentally friendly', 31.3% of survey participants chose 'undecided' which indicated insufficient information and lack of interest in this topic.

Figure 17: % of Survey Participants who agree (rating 4) and strongly agree (rating 5) about features that differentiate Luxury Car from Non-Luxury Car



4.4.2 Top Three Luxury Car Buying Criteria

It is important for luxury carmakers to understand the most important buying criteria from customers' perspectives to ensure that their products meet customer's requirements and buying criteria. To understand the top-three luxury car buying criteria from the customers' point of view, a survey question was designed to provide insights by asking survey participants to rank their top-three luxury car buying criteria. Outcomes from the survey were rankings among twelve buying criteria by level of importance. Moreover, to gain deeper insights

into differences of buying criteria from perspective of ownership, the questionnaire participants were classified into two groups: current luxury car owners and non-luxury car owners. The ranking of frequency between buying criteria to and groups is illustrated in Table 18. The top-five buying criteria for current luxury car owners were 'safety' followed by 'brand reputation', 'performance', 'design', and 'quality' respectively. As for the non-luxury car owners, the top-five criteria were 'quality' followed by 'performance', 'design', 'safety', and 'brand reputation'. It is interesting to observe that the group of top-five buying criteria for both groups were similar but rankings were different. One of the interviewees clarified the role of safety as the more safety features the car has, the less is the insurance premium²⁴. 'Innovation' was rated ninth by luxury car owners and tenth by non-luxury car owners. Innovation comes very far behind and is not even the major decision factor²⁵.

Table 18: Ranking of luxury car buying criteria

Ranking	Luxury car owners	N	Non-luxury car owners	N
1 st	Safety	42	Quality	50
2 nd	Brand reputation	37	Performance	49
3 rd	Performance	36	Design	48
4 th	Design	36	Safety	47
5 th	Quality	31	Brand reputation	44
6 th	Luxury	26	Comfort	35
7 th	Comfort	25	Luxury	16
8 th	Image	17	Image	14
9 th	Innovation	10	Environmental friendly	10
10 th	Social acceptance	9	Innovation	7
11 th	Trend setter	3	Social acceptance	4
12 th	Environmental friendly	3	Trend setter	3

Nevertheless, it is arguable that innovation was indirectly reflected in other factors such as quality, safety, performance, comfort and design. While luxury car companies have tried to capture the leading position through innovation, it is interesting to find out that when considering buying a luxury car, consumers put less importance on innovation over other factors. Customers who care about innovation represent a small fraction of the whole customer base²⁶.

²⁴ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

²⁵ Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), Date: 21 June 2010

²⁶ Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), Date: 21 June 2010

4.4.3 Top Brands by Distinctive Categories

To compete successfully in the luxury car segment, luxury carmakers must understand their customers very well. Customers' perceptions of their brands and their purchase reasons need close monitoring by luxury carmakers. Qq2 assessed customer's perceptions on distinctive categories by luxury carmakers. Table 19 categorizes luxury car distinctive categories, which are identified as 10 criteria and categorized into five groups based on criteria from GfK (2007)²⁷: 1) Perception, 2) Luxury & Comfort, 3) Operational Excellence, 4) Drivability and 5) Safety. Outcomes from quantitative analysis revealed no difference in the ranking results between luxury car owners and non-luxury car owners. Results indicated that Mercedes-Benz was clearly the leader under the category of 'social acceptance', where 89% of survey takers ranked Mercedes Benz as the luxury carmaker who captured this title. Mercedes-Benz also outperformed BMW and the remaining luxury carmakers in the areas of 'luxury' and 'brand image'. Mercedes-Benz also slightly outperformed other luxury carmakers in the area of operational excellence, which covers 'professional dealership', 'service quality' and 'reliability'.

²⁷ Based on the relevant study conducted by GfK (2007) for BMW Thailand

Table 19: Qq2 - Luxury car brand who captured the distinctive criteria by Thai consumer

Contribution	Category	Brand	% of questionnaire				
Perception	Social Acceptance	Mercedes-Benz	75.6%				
	Brand Image	Mercedes-Benz	57.2%				
Luxury	Luxury	Mercedes-Benz	65.7%				
	Comfort	Mercedes-Benz	48.5%				
Operation Excellent	Professional Dealership	Mercedes-Benz	43.8%				
	Service Quality	Mercedes-Benz	46.5%				
	Reliability	Mercedes-Benz	51.7%				
Drivability	Innovation	BMW	47.3%				
	Performance	BMW	40.5%				
Safety	Safety	Volvo	35.5%				
Topic	Audi	BMW	Lexus	Mercedes Benz	Volvo	N/A	Total (n)
Luxury	7	33	23	132	2	4	201
Comfort	6	31	50	97	7	9	200
Innovation	30	95	19	40	8	9	201
Performance	17	81	22	61	11	8	200
Service Quality	6	36	40	93	4	21	200
Reliability	8	36	29	104	16	8	201
Brand Image	11	57	9	115	5	4	201
Safety	10	32	14	66	71	7	200
Social Acceptance	6	25	7	152	5	6	201
Professional Dealer	3	57	18	88	5	30	201

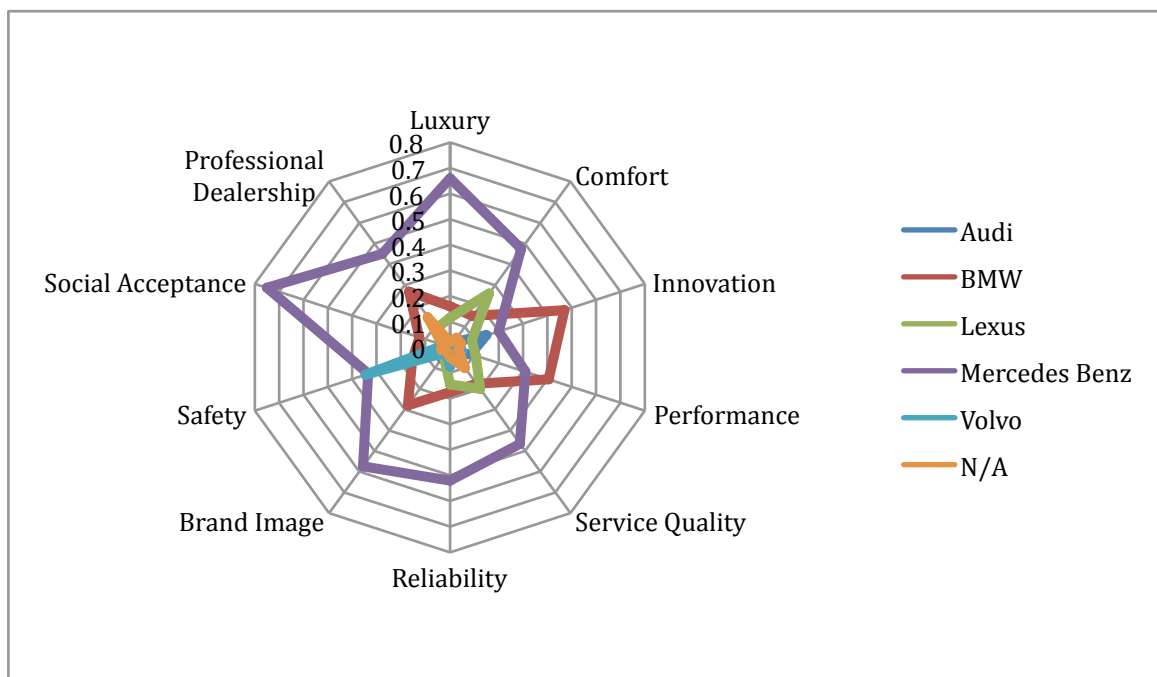
BMW captured the top spot under 1) 'innovation', where 66.7% of survey participants ranked BMW as number one, and 2) 'performance', where more than half (55.6%) of survey participants ranked BMW as number one. Volvo was still the leader under the category of 'safety', where 54.7% of survey participants ranked Volvo as number one in this category. Only 'Innovation' and 'fun to drive' were not enough to turn into commercial success, regardless of brand perception in other markets, where Mercedes-Benz, BMW, Audi and Lexus were performing equally well and received similar perceptions when it comes to 'brand image' and 'social acceptance'. However in Thailand, consumers still believed in the brand superiority of Mercedes-Benz, and normally regarded BMW as a cheaper alternative to Mercedes-Benz.

Another interesting fact was that Volvo still captured the number one spot under 'safety'. However, based on the recent safety test from the Insurance Institute for Highway Safety (IIHS), the US Non-profit organization, Volvo performed at the same level as other luxury carmakers like Mercedes-Benz, BMW, Audi and Lexus²⁸. This also suggests that luxury car consumers' beliefs were based on past

²⁸ Insurance Institute for Highway Safety Data (www.iihs.org)

experience and perception. They might have had limited information and knowledge that could differentiate between facts and perceptions. Figure 18 shows the number of respondents who rated each brand as a leader in each distinctive category. Outcomes indicated that Mercedes-Benz was a leader in many key features like 'social acceptance', 'brand image', 'luxury', and 'reliability'. BMW was the clear leader under the features of 'innovation' and 'performance'.

Figure 18: Perception of luxury car brands by distinctive characteristics (n = 201)



4.4.4 Customers' Perceptions of Product Innovation and Service Innovation

Descriptive statistical analysis and t-test of Qq6 'importance of product innovation and service innovation in the Thai luxury car industry' were summarized in Table 20. Questionnaire participants were divided into two groups: current luxury car owners and non-luxury car owners. Current luxury car owners valued the importance of product innovation ($mean = 4.12, SD = 0.80$) slightly higher than the importance of service innovation ($mean = 4.11, SD = 0.80$), while non-luxury car owners valued the importance of service innovation ($mean = 3.96, SD = 0.89$) higher than the importance of product innovation ($mean = 3.85, SD = 0.90$). Nevertheless, t-test between two groups of current luxury car owners and non-luxury car owners, indicated that the level of difference between both

groups was significant for the importance level of product innovation ($t(200) = .52, p < .05$) and not a significant difference for the service innovation.

Table 20: Descriptive statistics and t-test for Qq6 'Important of Product Innovation and Service Innovation in Luxury car industry'

Currently own luxury car or not		N	Mean	Std. Deviation	t Value
Product innovation: Product Innovation is the utmost important factor in the luxury car industry	Yes	92	4.12	.796	.522*
	No	109	3.85	.901	
Service innovation: Value added service is the utmost important factor in the luxury car industry	Yes	92	4.11	.791	.942
	No	109	3.96	.892	

* $p < .05$

This outcome challenges the luxury car industry's belief that product innovation was by far the most important factor in the Thai market. Automakers also believe that there is nothing much to differentiate products under service innovation. As long as they provided 'me too'²⁹ services that were associated with the main products, customers would be satisfied. Instead, luxury carmakers had invested significant resources and tried to fight for the top spot under product innovation. Luxury carmakers strongly believed that capturing the leading position in product innovation would help them succeed commercially. Instead, luxury carmakers should have spent resources and tried to come up with service innovations that went hand in hand with their luxury car and were valued by their customers. By doing so they would have created better sales performance that fitted customers' expectations.

Two open-ended questions in the survey asked survey participants to identify innovative products in the automotive industry that participants could recall (Qq4) and innovative services in the automotive industry that participants could recall (Qq5). These two open-ended questions are summarized in Table 21.

²⁹ Merriam-Webster Dictionary defined 'Me Too' service as marked by similarity to or by adaption of successful or persuasive policies or practices used or promoted by someone else.

Table 21: Product Innovations and Service Innovations in the Thai Luxury Car Industry that were recalled by the survey participants

Type of Innovation	Innovations (Frequency)
Product Innovations	Hybrid & Alternative Energy (49), GPS & Navigation System (22), Eco-Car (12), Fuel Efficiency Technology (11), Keyless System (6), Night Vision (5), Anti-Break Lock System-ABS (5), Auto break (4), Camera & Sonar Sensor (5), Auto Start-Stop (5), Adaptive Headlight (3), Auto Parking (5), Dynamic Stability Control-DSC (3), Active Steering (3), Bluetooth (2), i-Drive (2), E85 Compatible (3), Cruise Control (2), Dual Clutch Transmission (2), Active Headlight (2), In-Car Indicative & Warning Light (2), Foldable Side Mirror (1), High Performance Diesel Engine (1), In-car Internet Access (1), Safety Feature (5), Environment Friendly (4), Anti-Thief System (2), In-Car Entertainment (2), Massage Seat (1), Finger Scan Security (1), Paddle Gear Shift (1), Brake Energy Regeneration (1), Light Weight Car Structure (1), Voice Control (4), Multi-Function Steering Wheel (1), Driver Assist & Fatigue Detection (1), 4 Wheel Drive (1), Air-bag (1), Comfort feature (1)
Service Innovations	Advanced Computerized Service (9), On-line Diagnosis (9), On-line Service Status (4), Free Replacement Car (4), Advance Service Booking (4), Financial Service (3), Customer Service Index (CSI) and Customers' Feedback (2), On-line Service Record (2), Roadside Service (3), BMW Service Inclusive (2), Dealer Luxury Facilities (2), Service Alert (2), Guaranteed Service Time of Completion (2), On-Site & Home Service (2), Member Card (1), Service Convenient (3), 24 Hours Service (1), Service Fast Track (1), Valet Service (2), Emergency Communication System (3), Self-service (2), No Outstanding Service from Thai Luxury Carmakers (16),

From the summary table, technologies and product innovations offered by Thai luxury carmakers received very low recognition from customers. Those technologies and product innovations were: i-Drive, runflat tyres, night vision, low CO₂ emissions, E85 compatibility and High Performance Diesel technology. These technologies and product innovations formed a major part of innovation communications by Thai luxury carmakers. Instead, customers focused on technologies and product innovations that brought an immediate benefit to themselves, like hybrid and alternative energy, GPS and Navigation, Fuel Efficiency Technology and Keyless system. Customers focused on technologies that brought them immediate benefit regardless of how much carmakers wanted to advertise such technologies and innovations³⁰.

Product features like GPS, which was not the newest invention, received high recognition due to the high visibility of this feature and frequent use of the feature. As for service innovations, 16 survey participants stated that there was no satisfactory service innovations worth mentioning offered by Thai luxury

³⁰ Interview with Director Dealer Development, BMW Group Thailand, 28 Jun 2010

carmakers. Most recognized service innovations were in the area of service technology, like Advance Computerized Service and On-line Diagnosis. Other low frequency comments scattered around the topics of service quality, reliability, service interval, process of after-sales service, reasonable price & service price guarantee, and convenience of local or on-site service. Only three survey participants recognized Financial Service. A few comments recognized luxury car marketing and CRM events like road trips, private access to exclusive clubs, and customer events.

Together with the outcome from luxury car buying criteria that rated 'innovation' ninth (for current luxury car owners) and tenth (for non-luxury car owners) on the important list, findings from product innovations and service innovations that are recognized by customers help to draw the conclusion that the levels of innovation appreciation and recognition from customers' perspective are very low. Customers might already benefit from such innovations every time that they used the vehicle but such features were not recognized. Luxury carmakers needed to evaluate their product innovation strategy to improve their commercial returns on innovation. As for the service innovation, luxury carmakers needed to overhaul their service delivery model to provide quality, reliability, timeliness and reasonable prices to luxury car consumers.

In fact, this finding was not a new phenomenon in Thai luxury car industry. A number of technologies and innovations had been introduced without any appreciation from customers. Box 7 illustrates the case of BMW's runflat tyre and effect of poor technology introduction.

Box 7: Case of BMW's runflat tyre

Case of BMW's runflat tyre

A case of customers' perception toward new technologies and innovation can be demonstrated by using the case of runflat tyre. A run-flat tyre is a pneumatic vehicle tyre that is designed to resist the effects of deflation when punctured, and to enable the vehicle to continue to be driven at reduced speed up to 90 km per hour for a limited distance of up to 200 km. Some run-flat tyres have 20% higher rolling resistance. Further advantages are derived from better fuel economy, since no spare tyre is needed. A major downside is that due to reinforcement in tyre sidewalls, run-flat tyres usually give firmer rides compared to conventional tyres.

BMW is among the first leading carmakers who promote this technology. In some markets, like South Africa, consumers can choose whether they want regular tyres or runflat tyres. However, due to the markets in Thailand being too small to carry many tyre stocks, only runflat tyres are offered to consumers. Due to the generally poor road conditions in Bangkok and most of the country, customers fail to see benefits from the safety point of view and complain that this technology is an impractical and very expensive technology that they don't want. None of the other luxury carmakers in Thailand offers runflat tyres as a standard option. One consumer decided to complain to the consumer protection board and to BMW that the vehicle caused him serious back pain, and demanded a return of the purchase together with medical expenses claim. In summary, offering new product innovation without careful assessment of local taste and adaptation can cause a negative impact for such innovations and brands.

Source: interviews with BMW Thailand's dealer principle

4.5 Discussion of Findings

4.5.1 Different Perspectives of Innovation by Each Key Stakeholders

Outcomes from face-to-face interviews revealed that the interest in innovation was different among key stakeholders. While the executives from the major luxury cars gave innovation the most important rating, however, luxury car dealers believed that the main reason that brings customers to the luxury car segment was luxury image and brand perception. As for customers' point of view captured by questionnaires, their interest and reason of buying luxury car was definitely not because of innovation but rather customers were after brand perception, luxury and comfort³¹. The perception of the importance of innovation also differed from market to market (Oliver Wyman 2007). European and American people value innovations more than Asian people do³².

The face-to-face interviews and questionnaires revealed that expectations of roles and outcomes of innovation were different among carmakers, their distribution

³¹ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

³² Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), 21 June 2010

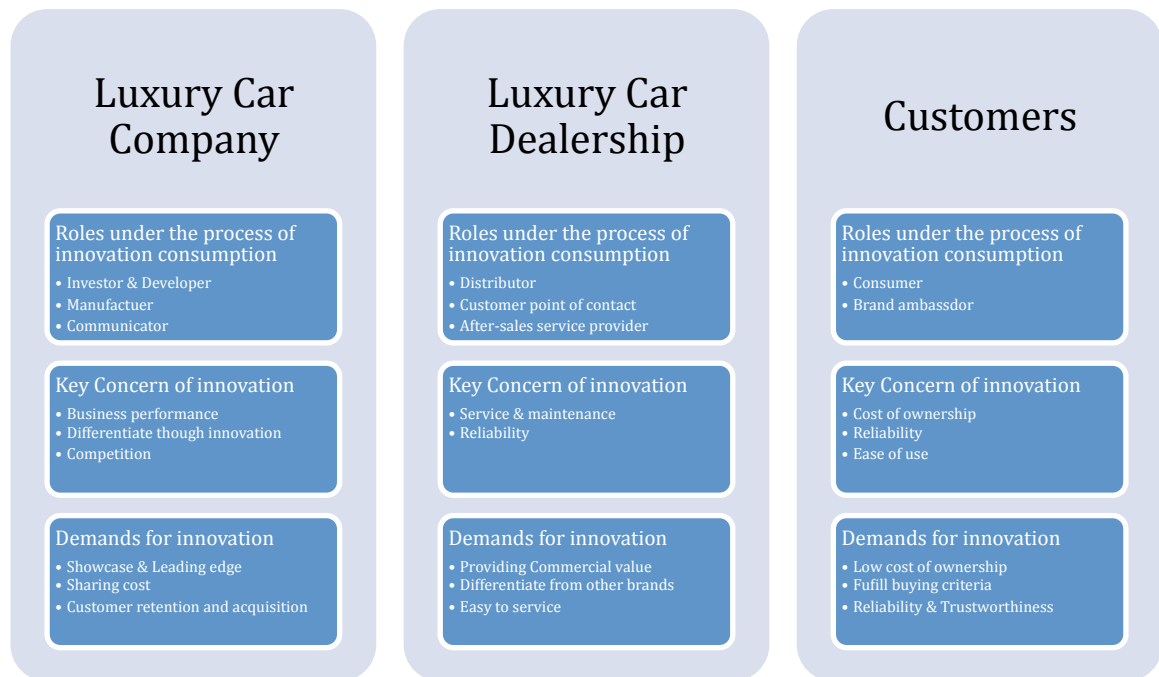
network (dealerships) and end customers. Stakeholders under the process of innovation consumption for luxury carmakers were: investor, developer, communicator and owner of technologies and innovations. Luxury carmakers expected innovations to differentiate and outperform the competition and brought the best in commercial value. Luxury carmakers wanted innovation to strengthen their brands' perceptions, acquired new customers and retained the current customers. Consequently, innovations needed to be installed in most of their models in most of the markets to ensure the innovation development costs are shared³³.

While luxury car dealerships' roles required them to get closer to the customers, dealers also had a key role of interlink between luxury carmakers and end customers. Dealers expected innovations that helped them to sell the product and outperformed their competitors. Innovations must be reliable and within their abilities and investment capabilities to provide satisfied after-sales and maintenance services to end customers. As for customers, their key role was to consume products. The customer's decision on which features and innovations that they find attractive was the key to commercial success that all luxury carmakers wished to understand. Customers also wanted to use innovations that require a minimal cost of ownership, high reliability and easy to use. They wanted luxury car dealers to be able to provide a satisfactory professional service to make the car ready for their transportation needs.

In conclusion, expectations of innovation were different among stakeholders. Differences could be further explained by the different of roles under the process of innovation consumption, key concerns of innovation, and demands for innovation. Figure 19 summarizes insights from empirical findings that help to conclude the innovation expectation matrix.

³³ Interview with Manager Sales, BMW Group Thailand, 1 June 2010

Figure 19: Summary of innovation expectation matrix



Source: Author's empirical studies

4.5.2 Findings Innovation as an 'Enabler' not a 'Main Driver'

Outcomes from face-to-face interviews revealed that innovation was not the first buying criterion when luxury car customers decided to buy a car. Innovation may be a starting point. Since innovation introduction was the easiest task, the hardest part was how we coped with innovation, administration, management and dealership management³⁴. Nevertheless, it couldn't simply be implied that innovation was not important in the luxury car industry. In fact, innovations were embedded in all-important buying criteria like brand perception, luxury, comfort, drivability, and safety. Without innovation, it would be impossible for luxury carmakers to differentiate their products, because people expected that luxury carmakers were the first to deliver the latest technology trend whether it was related to new concerns on environment issues, comfort in individual mobility, and etc. They did expect that luxury carmakers were the first who delivered these innovations³⁵.

³⁴ Interview with Former Director After-sales Services, BMW Group Thailand, 1 June 2010

³⁵ Interview with President, BMW Group Thailand, 11 June 2010

However, luxury car customers set such a high expectation on the premium luxury car products that it should not be inferior when compared to other luxury cars or non-luxury cars. In most cases, luxury car users did not realize that there are such advance features in their cars. Features liked curtain side airbags and dynamic stability control (DSC) were rarely noticed by users. Customers focused more on image than innovation. In Thailand, customers used the luxury image every time they used a vehicle; but they might rarely use a technical innovation only from time to time³⁶.

For the luxury car industry, customers wanted innovative products. They wanted to say 'this is better than the average'³⁷. Customers applied their own judgement on what was necessary and what was unnecessary. A luxury carmaker could persuade to some extent, but sometimes consumers' emotions took over rationality. Providing too many innovations that were unnecessary, unreliable or have a high maintenance cost would definitely bring negative results and would directly impact on the commercial performance of the product. Luxury carmakers must carefully consider the appropriate level of innovations and which innovations that best suit customers' demand, and also helped the luxury car brand to sustain its competitive position and business performance in the short-term and long-term.

Sometimes, competitors could even gain full benefit by offering no or limited technologies and innovations. BMW still needed to push innovation forward because that was the core strength of BMW³⁸. Mercedes-Benz was very smart on assessing the market readiness before they launched any new innovation. Since most of their customers bought their product because of brand recognition, Mercedes-Benz could get away with providing limited innovation. Since the BMW strategy tried to capture the image of innovative leader, BMW has been the first carmaker in Thailand that introduced many new features such as i-drive, runflat tyres, electronic injection and so on. This gave other carmakers a distinctive advantage in evaluating BMW technology, customer perceptions, clarification of rules and regulations and any technical problems.

³⁶ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

³⁷ Interview with Director After-sales Service, BMW Group Thailand, 8 June 2010

³⁸ Interview with Motoring Journalist, the Nation, 28 June 2010

While BMW captured the leading spot on innovation, in return, BMW had been perceived as an unreliable product, with high maintenance costs and so on. Mercedes-Benz applied the follower strategy in terms of innovation launching. In return, they gained more market share with a better perception in terms of product reliability and better service quality due to more stable technologies. When BMW was compared to its main rival like Mercedes-Benz, the question was whether it can simply give away innovation to customers regardless of timing or how ready customers were?³⁹.

4.5.3 Gaps between Research Findings and Literature Reviews

Based on the research findings, manufacturers try to stay competitive by competing on offering innovative products to consumers. This study provides insights from luxury car executives together with direct feedback from end consumers in regard to introductions and offerings of technologies and innovations in luxury cars. Empirical outcomes provided evidences that luxury car consumers were after their obvious benefits such as being perceived as having higher purchase power to gain social acceptance. Secondly, the major constraint that reduces the value of innovation mainly comes from the process of innovation introduction and how innovation has been communicated to the end users. Manufacturers might wrongly assume that, by having the best in class innovation, customers would appreciate their products and subsequently such products would dominate the market. This was quite a risky proposition and was not a valid statement as proven in this study. Customers also relied a lot on communication with manufacturers. Failure to communicate innovations undermined the performance of innovations. Thirdly, customers did not always appreciate new innovations, especially innovations where they couldn't draw a direct link to its benefits and where such innovations might incur high running and maintenance costs. Launching innovations with no obvious benefits and high maintenance costs would be counter-productive and led to poor customer satisfaction and loyalty. Poor innovation planning and launching also led to lack of trust and disappointment over luxury cars' brand perception. Lastly, empirical outcomes from the quantitative analysis revealed that, when luxury car buyers decided to buy luxury car, they put innovation at number

³⁹ Interview with Manager Sales, BMW Group Thailand, 1 June 2010

ninth (as for current luxury car owners) and tenth (as for non-luxury car owners). As one executive puts it, innovation took time, and sometimes being innovative created more problems and brought negative perceptions⁴⁰.

4.6 Conclusion

This chapter introduces the background of the automotive industry in Thailand. The automotive industry is the third largest industry in Thailand, accounts for nearly 12% of Thai GDP, and employs a workforce of over 300,000 persons. Due to supportive government policies and favourable local business conditions, almost all major car manufacturers have their sales function and operation function in the country. In Thailand, luxury cars account for roughly 5% of total domestic consumption. The key players in the luxury segment are mainly European companies (Audi, BMW, Mercedes-Benz and Volvo) with one exception which is Lexus from Japan. Each luxury carmaker has their own product differentiation strategy and has designated technologies and innovation strategies.

This chapter also presents outcomes from face-to-face interviews which reveal an interesting finding that roles of innovation under the product consumption process, key concerns and expectations of innovation are vastly different between luxury carmakers, their distribution networks and dealerships and customers. Together with empirical findings from the questionnaires of customers' feedback, the innovation expectation matrix indicates different roles under the process of innovation consumption, key concerns of innovation, demands for innovation among three groups of stakeholders, which are the luxury car company, luxury car dealership and customers. If differences are not managed properly or understood, it might undermine the performance of innovations.

The findings from the quantitative analysis on customers' feedback on luxury car buying criteria also reveal that innovation is ranked 9th for luxury car owners and 10th for non-luxury car owners, far below other factors like brand reputation, comfort, service quality and so on. The chapter concludes by highlighting that the major role of innovation is to be 'the enabler' of luxury car consumption but

⁴⁰ Interview with Former Director After-sales Services, 1 June 2010

not 'the main driver' of the consumption. Luxury car customers are after innovations that fit their desire to enjoy the tangible use of the luxury car products, like a means of individual transportation, and intangible uses of the product, like status symbol and exclusivity. The gaps of the research findings together with the gaps from the literature review represent future opportunities for new research studies, where more practical research is required to shed some light on the role of product and service innovation with regard to product consumption.

Chapter 5 - Roles of Service Encapsulation in the Thai luxury car industry

Thai luxury car companies currently provide many service encapsulations. Some services are required by law and some services exist to create customer satisfaction and loyalty. However, there is a lack of understanding on what constitutes an effective and successful service encapsulation offering. Luxury car companies are unsure how best to deliver service encapsulation and what the requirements are and who to involve. Organizations might be able to come up with the best ideas on service encapsulation but fail to deliver value to end consumers. It is important that organizations understand the service encapsulation delivery model and barriers to service encapsulation in order to deliver value to consumers.

When services are combined with core products and services, by definition, service encapsulation is created. This chapter will investigate the role of service encapsulation in the Thai luxury car industry (section 5.1). Next, the analysis starts from outcomes from qualitative analysis of face-to-face interviews (section 5.2), followed by outcomes from quantitative analysis of questionnaire (section 5.3). In section 5.4, discussion and findings on the service encapsulation service delivery model are discussed. Outcomes from face-to-face interviews and questionnaires also provide great detail on barriers to service encapsulation in the Thai luxury car industry (section 5.5). Finally, the chapter will be concluded (section 5.6).

5.1 Outcomes from Qualitative Analysis: Face-to-Face Interviews

5.1.1 Roles of Service in the Luxury Car Market

There was unanimous agreement among interviewees that, regardless of how good the product is, bad service will definitely push the product out of business. This statement was also valid beyond the automotive business. Luxury carmakers were no longer selling a product, but only a product-like solution in

terms of a bundling of products from similar sources⁴¹. The role of service was to enhance the benefit from the use of the product⁴². A luxury car was considered a high investment from the customers' point of view. While the decision to purchase a luxury vehicle could be made within a short period of time, customers had to live with their decision for a much longer time. Customers met sales staff only once, but they would see service staff for the next five years⁴³. There was an agreement among the interviewees that service was the most critical part of determining the success and failure of the luxury car business. As indicated by President of BMW Group Thailand:

Service becomes more and more critical. Products become more similar. Decision isn't made based on brand, engine, horsepower, or design but obviously very much based on experiences of the service organization. The product itself becomes more equal. If a luxury carmaker wants to differentiate more and more, a carmaker has to outperform by providing a better service than its competitors.

Quality of service also led to customer loyalty. Regardless of how innovative the products were, if such innovation were unreliable or incurred higher maintenance costs, customers would take a negative view of such innovation and might question the reputation of the luxury car brand. Since car technology was so advanced, the repairs and service must bring benefits to customers by fixing the problems. If service failed to serve the customer, it would directly result in a poor perception in the customer's mind⁴⁴. Service would have a major impact for the next purchase and could keep customers loyal to luxury car companies⁴⁵. Repurchase was the key to an automotive business. Once carmakers launched innovation, customers have to stay with these innovations for a longer term⁴⁶.

Luxury car companies also needed to ensure the right timing to launch innovations and allowed customers to take full benefits from innovations. By doing so, customers were willing to pay for new innovations. Ultimately, service was the key decision factor when customers decided to purchase a car⁴⁷. If the car had a good service reputation and pricing position was right, it will be the most

⁴¹ Interview with Manager Technical Support, BMW Group Thailand, 22 June 2010

⁴² Interview with General Manager, MINI Thailand, 2 April 2010

⁴³ Interview with Manager Sales, BMW Thailand, 1 June 2010

⁴⁴ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

⁴⁵ Interview with BMW's Dealer Principle, Barcelona Motor, & Managing Director, Ducati Thailand, 21 June 2010

⁴⁶ Interview with Manager Sales, BMW Thailand, 1 June 2010

⁴⁷ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

popular product in the customer's mind⁴⁸. If luxury carmakers failed to handle service quality or quality of innovation, it would create distrust among customers. Box 8 illustrates the important roles of service in Thailand automotive industry by using the case of Honda Motor Thailand and Toyota Motor Thailand.

Box 8: Case study of Honda Motor Thailand and Toyota Motor Thailand

Case Study of Honda Motor Thailand and Toyota Motor Thailand

The appreciation of important role of service is nothing new in Thailand automotive industry. In the late 80s, Honda entered the Thai market without any advertising. They set up their own showroom and targeted an annual sell below 1,000 units. Since it was a small market, Honda car management at that time had a strong intention to spend money mainly to set the new standard of after-sales service. Surprisingly, Honda was able to exceed their sales volume after the first year. Honda customers were people who knew their products from other markets. During that period, Honda was engaging in the 'Formula One' race and won year after year. Honda always comes on top in term of product reliability and professional after-sales service.

On the other hand, Toyota took over GM and became the number one carmaker in 2009. However, in 2010, Toyota faced the severest product recall in the history of carmakers. The president of Toyota Corporation had to fly to the US and personally apologize to their American customers, and had to testify at the US commerce court. What happened to Toyota was a clear case of being a victim of its own success. Toyota had grown very fast. The Japanese way of 'Kaizen' or 'continuous improvement' was treated as a second priority behind the success story of sales volume. Toyota allowed complacency into their organization. The growth was beyond their control and now their image is tarnished. Toyota must hold on to their true values, not let the short-term volume game dictates the way they do businesses.

Source: Author's document analysis

5.1.2 Service Encapsulation in the Thai luxury car industry

As a standard practice in the Thai automotive industry, carmakers needed to provide basic forms of service encapsulation. Some service encapsulations were legal requirements such as product warranties and claims. For the Thai luxury car industry, luxury carmakers tried to differentiate their service encapsulation from non-luxury cars by offering more diverse service encapsulations such as after-sales service, finance and insurance services, brand experience, and luxury lifestyle. Hence, service encapsulations increased its vital roles to enhance the performance of the core products or services according to Howells (2004: 23-24):

How services encapsulate, or act as 'wrappers' to, goods can be seen in two key dimensions. Firstly, existing, familiar services encapsulate new goods (or services), in turn providing a 'familiariser' effect – by providing a familiar, trusted service to a new good, 'buffer' effect – once the good has been adopted, enabling the consumption of a new good in exactly the same consumption service format as the former; and a 'facilitator' effect – by encouraging and helping consumers to learn new practices and routines through an existing service 'window' or framework to use a new good. Secondly, new services

⁴⁸ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

encapsulating existing goods (or services), here services are used to improve the acceptability, flexibility and performance of existing goods and these attributes are outlined.

New services encapsulating existing goods can provide a number of revitalising and innovative roles in terms of: 'sweetener' effect – by improving the acceptability of a good through a new service format, 'flexibility' effect – new services associated with an existing good (or service) may improve flexibility of use, 'performance' effect – a new service may improve the performance of the good, and 'functionality' effect – new services may allow an existing good to be used in a different way (Robertson and Yu 2001).

Services in this way could be seen as playing an important role in the consumption of innovations by enabling consumers to interact and accommodate these new goods and services more easily. However, there was often a complex interplay between services and goods in the innovation process; changes in one sphere often 'spark off' changes in the other sphere (Howells 2004). Currently, carmakers in Thailand and their partners offered basic service encapsulations such as: service inclusive, mobility service, financing and insurance, privileged access to privilege clubs, and etc. All carmakers, whether entry-level (Chinese and Indian car makers), medium level (Korea carmaker), mass and Japanese premium (Japanese and America carmakers), and luxury segment (German carmakers), offered quite similar service encapsulation packages.

In order to provide the right service encapsulation, carmakers needed to understand their customers' requirements: what else do they need, what kind of lifestyle are they engaging in, what are their customer profiles and demographics, what kind of other add-on products and services could be further offered, how to push for more service encapsulations without being perceived as a disturbance and annoyance. Service Encapsulation needed a shared common understanding of what the ultimate goal of encapsulating products and services with the main product was. To make service encapsulations work, the level of integration and synthesis of products and services from all partners was very high. In the case of luxury cars, customers not only brought a transportation solution, but they also brought luxury, comfort, safety, peace of mind, and reasonable cost of ownership. At the same time, customers wanted 'solutions', not just 'products'. Manufacturers must be proactive and start listening to

customers⁴⁹. Service Encapsulation was starting to play a vital role in packaging products and services together and making them very attractive to customers.

Good service encapsulation must clearly demonstrate the benefits and values to customers. Good service encapsulation was also transparent to customers and gained their trust⁵⁰. Ultimately, service encapsulations would enhance the retail experience. Because customers had cars packaged with a certain peace of mind, like a warranty, carmakers need to enhance this with what it does for me in terms intangible usage such as luxury lifestyle⁵¹. In Box 9, BMW Mission 2020 represents the change of company vision from selling vehicles to be a provider of individual mobility with significant service centric and combination of tangible and intangible usages.

Box 9: BMW Mission 2020

BMW Mission 2020
The traditional way of looking at automotive industry is changing. Automotive industry that has long been focused on the sales of vehicle is about to be replaced by the concept of personal mobility. BMW Mission 2020 is 'to be the world leading provider of premium products and premium services for individual mobility'. The key word for the new paradigm is individual mobility. Individual mobility is a lot similar to Service Encapsulation. Individual mobility targets the packages of various products and services to provide premium mobility experience to the customers. Individual Mobility requires more than just selling the premium products but also providing the premium services as well. BMW is moving away from the premium product-focused company, to premium partnership for the customers. BMW in the future must be able to prepare all solutions for customers' mobility requirement to create stickiness and to keep customers engaged in their business. Ultimately, Service Encapsulation is not to confuse consumers with endless offers, but to craft the solution that addresses customer demands and much more.
<i>Source: BMW's Annual Report 2010</i>

5.1.3 Current Service Encapsulation offered by the Thai Luxury Market

The majority of luxury car consumers usually started with non-luxury cars before owning luxury cars. In the automotive industry, customers were entitled to receive product warranties and claims as part of the consumer's protection rights governed by Thailand's Ministry of Commerce. Mobility service was an extra service that carmakers outsource to a local vendor. After-sales service was

⁴⁹ Interview with BMW's Dealer Principle, Barcelona Motor and Managing Director, Ducati Thailand, 21 June 2010

⁵⁰ Interview with President, BMW Group Thailand, 11 June 2010

⁵¹ Interview with BMW Dealer Principle, Performance Motors and Group General Manager, Sime Darby (Thailand), 18 June 2010

considered a 'cash-cow' business in Thailand. During the period of economic downturn, when purchasing powers of potential luxury car buyers were low, luxury carmakers might aim to lower their margin on the new car sales and hoped that this would be compensated by their extra revenues from after-sales service at the later stage. Typically, some forms of financial service and insurance services were available either from luxury carmakers' own subsidiary companies, like BMW and Mercedes-Benz, or through local financial institutions. For the luxury car industry, it was normal for a luxury carmaker to offer luxury lifestyle services such as brand experience, marketing events, executive lounge access and other forms of privilege. The idea of luxury experience would strengthen each luxury brand perception. Customers also expected luxury car dealers to provide first class facilities and amenities. Customers also expected their vehicles to be supported by the nationwide dealer network, to provide them with flexibility and peace of mind to use their luxury cars.

Outcomes from face-to-face interviews also revealed that in other markets, luxury carmakers offered extra services that might not be available in Thailand, such as free loan car service, service pick-up and drop-off, guaranteed re-sale value, accurate service price estimation, environmentally friendly products and services, and guaranteed service punctuality. Nevertheless, one BMW executive believed that the company already provides the best service encapsulation and might not need to add any new services⁵². Table 22 provides a summary of services offered by Thai luxury carmakers as of December 2011.

⁵² Interview with Director After-sales Services, BMW Thailand, 8 June 2010

Table 22: Summary of services offered by Thai luxury carmakers as of December 2011

Service Offered	Audi	BMW	Lexus	MB	Volvo
Product Warranty	X	X	X	X	X
Mobility Service		X	X	X	
After-sales service	X	X	X	X	X
Financial Service		X		X	
Insurance Service		X		X	
Loan Car					
Test Drive	X	X	X	X	X
Brand experience & Marketing Event		X	X	X	X
Executive Lounge and Privilege		X	X	X	
Product training & Technical Updates		X	X	X	
Pick-up & Drop-off		X		X	
Guaranteed Re-sale Value					
Accurate Service Price Estimation					
Nationwide Service Network & Dealer Coverage	X	X	X	X	X
Environmentally Friendly					
Service Punctuality					
Dealer Amenity & Reception Service	X	X	X	X	X

Source: Author's documents analysis

5.1.4 Measurement of Service Encapsulation Quality by Thai Luxury Carmakers

Customer satisfaction enhanced the cross-selling potential of a supplier, as satisfied customers display a greater tendency to purchase larger quantities or possibly other products or services (Herrmann et al. 2000). To ensure the good sales and service quality and standard, almost all automotive carmakers had their customer satisfaction assessment; for BMW this was the Customer Satisfaction Index (CSI), for MB it was Customer Appreciation, for VW it was Dealer Image Analysis (DIA). Customer satisfaction assessments were either conducted by an internal team or outsourced to the third party. Assessments were typically divided into sales process and after-sales process. Since the assessment questions and parties who conduct the assessment were different, outcomes of customer satisfaction assessments conducted by luxury carmakers cannot be compared to standardized measurement across the industry.

However, Thai carmakers relied on the independent customer satisfaction assessment such as from JD Power⁵³. JD Power also performed similar customer satisfaction assessments in other markets. The only limitation of JD Power in

⁵³ J.D. Power and Associates is a global marketing information services company providing forecasting, performance improvement, social media and customer satisfaction insights and solutions. The company's quality and satisfaction

Thailand was that they required carmakers to sell more than 1,000 units in order to find a suitable sample size to conduct a survey. Therefore in the Thai luxury car industry, only BMW and Mercedes-Benz were qualified to participate in their survey. Satisfied consumers also exhibited a greater willingness to pay higher amounts for products and services, and consequently do not immediately defect to a lower-priced competitor when faced with a price increase (Herrmann et al. 2000). In summary, there are no standardized customer assessments available in the Thai luxury car industry.

5.1.5 Luxury Car Dealership and Retail Experience

Ultimately, the service encapsulation in the luxury car industry was all about retail experience. Luxury carmakers created an image to attract customers. Customers consumed products and services to fulfil their main purpose of individual transportation and other needs like social acceptance, safety, better performance, style, and product appeal. During the whole retail experience process, car dealers played significant roles to end consumers and created satisfaction for luxury cars' service encapsulation. Dealers also had significant roles in convincing customers to stay loyal to the brands. The success of luxury car products was tied very closely to working relationships between the brand owner (internal) and main consumer contact point such as dealers (intermediary). Luxury cars' dealer networks must concentrate on not only the infrastructures and assets but also the attitude and mentality of the people at the dealership, which may not come as an extra cost but, instead, provided complementary skills and knowledge to fulfil innovations⁵⁴.

The success of Mercedes-Benz as a market leader in Thailand was an outcome of the constructive working relationship between Mercedes-Benz and its dealers over a long period of time. When Mercedes-Benz AG decided to take over the local market and set up Mercedes-Benz Thailand, it did the right thing by keeping its former sole distribution, Thonburi Car Assembly, and converting them to dealers. Thonburi had acquired valuable knowledge and experiences by selling Mercedes-Benz in Thailand for more than 30 years. They knew the customers and their brand perception intimately. This observation was best

⁵⁴ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

supported by comments from Steven Kaiser, senior manager at JD Power, based on outcomes of Thailand's Automotive Sales Satisfaction Report in 2009.

Mercedes-Benz ranks highest in the sales satisfaction index (SSI) study with an index score of 855 points (from 1,000). Mercedes-Benz receives particularly high rating from customers in five of the six factors that determine satisfaction: delivery process, salesperson, dealer facility, paperwork and deal. Mercedes-Benz also has the highest percentage of customers in the study who say they 'definitely would' purchase another Mercedes-Benz (35%), repurchase from their Mercedes-Benz dealer (41%) and return to their dealer for after-sales service (70%). Mercedes-Benz is the most successful brand in minimizing problems a customer might experience during the sales process (JD Power Asia Pacific, 2006 Thailand Sales Satisfaction Index (SSI) Study, 2006).

In contrast, when BMW entered Thailand during the same period, BMW had a damaged working relationship with their former sole distributor, Yontrakit Automobile. Consequently, after the set up of BMW Thailand, Yontrakit reduced the number of BMW dealerships from over ten outlets to one dealer. BMW had to start from the ground up in order to understand the Thai luxury market and Thai customers. Yontrakit started to work with other brands to diversify their risks, including VW Group, Audi, Citron, Peugeot, Skoda and SEAT. Regardless of how good BMW products were, without knowledgeable dealers, BMW as internal couldn't establish trust and reliability from the customer's point of view. As a result, BMW had underperformed ever since the set up of BMW Thailand. Box 10 describes the important roles of dealer. Gaining the trust and commitment from dealers was not an easy task and different dealership structure needed to consider carefully as the case was represented below:

Box 10: The choice of single dealer or multiple dealers

The choice of single dealer or multiple dealers in one market

Ultimately, the luxury car industry is all about retail experience. Typically, the normal practice for the luxury car companies to compete in the local markets is through the set-up of dealership. The local dealership set up can be established into 2 choices of establishment; luxury carmakers' own dealership (so called Niederlassung in German), or local dealer appointments. Dealership strategies can be broadly identified as; one dealer owner appointment or multiple-dealer-owners appointment. For maximum control, luxury carmakers prefer to set up their own dealers. However, this option is feasible only for a mature and large market like Germany. For a developing market with low sales volume, carmakers tend to find the local dealer partnership. While carmakers bring product, sales & marketing experience to set up National Sales Company (NSC), technical knowledge, local dealer partners need to invest in facility, people and process. Typically, a dealer agreement is extended on a yearly basis. The dealership contract can be terminated or dealers can cancel the contract with three months notice.

It is still a big debate whether NSC should award a dealership contract to one dealership owner (who can set up more than one outlet), or multiple-dealership owners. While one owner can get sizable businesses to invest in their facility and people, NSC might lose the bargaining power. In Singapore, BMW appointed Performance Motors, a subsidiary of Sime Darby Group from Malaysia. For such a small country like Singapore, Performance Motors is the only outlet. Annual sales volume in Singapore by one dealer is around 3,500 units, which exceeds sales in Thailand with 18 dealers.

Source: Interviews with Luxury's Car Dealer Development Director

5.2 Outcomes from Quantitative Analysis: Questionnaire

5.2.1 Value Perception of Service Encapsulation

Empirical findings from face-to-face interviews were used to design the service encapsulation question that would quantitatively verify customers' beliefs and perceptions of service encapsulation values. When survey participants were asked about how they valued the importance of the existing services that were normally encapsulated with luxury cars, feedback from survey participants indicated very interesting insights that are somewhat contradictory to what luxury carmakers believe. Some services that were valued highly by luxury carmakers received lower importance ratings from Thai current and potential luxury car customers. Customers valued services that associated and enhanced the primary values of luxury car as a means of personal transportation the highest. Empirical findings from the questionnaire would eventually support this conclusion.

Table 23 illustrates the descriptive statistical data and t-test from Qq7 – ranking the level of importance of the service offering. Survey participants were divided into current luxury car users and non-luxury car users and, subsequently, t-test

was conducted between the two groups. The conclusion could be drawn that only three service offerings showed significant differences between the two groups of survey participants. Those service offerings were ‘financial services’ ($t(198) = 8.79, p < .05$), ‘be part of brands marketing and CRM events’ ($t(200) = 1.44, p < .05$), and ‘service pickup and drop off’ ($t(200) = .06, p < .05$).

Table 23: Descriptive statistics and t-test of Qq7 – Rating of the level of importance for the service offering that customers perceive values

Currently own luxury car or not		N	Mean	Std. Deviation	t Value
Product warrantee	Yes	92	4.25	.933	.039
	No	109	4.20	.921	
Mobility service	Yes	92	3.73	1.049	.379
	No	109	3.81	1.023	
Aftersales service	Yes	92	4.60	.612	6.002
	No	109	4.45	.787	
Financial Services	Yes	91	2.78	1.209	8.788*
	No	108	3.17	.922	
Insurance Service	Yes	92	3.59	1.159	.892
	No	109	3.61	1.089	
Loan car	Yes	92	3.46	1.162	1.688
	No	109	3.54	1.050	
Test drive	Yes	91	3.54	1.128	.885
	No	109	3.48	1.068	
Be part of Brands marketing and CRM events	Yes	92	3.08	1.269	1.442*
	No	109	2.71	1.125	
Assess to private clubs and exclusive events	Yes	91	3.37	1.189	.616
	No	109	3.05	1.158	
Product info Technical updates	Yes	91	3.41	1.000	.038
	No	109	3.56	.995	
Service pickup and dropoff	Yes	92	3.68	1.048	.057*
	No	109	3.35	1.100	
Guarantee resales value	Yes	90	3.44	1.228	4.750
	No	109	3.49	1.042	
Accurate service price estimation	Yes	92	3.66	.905	.122
	No	109	3.68	.932	
Nationwide service network dealer coverage	Yes	92	3.85	1.026	.207
	No	109	3.84	1.011	
Environmental friendly	Yes	92	3.55	.976	.390
	No	109	3.61	1.088	
Service Punctuality	Yes	92	4.22	.823	.005
	No	108	4.12	.904	
Dealer amenity reception service	Yes	92	3.97	.818	.034
	No	108	3.88	.862	

* $p < .05$

When the survey participants were categorized into current luxury car owners and non-luxury car owners, the ranking by using means of important level of service offering revealed the similarity of the top-five service offerings that valued by both groups as illustrated in Table 24. The number one ranking was ‘after-sales service’ followed by number two ‘product warrantee’. ‘Service punctuality’, ‘dealer amenity reception service’ and ‘nationwide-service network dealer coverage’ were ranked at number three, four and five respectively. These lists of services confirmed the observation that customers looked for services that encapsulated their main and intangible product usage, which is the means of individual transportation. Nevertheless, it is interesting to observe that the bottom three lowest scores on importance rating from both current owners and non-current owners of luxury cars are ‘access to private clubs and exclusive events’, ‘be part of brands marketing and CRM events’, and lastly ‘financial services’. Surprisingly, those three services received the highest marketing budgets and attention from the luxury car companies.

Table 24: Important (Mean) Ranking of Qq7 - Rating of the level of importance of the service offering that customers perceive

Current luxury car owners		Non-luxury car owners	
Service offering	Mean	Service offering	Mean
Aftersales service	4.60	Aftersales service	4.45
Product warrantee	4.25	Product warrantee	4.20
Service punctuality	4.22	Service punctuality	4.12
Dealer amenity and reception service	3.97	Dealer amenity and reception service	3.88
Nationwide service network, dealer coverage	3.85	Nationwide service network, dealer coverage	3.84
Mobility service	3.73	Mobility service	3.81
Service pickup and drop-off	3.68	Accurate service price estimation	3.68
Accurate service price estimation	3.66	Environmental friendly	3.61
Insurance service	3.59	Insurance service	3.61
Environmental friendly	3.55	Product info technical updates	3.56
Test drive	3.54	Loan car	3.54
Loan car	3.46	Guarantee resale’s value	3.49
Guarantee resale’s value	3.44	Test drive	3.48
Product info technical updates	3.41	Service pickup and drop-off	3.35
Access to private clubs and exclusive events	3.37	Financial services	3.17
Be part of brands marketing and CRM events	3.08	Access to private clubs and exclusive events	3.05
Financial services	2.78	Be part of brands marketing and CRM events	2.71

Even through image and perception were the main buying criteria of the luxury car, customers did not show high appreciation of activities that engaged them with the brand through various marketing activities. Customers also did not

value associated financial services very highly due to customers not need to finance their purchase through the service providers offered by luxury car companies. However, the level of importance was significantly higher in non-luxury users (*mean* = 3.17, *SD* = 0.92) than the current luxury car owners (*mean* = 2.78, *SD* = 1.21). In contrast, customers might feel more comfortable with financial institutions that they trust and currently use for other financial services like mortgages and loans. Customers might put their trust in the local large financial institutes rather than foreign small boutique-leasing providers owned by luxury carmakers from overseas. Therefore, customers placed less value on financial services from the luxury car companies.

This view is quite contradictory to what most luxury car companies believe: that they can use financial services business to generate more business, and create stronger bonding between car manufacturers and customers. This practice was proven to be a key success factor for the luxury car industry to penetrate in the new market and first time luxury car buyers who might need more financial support. In Thailand, both BMW and Mercedes-Benz had their own leasing companies. Survey results also indicated that customers placed less value on these financial supports from luxury car companies. Finally, encapsulated services that were offered to enhance the customer experience, like test-drives and services that provided an uninterrupted use of vehicle like loan cars were valued as somewhat important by customers.

From the list of service encapsulations that wrapped around the core product which is a luxury car, if each service was classified by, firstly, whether or not such service was directly or indirectly linked to the main use of the product, in this case the main purpose of transportation. Secondly, who provided the service to consumers and service providers can be classified into three groups: i) 'internal' – the organization who owns the product such as trademark, local subsidiary of a global organization, ii) 'intermediary' – the organization who acts as a contact point and interlink between product owners and end customers, and iii) 'external' is organizations that go beyond the close legal boundary.

Relationships between 'internal' and 'intermediary' were normally based on legal contracts such as sole distribution, dealership and the terms of the contract could be short-term or open-ended. From customers' point of view, sometimes

customers were not fully aware that ‘internal’ and ‘intermediary’ were two separate organizations. Positive and negative perceptions of luxury car brands affected business performances of both ‘internal’ and ‘intermediary’ in the same market. The role of ‘intermediary’ could be replaced by ‘internal’, if ‘internal’ decides to fully engage in the market like taking over the local distribution. Nevertheless, customers perceived ‘external’ as a separate organization from ‘internal’ and ‘intermediary’. Table 25 summarized the level of importance of services, mapped with direct and indirect use of product and service together with who provide such service.

Table 25: Most important services from case interviews mapped with direct and indirect use of product and service providers

Service Encapsulation	Mean (n = 206)	Level of Importance	Direct or indirect to the main using purpose of product	Offered by internal or external parties
After-sales Service	4.52	High	Direct	Intermediary (Dealer)
Product Warrantee	4.22	High	Direct	Internal (NSC)
Service Punctuality	4.17	High	Direct	Intermediary (Dealer)
Dealer Amenity & Reception Service	3.92	High	Direct	Intermediary (Dealer)
Nationwide Service & Dealer Network	3.85	High	Direct	Intermediary (Dealer)
Mobility Service	3.77	High	Direct	External (Car Service)
Accurate Service Price Estimation	3.67	Moderate	Direct	Intermediary (Dealer)
Insurance Service	3.60	Moderate	Indirect	External (Insurance Company)
Environmental Friendly	3.59	Moderate	Direct	Intermediary (Dealer)
Test Drive	3.51	Moderate	Direct	Intermediary (Dealer)
Service Pick-up & Drop-Off	3.50	Moderate	Direct	Intermediary (Dealer)
Loan Car	3.50	Moderate	Direct	Intermediary (Dealer)
Product Info. & Technical Updates	3.49	Moderate	Direct	Internal (NSC)
Guaranteed Resale Value	3.47	Moderate	Direct	Internal (NSC)
Access to private clubs and exclusive events	3.20	Low	Indirect	Internal (NSC)
Brand Experience & Marketing Events	2.99	Low	Indirect	Internal (NSC)
Financial Service	2.88	Low	Indirect	External (Finance Company)

Also in Table 25, service encapsulations offered by luxury carmakers were classified by parties who provide services (internal, intermediary or external) and level of importance of each service encapsulation (high, moderate or low). Interestingly, luxury car consumers clearly stated that what they valued highly were service encapsulations on services that were directly linked to the usage of the product. In the highly important case, only 'product warranty' and 'service inclusive' were offered by 'internal'. The majority of highly important services were offered by 'intermediary' or dealers, for example, 'after-sales service', 'service punctuality', 'dealer amenity & reception service' and 'nationwide service & dealer network'.

5.2.2 Value Misalignment of Service Encapsulation

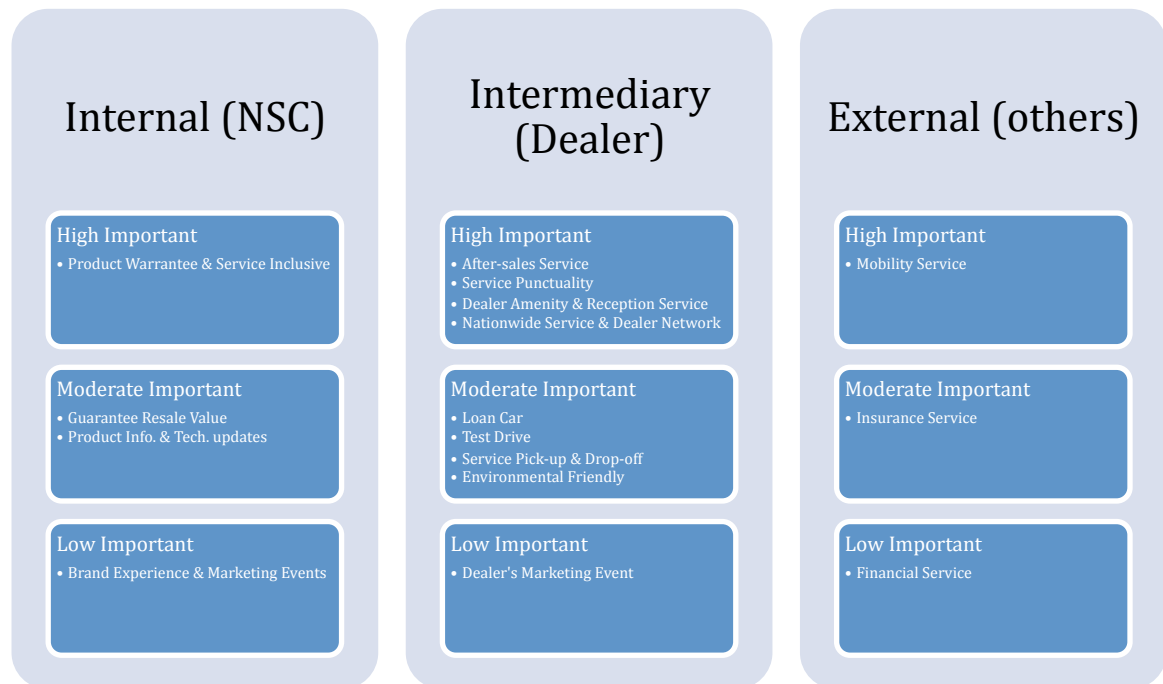
In contrast to the opinions of executives who run luxury car companies in Thailand and were fully confident of service encapsulation items like brand experience, marketing events and financial services, outcomes from this study provided the contrary view that, in fact, customers placed very little value on those three items. Luxury carmakers always spent the largest amount of their marketing budget on brand experience and marketing events. Another interesting finding was that customers place less value on Financial Services. Two of the largest Thai luxury carmakers, which are BMW and Mercedes-Benz, invested a significant amount of money to set up their in-house financial service companies. The model of a National Sales Company (NSC) working side by side with a Financial Service Company had been proven very successful in other markets. However, in Thailand, Financial Service received a lowest important rating from the group of current luxury car owners and top-three of least important service ranked by non-luxury car owners.

To further explain the situation, from the management of a luxury carmaker's point of view, their performance was measured in units sold and market share. It was obvious that they will give the first budget priority to service encapsulations that bring more sales. However, in reality, customers value after-sales service encapsulations that were directly linked to their main purpose in purchasing the product. Service encapsulation in the luxury car market must provide them with ease of use, efficiency, convenience, and peace of mind at a reasonable running cost. In fact, luxury car customers were looking for affordable luxury products

and services offerings. Without these qualities of service encapsulations, luxury carmakers had no chance to succeed in the local market⁵⁵. Anything beyond that, customers would perceive as unnecessary and considered of moderate and low importance. Key lessons to learn were: firstly, luxury carmakers need to understand what customers' priorities were and there was a case of value misalignment between carmakers and end consumers. Secondly, most highly important service encapsulations were provided by the luxury carmakers' dealers who already interacted closely to customers already.

Figure 20 illustrates the innovation expectation matrix which construct from merging of outcomes from qualitative and quantitative analysis in comparison of perceptions of important as outcomes from face-to-face interviews and customers inputs of important rating by each service, three clusters of services based on their important (high, moderate, and low) by service encapsulation providers (internal, intermediary, and external).

Figure 20: Innovation expectation matrix



Source: Author's empirical studies and personal analysis

⁵⁵ Interview with Managing Director, BMW Financial Services (Thailand), 22 June 2010

5.2.3 Influencing Factors of Service Encapsulation

Outcomes from case studies suggested a number of factors that had contributed to the success of service encapsulation for Thailand luxury car industry. Findings from face-to-face interviews helped to design questionnaires to probe the influencing factors of service encapsulation in detail. Table 26 illustrates the descriptive statistical analysis and t-test for Qq9. Survey respondents were, once again, categorized into two groups, luxury car owners and non-luxury car owners. A t-test of all-important factor of 'when customer consider buying product/services from car companies', and the significant differences between current luxury car owners and non-luxury car owners was conducted. Results of the t-test indicated that three factors showed significant differences between the two groups: 'reputation' ($t(199) = .26, p < .05$), 'sense of belonging' ($t(198) = 6.49, p < .05$), and 'quality of customer service' ($t(199) = 5.59, p < .01$).

Table 26: Descriptive statistic data and t-test for Qq9 - Important factors when customers consider buying products/services from car companies

Currently own luxury car or not		N	Mean	Std. Deviation	t Value
Trust	Yes	91	4.33	.761	.138
	No	109	4.31	.766	
Reputation	Yes	91	4.30	.782	.261*
	No	109	4.04	.838	
Reasonable price	Yes	91	4.20	.846	.271
	No	109	4.22	.821	
Luxury lifestyle	Yes	91	3.44	1.157	2.198
	No	108	3.26	1.053	
Sense of belonging	Yes	90	3.38	1.167	6.492*
	No	109	3.05	1.013	
Quality of dealership	Yes	91	4.11	.795	.750
	No	109	4.03	.775	
Dealer network coverage	Yes	91	3.92	.934	2.649
	No	109	3.90	.838	
Quality of Customer Service	Yes	91	4.66	.600	5.592**
	No	109	4.41	.670	

* $p < .05$, ** $p < .01$

Statistical analysis of this question provided good insights and confirmed factors that had an impact on the success of service encapsulation. The highest element was 'Quality of Customer Services'. Customers stated that they buy premium

and they expect premium service. 'Trust'⁵⁶ was also a key element for customers. When customers decided to consume the product and service or when they decided to try new innovations, what came first to the customer's mind is whether the service provider is trustworthy. Customers associated their experience whether direct or indirect to justify their new purchases. This finding provided an insight to luxury carmakers, who focused narrowly and tried to improve their performance by offering more products and services, only to find that the new offering did not help the company to perform better. This insight suggested that before offering new products and services, carmakers needed to gain trust from their customers. Carmakers also needed to instil trust in the public and consumer groups as well.

Ranking on the 3rd place was 'reasonable price'. Even if luxury car users were often regarded as people who had high purchasing power, nevertheless, when they made a purchase, they carefully considered the reasonable price element. Customers wanted an affordable luxury vehicle and running costs must be within a reasonable range⁵⁷. The next factor of 'Reputation'⁵⁸ was also associated very closely with 'Trust'. BMW suffered from their bad reputation from the era of local importers who performed poorly on quality of services and that effect was still reflected today. However, what contributed to 'reputation' was not only what happened on the local level but also on the global level. Due to the free flow of information from other markets, what constituted brands' reputations, whether good or bad, would have a certain level of impact in the local market. When BMW sold more diesel cars in Europe than petrol cars, their good reputation from other markets created demand from customers for diesel products in the Thai market. Another example is Lexus; long before Lexus penetrated the Thai market, the Lexus brand was closely associated with quality and reliability. The first group of Lexus buyers were people who used Lexus in other markets, while trust was more personal and required direct and local experience.

⁵⁶ Merriam-Webster dictionary defines 'trust' as 'assured reliance on the character, ability, strength, or truth of someone or something, one in which confidence is placed'.

⁵⁷ Interview with Managing Director, BMW Financial Services (Thailand), 22 June 2010

⁵⁸ Merriam-Webster dictionary defines 'reputation' as: 'overall quality or character as seen or judged by people in general, recognition by other people of some characteristic or ability'.

5.3 Discussions and Findings: Service Encapsulation Delivery Model

Scholars indicated that the different roles that intermediary or dealer play within the innovation process have been variously described as third parties (Mantel and Rosegger 1987), intermediary firms (Stankiewicz 1995), abridgers (Bessant and Rush 1995; McEvily and Zaheer 1999), brokers (Hargadon and Sutton 1997), and superstructure organizations (Lynn et al. 1996). Mantel and Rosegger (1987) highlighted other roles that such third parties played in the diffusion process, including support in decision-making of whether to adopt or not; as a specification writer or standard setter; and, as an evaluator of the technology once it was in the market (Howells 2006). Hargadon and Sutton (1997) in their study focused on how brokers, as agents, facilitated the process of knowledge and technology transferred 'across people, organization and industries', while Czarnitski and Spielkamp (2000) identified the role that business-related services played as 'bridges for innovation' to other manufacturing and service firms.

As stated by Howells (2004), consumption was, therefore, not a one-off contact via the sale of a product but a continuing process involving long-term customer contact through service delivery. In summary, there were three service encapsulation players whose relationship and co-operation make up the service encapsulation delivery model as highlighted in Table 27.

Table 27: Definition of service encapsulation players

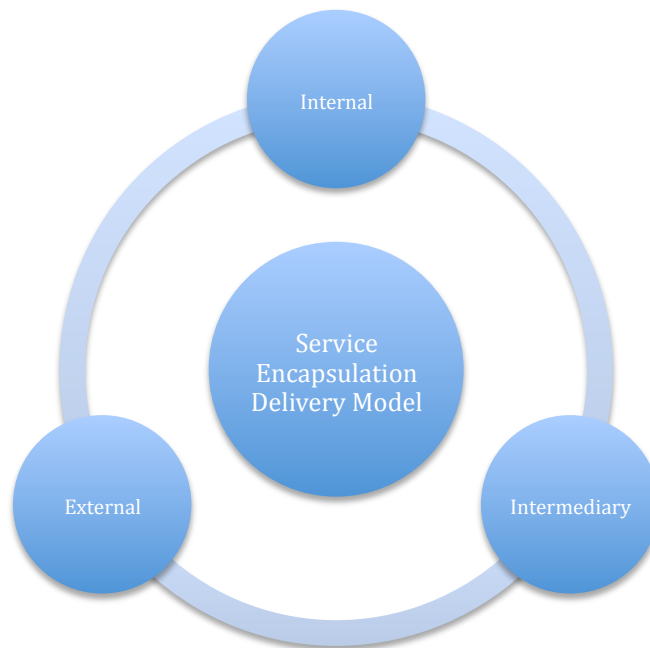
Service Encapsulation Players	Definition	Examples
Internal	Internal owns brand, technologies, innovations, and know-how on how to run businesses. Internal is often the multinational corporation (MNC) and operates on the global scale. Internal often sends their senior executive to oversee the local organization. Depending on internal's business strategy, internal tends not to invest in fixed assets outside their home office to give them flexibility to mobilize their operation when required.	Luxury car brand owner
Intermediary	Intermediary is the local affiliate of internal who acts as a main interface point between internal and customers. Intermediary key roles include supporting in decision-making of whether to adopt new innovations or not, an evaluator of the technology once it was in the market (Howells 2006) and bridges for innovation to the manufacturing and service firms (Czarnitski and Spielkamp 2000). From customers' point of view, internal and intermediary are the same function who are the brand representative.	Dealer, distributor
External	External is an outsider who has no direct brand representative rights. However external works closely with internal and intermediary to fulfil their non-core business functions. The level of commitment to external's services is low. Occasionally, external might perform tasks and interact with customers directly on behalf of internal and intermediary for a task that requires special skills such as roadside-assistant or highly localized content such as insurance surveyor.	Outsourcing partner, roadside service assistant, insurance surveyor

Source: Author's personal compilation

Service Encapsulation Delivery Model

In order to deliver value from service encapsulations, the interplays among the three parties, which are internal, intermediary and external, play critical roles from creating the service encapsulation idea to delivering values to end consumers. Empirical outcomes from face-to-face interviews and the service encapsulation survey also confirm findings that service encapsulation owners need to carefully create 'rules of engagement' and clearly identify roles and expectations from each player. These 3 players form a unique relationship called Service Encapsulation Delivery Model as shown in Figure 21.

Figure 21: Service Encapsulation Delivery Model



Source: Author's personal analysis

The model highlights 3-way relationships with detailed descriptions as follows:

- i) Partnership between internal and intermediary: the relationship between internal and intermediary requires close partnerships since, from customers' perspective, both internal and intermediary are the same entity. Internal needs to ensure that intermediary has the knowledge to carry on the critical task, shares the same vision and common goals, and retains the brand integrity of premium and luxury image.
- ii) Co-operation between internal and external: internal needs to establish cross organization and, sometimes, cross industry co-operation with external parties. Internal must set up clearly defined Service Level Agreement (SLA), standard working procedures and key performance indicators to ensure the quality and consistency of services from external.
- iii) Outsourcing between intermediary and external: Since intermediary needs to focus on their core strengths and competencies, intermediary needs to outsource their non-core activities to outsourcing vendors. These vendors need to ensure efficient, quality and cost effective services and solutions are provided to intermediary. Since tasks are not critical, intermediary can select, evaluate and monitor performances of these vendors. Intermediary needs to

establish clearly defined working procedures and key performance indicators as well.

Table 28 summarizes 3-way relationship in the service encapsulation delivery model including details on key success factors, benefits, constraints and examples.

Table 28: Summary of 3-way relationships in the service encapsulation delivery model

3-ways Relationship	Key Success Factors	Benefits	Constraints	Examples
1. Partnership: Internal & Intermediary	<ul style="list-style-type: none"> ▪ High level of trust ▪ Legal contract ▪ Knowledge transfers ▪ Integrated operation system ▪ Common interests on shared KPIs and successes ▪ Measurement and evaluation of performance ▪ Effective communication 	<ul style="list-style-type: none"> ▪ Low investment cost to penetrate a new market ▪ Select intermediary who fits with brands and management style ▪ Fit well with growth strategies 	<ul style="list-style-type: none"> ▪ Control of quality and standard ▪ Lose of intellectual properties and trade secrets ▪ Required a high level of trust 	<ul style="list-style-type: none"> ▪ Dealership agreement ▪ Distribution agreement ▪ Manufacturing rights
2. Co-operation: Internal & External	<ul style="list-style-type: none"> ▪ Service Level Agreement (SLA) ▪ Well-defined standard operation procedures ▪ Share operation system and IT platform ▪ Measurement and evaluation of performance ▪ Professionalism to reflect luxury images 	<ul style="list-style-type: none"> ▪ Low investment ▪ High mobility with low switching costs ▪ Leverage on local expertise ▪ Focus on core competencies 	<ul style="list-style-type: none"> ▪ Control of quality and standard ▪ Lose of intellectual properties and trade secrets ▪ Lose of customers' confidentiality ▪ Limit choices of local partners ▪ No long-term commitments 	<ul style="list-style-type: none"> ▪ Contracting ▪ Joint branding ▪ Customer database sharing ▪ Leverage on local expertise – Mobility Service ▪ Special Financing Campaign with Financial Institutions
3. Operation Outsourcing: Intermediary & External	<ul style="list-style-type: none"> ▪ Outsourcing contract ▪ Well-defined standard operation procedures ▪ Share operation system and IT ▪ Measurement and evaluation of performance 	<ul style="list-style-type: none"> ▪ Flexible and cost effective products and services ▪ Overhead cost reduction 	<ul style="list-style-type: none"> ▪ Control of quality and standard ▪ Limit choices of preferred vendors 	<ul style="list-style-type: none"> ▪ Outsourcing ▪ Training ▪ Payroll & Admin ▪ IT administrator

Source: Author's empirical studies and personal analysis

Implications and Strategies

A key implication of the service encapsulation delivery model is that internal might come up with standard sets of products and services to be launched in the local markets. As a product and service owner, internal might have a clearly defined set of standard working procedures, targets and standard marketing approach. However, none of these standards can work if internal fails to identify an intermediary who is willing to share common vision, goals, standard procedures, targets, brand philosophy, and service quality. While luxury carmakers want to leverage their premium and luxury brand perceptions together with sales performance, intermediary might have their own agenda to satisfy their short-term goal. Typical business practices involve: selling luxury cars at a very low price, disturbing the market perception as a premium product in order to overthrow the competition, including other same-brand dealers, reducing their stock and gambling on future income from after-sales business.

Internal and intermediary can also fail if they select an external that does not carry the premium and luxury images of their product. Internal might decide to outsource their mobility service to a third party. However, customers expect the same service quality since it carries the luxury car brand. The process of customer reception, mobility service and follow-up must be carried out to ensure the premium and luxury experience to end consumers. This high level of service cannot be realized if external fails to understand the product and service philosophy of luxury carmakers. Box 11 describes the success of IKEA which comes mainly from the focus of service encapsulation with a clear distinction on values of their service encapsulation and how IKEA plans to deliver such values.

Box 11: IKEA's achieving high customer satisfaction through a focused service encapsulation

IKEA: Achieving High Customer Satisfaction through a focused Service Encapsulation⁵⁹

An example of good practice on service encapsulation outside automotive industry is best represented with the case of IKEA of Sweden. IKEA thinks their proposition and promise is very simple: customers do their part. IKEA does its part. Those savings are passed on to customers in the form of affordable, well-designed functional home furnishing products and solutions for a better everyday life at home. 1) Designer starts with the price tag, 2) self service with instant gratification and help, 3) Our things are flat-packed for cheaper storage and transportation. And by producing in bulk IKEA can lower the costs and offer lower prices, 4) self delivery with recommended delivery service, 5) Products are easy to assemble with one Allen key, 6) 100 days refund policy (source: www.ikea.com)

IKEA isn't trying to offer a completed and seamlessly integrated service encapsulation in the home furnishing industry. Instead, IKEA offers a focused strategy on service encapsulation by focusing on their key competencies like supply chain management, cost control and furniture design. Accordingly, no other furniture manufacturer has succeeded in replicating the 'experience world' of IKEA to this day. Offerings such as IKEA's Family Card, childcare, home delivery service, do-it-yourself set up or the IKEA restaurant can be imitated in isolation. In combination, however, these elements offer ideal protection (Dorner et al. 2011).

Under the 3-way service encapsulation delivery model, each pair of relationships requires a different set of strategies. Strategies help enrich relationships to deliver the best values of service encapsulation. For partnerships between internal and intermediary, the strategy must help to steer trust and deepen the professional relationship. By doing so, the strategy must create a win-win situation for both internal and intermediary. For co-operation between internal and external, the strategy must ensure the standard, quality and reliability of product and service to ensure the premium image of overall service encapsulation remains intact. For outsourcing between intermediary and external, the focus of strategy is low cost and excellent operation. Well-defined service agreements and standard working procedures are required. Table 29 summarizes 3-way relationships in the service encapsulation delivery model and recommended strategies.

⁵⁹ Source: www.IKEA.co.th

Table 29: 3-ways relationships in the service encapsulation service delivery model and recommended strategies

3-ways Relationships	Strategies
1. Partnership: Internal & Intermediary	<ul style="list-style-type: none"> ▪ Dealer recruitment and performance management ▪ Trust building ▪ Ensure reasonable dealer profitability ▪ Knowledge transfer & training ▪ Sharing of brand and customer experience philosophy
2. Co-operation: Internal & External	<ul style="list-style-type: none"> ▪ Service quality establishment through Service Agreement ▪ Operational excellence ensure quality and cost efficiency ▪ Sharing of brand and customer experience philosophy ▪ Leveraging on each experience and competencies
3. Operation Outsourcing: Intermediary & External	<ul style="list-style-type: none"> ▪ Service quality establishment through Outsourcing Service Agreement ▪ Standard working procedures establishment ▪ Operational excellence & cost efficiency

Source: Author's personal analysis

5.4 Discussions and Findings: Barriers of Service Encapsulation in the Thai luxury car industry

Innovation activity may be hampered by a number of factors. There may be reasons for not starting innovation activities at all, or factors that slow innovation activity or have a negative effect on expected results. Impediments to service innovation vary according to different service industries, firm sizes and country-specific regulations. Preissl (2000) attempted to identify barriers to service innovation in general. Moreover, the empirical study in European countries by Preissl (2000) generally demonstrates that impediments to service innovation involve five factors: 1) political factors, 2) financial constraints, 3) technical problems, 4) absorptive capacities of markets, and 5) innovation management and qualifications.

From face-to-face interviews, it becomes clear that there are still more opportunities to integrate service encapsulation in the Thai luxury car industry. Although service encapsulation is a straightforward concept with clear benefits to customers, Thai luxury carmakers and their service encapsulation partners still face many challenges and barriers to becoming successful and bringing financial and non-financial benefits to their organization. Empirical findings help to identify 15 service encapsulation barriers as follow:

1. Culture, attitude, mind-set

Organizations can craft the world-class and fancy service encapsulation as much as they like. However, in reality, it comes down to people in the organization to deliver Service Encapsulations. Outcomes from an empirical study also support this statement, as shown from an interview with the President of BMW Financial Services (Thailand):

Staff have their own culture, attitude and mind-set. It is possible to train people for skills, but it is difficult to change their culture, attitude and mind-set. Besides, staff might already have given up the fight with competitors. In the own mind, they are already convinced that there is no way luxury carmakers can overtake their rival and become number one. Therefore, their own conclusion is all service encapsulations are useless.

Luxury carmaker's executives comment that luxury carmakers offer, by far, the best service encapsulation already and there is no need to do more⁶⁰. This kind of mentality is a major roadblock for the emergence and success of Service Encapsulation. Barriers always come down to the people factor⁶¹. Service encapsulation also requires passion, which seems to be missing in the local context⁶².

2. Organizational Effectiveness and Directions

Given that the organizations are equipped with the right staff, it is mandatory for top management to deliver a clear organization direction, followed up by a strategic map which can be realistically measured by key performance indicators. It may become evident that staff do not know in what directions that vision wants to steer them and the organization⁶³. Staff do not own the vision and are not fully committed to pursuing the vision. In many cases, there is no common vision. Each department interprets the company vision in favour of their own benefits⁶⁴. This is a very crucial basic step. The organizations must successfully create a common vision and build up a sense of ownership throughout the whole

⁶⁰ Interview with Director After-sales Service, BMW Thailand, 8 June 2010

⁶¹ Interview with Director After-sales Service, BMW Thailand, 8 June 2010

⁶² Interview with Manager Human Resources, BMW Thailand, 2 June 2010

⁶³ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

⁶⁴ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

organization⁶⁵. Management must not overlook the important role of an incentive plan as a motivation⁶⁶. If an organization wants to drive service encapsulation, the only barrier is the clear direction from the management. Direction must be clear to allocate sufficient resources to make the project happen⁶⁷.

3. Follow up on training and personal development

Even if a shared vision is firmly established in the organization, the next crucial step is to assess for the competency gaps. Competency includes knowledge, skills and attitudes. Service encapsulations require an additional set of competencies. To master the new terrain and to outperform competitors, organizations must be realistic about where the organizations are in term of competencies⁶⁸. It makes no sense to offer the best in class service encapsulation only to find out later that organizations are incapable of delivering such an offering⁶⁹. Customers will feel even more upset and lose trust in the brand and the organizations behind it.

4. Education, Innovation can go as far as education can go

Another big barrier that goes beyond business units to overcome this barrier is the educational level of customers. Innovation appreciation can only go as far as the consumer's level of education can go⁷⁰. Organizations cannot simply introduce innovations, push them to the customers, and hope that they will understand and appreciate them⁷¹. Customers are entitled to know: what is in it for me, what the benefits are, whether or not it is worth my extra money, or whether competitors offer better Service Encapsulation in the customers' opinion⁷². Communication is crucial to give Service Encapsulation substance to customers and ensure its value is not diminished along an ineffective communication process⁷³.

⁶⁵ Interview with President of VW Thailand, 28 June 2010

⁶⁶ Interview with President of VW Thailand, 28 June 2010

⁶⁷ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

⁶⁸ Interview with Manager Human Resources, BMW Thailand, 2 June 2010

⁶⁹ Interview with BMW's Dealer Head of After-sales Service, Europa Motor, 9 June 2010

⁷⁰ Interview with former Director After-sales Service, BMW Thailand, 1 June 2010

⁷¹ Interview with General Manager, MINI Thailand, 2 April 2010

⁷² Interview with Motoring Journalist, UK Car's Magazine, 28 June 2010

⁷³ Interview with Director Corporate Communication, BMW Thailand, 9 April 2010

5. Trust

Brand perception and customer experience take time to deepen their roots in the customers' minds⁷⁴. Some luxury carmakers suffered a poor image of unreliable products and high service costs⁷⁵. Organizations cannot change their old image and perceptions overnight. Service encapsulation cannot be delivered without trust between customers and the organization⁷⁶. With a poor reputation for more than 20 years, BMW started from a severe negative image. Even after over 10 years of its own subsidiary and control from German management, BMW image still suffers from the failure of recent introduction of service encapsulation packages like BSI (BMW Service Inclusive)⁷⁷. It is difficult to convince customers all over again to start trusting the brand once more. The convincing process takes time⁷⁸.

6. Vital Roles of Communication

One consensus from the interviewees is 'communication is the key'. For the luxury car industry, carmakers have to take care of many messages: brand perception, new marketing campaign, upgraded technologies, new innovations, product comparison with competitors, communication to their own dealer network, product pricing and positioning and so on. Dealers have to learn to communicate properly about the right product selling points⁷⁹. Sharing the same philosophy on what behind the brand, what the new model represents, can only create the seamless and uninterrupted flow of messages⁸⁰. Communication is a key barrier. It is important to ensure the same message from top to bottom, command or convince, motivate and follow⁸¹.

⁷⁴ Interview with President, BMW Thailand, 11 June 2010

⁷⁵ Interview with News Journalist, The Nation, 28 June 2010

⁷⁶ Interview with Director Dealer Development, BMW Thailand, 28 June 2010

⁷⁷ Interview with Director Corporate Communication, BMW Thailand, 9 April 2010

⁷⁸ Interview with Manager Sales, BMW Thailand, 1 June 2010

⁷⁹ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

⁸⁰ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

⁸¹ Interview with Managing Director, VW Thailand, 28 June 2010

7. Economic and Financial Crisis

Another major obstruction for implementing Service encapsulation is the lack of financial resources allocated from the firm⁸². In the second half of 2008, the sub-prime crisis had hit the automotive industry very hard. While car stocks were piling up, all carmakers had no choice but to cut down all expenses as much as possible in order to survive the crisis. Carmakers became very risk averse and postponed the launch of new technologies and innovations. The financial crisis also heavily impacted customers as well. Customers postponed their luxury car purchasing, and tried to prolong the ownership of their current cars⁸³. After-sales services experienced a rapid increase in service business. The service workshop utilization increased dramatically. High demand for after-sales services put pressure on dealers who had always treated after-sales business as a second priority⁸⁴. With the lack of attention to after-sales business for many years, customers experienced a poor after-sales service encapsulation package from NSC and its dealers, despite the fact that after-sales plays the most important role in the luxury car service encapsulation offering⁸⁵.

8. Co-operations and Partnerships

Service encapsulations require a team effort from both internal parties and external parties. Service encapsulations need strong partnerships among the service and product providers⁸⁶. The value of Service Encapsulations from the customers' perspectives must come from the integration of efforts among different parties⁸⁷. Carmakers must work closely with external parties to ensure the high service encapsulation standard. Service encapsulation must constantly go beyond customer expectations. It becomes clear that the co-operations among the service providers or partners are crucial to the success of service encapsulations⁸⁸. Poor co-operation among partners is one of the major

⁸² Interview with General Manager, BMW Financial Services (Thailand), 9 June 2010

⁸³ Interview with President, BMW Financial Services (Thailand), 22 June 2010

⁸⁴ Interview with Director After-sales Service, BMW Thailand, 8 June 2010

⁸⁵ Interview with Director Dealer Development, BMW Thailand, 28 June 2010

⁸⁶ Interview with Dealer Principle, Sime Darby Group, 18 June 2010

⁸⁷ Interview with Dealer Principle, Sime Darby Group, 18 June 2010

⁸⁸ Interview with President, BMW Thailand, 11 June 2010

roadblocks to organizations delivering service encapsulation successfully⁸⁹. The BSI process is a good example of barriers to service encapsulation. BSI is really good and the concept is best in class. However, BSI required a lot of involvements from many parties. Communication could not easily be done⁹⁰.

9. Infrastructure

In order to execute service encapsulation successfully, infrastructure, especially IT, must be integrated and synchronized among organizations and their partners. Good IT infrastructure helps organizations to analyse customers and to prepare the right solutions for them⁹¹. Under the current circumstances where customers are so annoyed with cold calls from credit cards, personal loan and insurance products, it becomes a real challenge to offer something that catches customers' interest⁹². Once again, trust comes as a key contributor. If customers have a good perception of the organizations and their products, they might be willing to listen to what the organizations have to offer⁹³. Infrastructure is necessary to support service encapsulation⁹⁴. Infrastructure is one of the major barriers in Thailand. There are a lot of projects in Europe like the auto start/stop function, which is working well in some markets, or some intelligent highway systems where the distances to other cars are measured constantly. There are not ready to be implemented in Thailand due to lack of basic infrastructure⁹⁵.

10. After-sales Service as First Priority

A reliable product with good service can always find buyers, but a well-known car with a bad service reputation, will be pushed out from the market⁹⁶. There is a saying that 'retail is details'. The automotive business is a retail business. After-sales service is the backbone of the survival of the brand and products⁹⁷. Surprisingly, many automakers fail to understand these points. They always

⁸⁹ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

⁹⁰ Interview with Director Corporate Communication, BMW Thailand, 9 April 2010

⁹¹ Interview with Manager Technical Support, BMW Thailand, 22 June 2010

⁹² Interview with General Manager, BMW Financial Service (Thailand), 9 June 2010

⁹³ Interview with Director Dealer Development, BMW Thailand, 28 June 2010

⁹⁴ Interview with General Manager, MINI Thailand, 2 April 2010

⁹⁵ Interview with Director After-sales Service, BMW Thailand, 8 June 2010

⁹⁶ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

⁹⁷ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

make a big entrance, claim big successes in other markets, advertise how advanced their technologies are and so on⁹⁸. In Thailand, many big name carmakers like Audi, Citroen, Peugeot, Skoda, and SEAT have good products, but they failed miserably on the after-sales side⁹⁹. Good after-sales service creates a strong foundation for service encapsulation to build on. Without reliable service, it is hard to gain trust from customers. Without trust, there is no chance for service encapsulation¹⁰⁰.

11. Service Encapsulation is not a 'one size fits all' solution

Service Encapsulation is not the package for every customer segment. Service Encapsulation cannot please all customers¹⁰¹. Customers need flexibility, individuality and freedom of choice. Trying to overload customers with endless offers might yield negative results instead of positive results¹⁰². Service Encapsulation needs to be localized, since worldwide generalization will not work in each specific market¹⁰³. It becomes important for carmakers to understand their customers and appreciate their differences. Trying to fit one service to all customers is no longer a valid service mentality. Instead, customers show high appreciation and tend to remain loyal and satisfied when carmakers prove to them that they work hard in order to offer an individualized service.

12. Rules and regulations

Some rules and regulations are barriers to service encapsulations. For example, new financial products are subjected to approval by the Bank of Thailand and Ministry of Commerce before it can be offered to customers¹⁰⁴. New technologies and innovations must pass the homologation process conducted by the Ministry of Transport regardless of how widely accepted such technologies are in other markets¹⁰⁵. Automatic cruise control is prohibited in Thailand, due to the concern about the interference from radio frequencies. Even within the internal parties

⁹⁸ Interview with Motoring Journalist, the Nation, 28 June 2010

⁹⁹ Interview with Motoring Journalist, the Nation, 28 June 2010

¹⁰⁰ Interview with President, BMW Financial Services (Thailand), 22 June 2010

¹⁰¹ Interview with Director Dealer Development, BMW Thailand, 28 June 2010

¹⁰² Interview with Director Corporate Communication, BMW Thailand, 9 April 2010

¹⁰³ Interview with Director After-sales Service, BMW Thailand, 8 June 2010

¹⁰⁴ Interview with General Manager, BMW Financial Services (Thailand), 9 June 2010

¹⁰⁵ Interview with former Director After-sales Services, BMW Thailand, 1 June 2010

inside NSCs, Sales organizations and Financial Services organizations are not allowed to share customer databases and expose customers' financial status¹⁰⁶. This regulation prevents two organizations from integrating their efforts to offer new service encapsulations in place of fragmented services, one from product selling and another one from financial services. The Thai government needs to adjust rules and regulations to make sure that such rules and regulations give all parties fair treatment in order to promote healthy competition for the benefit of customers and enhance values of service encapsulation to end customers¹⁰⁷.

13. Readiness to explore Service Encapsulation Opportunities

Service encapsulations are about exploring new territories in order to bring more value to customers. Organizations need to be sure that they are capable of handling the new businesses or unknown territories¹⁰⁸. Service Encapsulations come with risks, as do any new business ventures¹⁰⁹. Innovation needs to be consistently evaluated and readjusted. Resistance to innovation from customers is normal. Sometimes, carmakers need to select which innovation is good for customers and that innovation is something that customers want. Tailor-made products and product positioning are also other techniques that carmakers can pick and choose. Luxury carmakers can also learn from other industries which demonstrate good ideas and exceptional execution of service encapsulation. Luxury carmakers can also leverage on brand partnership with other enterprise to reaffirm to the market about their product differentiation and what the brand is representing.

14. Service Encapsulation as a priority

One of the major barriers for the success of service encapsulation is the commitment to execute the idea. Organizations might embrace the service encapsulation concept, get excited for a week, and ignore the concept later¹¹⁰, like many world-class concepts that organizations tried to implement in the past, such as organization's vision and mission, balanced scorecard (BSC), strategy

¹⁰⁶ Interview with President, BMW Financial Services (Thailand), 22 June 2010

¹⁰⁷ Interview with President, BMW Thailand, 11 June 2010

¹⁰⁸ Interview with BMW's Dealer Principle, Barcelona Motor, 21 June 2010

¹⁰⁹ Interview with BMW's Dealer Principle, Barcelona Motor, 21 June 2010

¹¹⁰ Interview with Manager Sales Planning, BMW Thailand, 16 June 2010

map, competency model, quality assurance and so on. If there is no real commitment and priority given to ideas of service encapsulation, organizations will have no conviction to realize the benefits to their own organization and deliver value and 'stickiness' of services to customers¹¹¹. Organizations must ensure that their people, process, infrastructure and partners are ready to jump into the new service encapsulation ideas¹¹². Success criteria of service encapsulation must be clearly defined and followed up with effective and transparent incentive scheme to move organizations to deliver values of service encapsulation to end consumers.

15. Service Encapsulation requires local adaptation

Existing service encapsulations that luxury carmakers can localize and offer together with their products are: service inclusive, financial and insurance package, buy-back guarantee, guaranteed resale value, extended warranties and so on. Service Encapsulation needs to be localized in order to maximize customer benefits¹¹³. The globalization process needs a local adaptation to understand the local lifestyle, values, and perception of life. The 'one size fits all' concept does not work¹¹⁴. Other Thai luxury carmakers do not have the flexibility to tailor their product features due to imported CBU. Products might not entirely fit customers' needs and there is no room to personalize whatsoever, which makes it difficult to localize service encapsulation that is related to product offering¹¹⁵. Nevertheless, in order to deliver effective service encapsulation, local adaptation is a mandatory.

In summary, there are many of barriers that come from internal and external drivers. Service encapsulation providers must be fully aware of these barriers and come up with service encapsulation strategy and execution plan in order to effectively bring best values from service encapsulation providers to end customers. Box 12 highlights how Apple creates a success through fulfilling service encapsulation strategy through establishing their own retail network to ensure values of service encapsulation is kept within the control of Apple.

¹¹¹ Interview with Lexus's Dealer Principle, Lexus Auto City, 28 June 2010

¹¹² Interview with Director Dealer Development, BMW Thailand, 28 June 2010

¹¹³ Interview with Director After-sales Services, BMW Thailand, 8 June 2010

¹¹⁴ Interview with Manager Sales, BMW Thailand, 1 June 2010

¹¹⁵ Interview with Lexus's Dealer Principle, Lexus Auto City, 28 June 2010

Box 12: Apple's fulfilling service encapsulation strategy through forward integration

Apple: Fulfilling Service Encapsulation Strategy through Forward Integration

As mentioned by President of BMW Group Thailand, 'Consumer industry is all about retail experience'. The key success factor in the luxury car industry as well as other consumer products is to create the ultimate retail experience.

In computers industry, it has long been perceived that setting up own retail networks cost time and money. The company likes Dell has performed much better than its competitors by setting up the whole business based on on-line and e-commerce. However, in the case of Apple computers, they rethought the concept of retail experience for electronic appliances, PCs and much more. After years of passing retail experience to third parties like department stores and IT outlets, Apple CEO, Steve Jobs, was not satisfied with the overall experience that Apple's customers received. He decided to set up Apple stores with a modern look to reflect the minimalist design of Apple's designs. This is a bold move especially when considering the failure of Gateway's retail outlets compared to the success of the on-line shopping experience offered by Dell. To everybody's acknowledgement, Apple stores have become one of the best retail experiences that consumers have ever had.

Source: Yoffie, D. (2012) Apple Inc. in 2012, HBS Case Collection

5.5 Trends of Service Encapsulation in the Thai luxury car industry

One of the unique characteristics of an automotive sector is that the sector is rather slow to change when compared with other sectors like Banking, Telecom, IT, and electronic appliances. From the recent sub-prime crisis in late 2008, the automotive industry was the hardest hit due to the lack of efficiency and competence, cost overruns, poor ability to predict the market, heavy reliance on the energy industry over which they have no control and so on. Within the last two years, the automotive industry has dramatically changed. The number of players has been reduced. The organizations are reshuffled with huge staff retrenchment. The automotive industry has been forced to improve their organizational effectiveness. Poorly managed carmakers, despite their long history in the business, have been liquidated or taken over by new non-traditional players like Chinese (for the case of Volvo) or Indian (for the case of Jaguar and Land Rover) carmakers.

Particularly in Thailand, the automotive industry has enjoyed tremendous success. The automotive sector has been the brightest and the most promising industry in Thailand. The sector has been supported from the government. Any new government strategically favours an automotive sector, since this sector alone can push GDP, bring new foreign direct investment and create more jobs. The level of influence and lobbying is high in this industry. From the holistic point of view, the future of service encapsulation will be created together with; 1)

Information and IT capability, 2) Custom knowledge and education, 3) Flexible and Individualize, 4) Service encapsulation strategy of the carmaker, and 5) price and positioning of Service encapsulation.

The key learning point for Service Encapsulation here is that to make service encapsulations work and create value in customer's minds, organizations must take care of their customers. It must not practise customer's segregation, so that the organization will please only new car customers due to the management's performance indicators are directly linked to the volume of new car sales, but ignore the majority of customers who may easily eventually make the purchasing decision to replace their current luxury cars. In Thai luxury car market, there are still many service encapsulation opportunities as suggested by survey participants based on service encapsulation questionnaire. Box 13 summarizes other service encapsulation opportunities as suggested by survey participants by completing Qq8.

Box 13: Service encapsulations suggested by survey participants

Service Encapsulations suggested by survey participants
<p>Question 8 in Service Encapsulation in the Thai luxury car industry asks survey participants to identify service encapsulations that they wish to see in the Thai market. List of suggested service encapsulations are: alternative spare parts (OEM parts), free loan car, service personal assistant, on-line service car status, 24 hours service, sales of certified pre-owned cars, information & customer magazine, pre-appointment services, service facility, discount for service, quality of service diagnosis, auto spa, quality enhancement of after-sales service, integrity demonstration and control of after-sales staff, service reminder, service price estimation, availability of accessories and parts, and 24 hours mobility service.</p> <p><i>Source: Outcomes from open-ended question, Qq8 – please identify other services that you may need</i></p>

5.6 Conclusion

This chapter started by highlighting the critical role of service, which is often overlooked by Thai luxury carmakers despite research findings that services will become a main source of revenue in the global automotive industry (Susman et al. 2006). Service Encapsulation is the process of packaging products with other services and products. New services encapsulating existing goods can provide a number of revitalising and innovative roles. Current performances of service encapsulations offered by Thai luxury carmakers were presented.

Consumers' points of view in terms of value perception of Thai luxury car service encapsulations were also presented and, ultimately, led to the proposal of the

Service Encapsulation Delivery Model. The model aims to describe the relationship among three parties who largely contribute to the process of service encapsulation delivery and success/failure of outcomes. Interplays among service encapsulation players which are broadly classified as internal (NSC), intermediary (dealer) and external (outsourcing vendor) define the success of service encapsulation. Luxury carmakers are MNC firms which might represent inexperience and lack of knowledge of local customers. Excellent and innovative advanced products that have proven very successful in other markets do not guarantee success in the local market (More 2011). A poor service encapsulation delivery model drives customers away. It takes time to change the local perceptions of brands and their service reputations.

Empirical findings from qualitative analysis together with the conclusions and findings drawn from the quantitative analysis helped to define the barriers to service encapsulation in Thai luxury car market. Lastly, future trends of service encapsulation, which were summarized from the questionnaire of Service Encapsulation in the Thai luxury car industry, were presented and merged with qualitative outcomes to draw conclusions and findings.

Chapter 6 - Maximizing Return on Innovation through Service Encapsulation: A Case Study in the Thai Luxury Car Industry

The main purpose of service encapsulation is to enhance the performance of product and service innovation and help profit-seeking organizations to achieve commercial value. Service encapsulations in the luxury car industry must also help carmakers to strengthen their market positioning, increase financial performance and enhance brand equity. This study aims to provide insights into what the combination of driving forces is to create the proper service encapsulation. Empirical findings indicate that service encapsulation providers must fulfil or exceed customers' expectations. This can only be achieved by i) understanding customers' requirements, ii) the ability of the organization and its service encapsulation partners to fulfil such requirements, and iii) the courage to go beyond norms and exceed customers' expectations. The study will reveal the key ingredients to maximize the commercial value of innovation through service encapsulation.

This chapter starts by explaining the concept and classifications of return on service encapsulation as results of the literature review and qualitative analysis (section 6.1). Then, criteria for future purchase of luxury car and brand loyalty are summarized as results of quantitative analysis (section 6.2). Under section 6.3, discussion and finding on key success factors in maximizing return on service encapsulation are described. Inputs from the literature and empirical studies of face-to-face interviews and the service encapsulation survey are synthesised to propose a 'Service Encapsulation Commercialization' framework, modified from the work of Sundbo and Gallouj (2000) (section 6.4). Lessons learned from the Thai luxury car industry and implications of this knowledge for general practitioners are highlighted under section 6.5. This chapter is then concluded in section 6.6.

6.1 Return on Innovation

From the literature review, researchers seem to agree on one concept about two broad classes of performance measure which can be adopted as suggested by Drake et al. (2006). The first is concerned with accounting and financial performance, such as profitability, return on investment (ROI) and share price. The second is concerned with market performance, which usually means the share of growth in comparison with industry. This research will explore both concepts in greater details.

6.1.1 Concept of Return on Innovation from Service Encapsulation

Service encapsulation efforts from organizations must bring commercial value. Commercial value can be broadly classified into two categories: tangibles and intangibles. Tangible values are revenue & profit, and market shares. However, since an organization's revenue and profit are also associated with other accounting and financial items like depreciation, liabilities, interest expenses and so on where information is not publicly available, for the purpose of this study, units sold and accumulated car population will represent revenue and profit of luxury carmakers. Market share is another tangible value that represents current business performance of luxury carmakers in relation to other luxury carmakers in Thailand. Intangible values include brand perception and preferred luxury car brand for future purchase which, somewhat, can indirectly predict future business performances.

6.1.1.1 Units Sold and Car Population

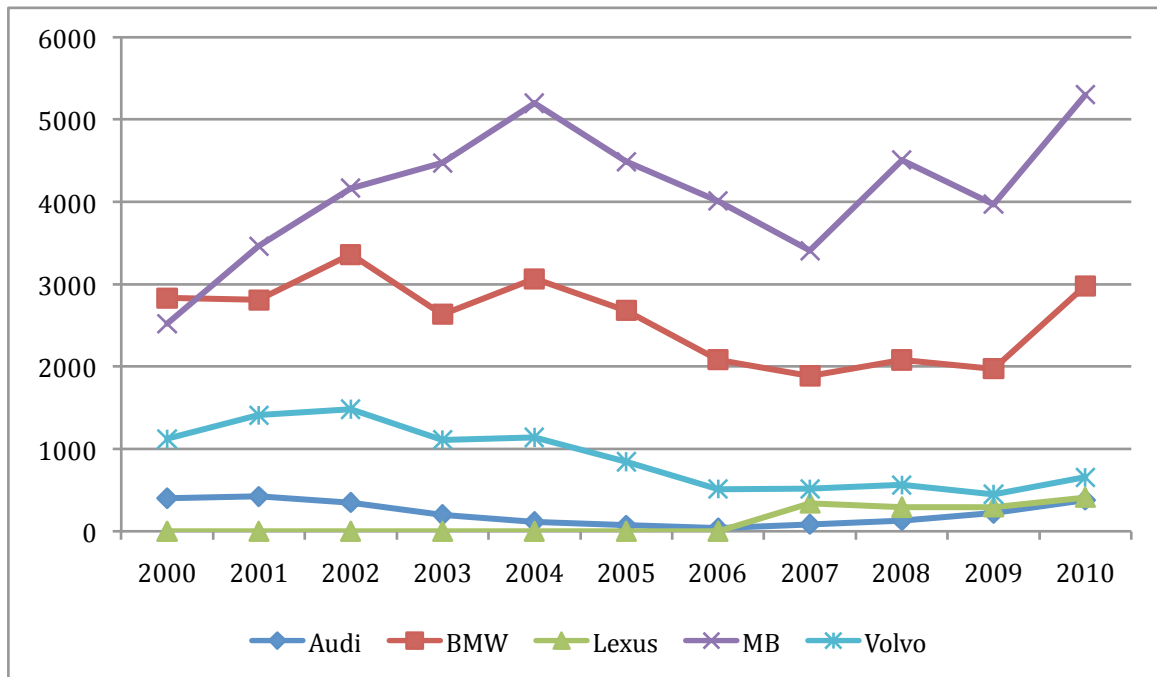
Number of new cars sold is the ultimate financial indicator for automotive companies. NSC has been closely monitored from their head office based on number of new cars sold and market share in order to evaluate NSC's performance in comparison to other markets. The process to generate one unit of new car sold is very complex and involves many persons and organizations. Nevertheless, the process can be broadly captured by using Marketing mix

model¹¹⁶ which is product, price, place and promotion. Luxury car customers can be divided into 4 broad segments: retail customers, corporate customers, fleet operators and diplomats, and each customer segment requires a different combination of 4P to generate a new car sale. Retail customers who typically own luxury cars for an average of 4 years will be more concerned about running costs and resale value. They purchase luxury cars with a consideration to financial impacts like depreciation and residual values. Corporate customers and diplomats might not be much concerned about price but more with the image, luxury and comfort. Fleet operations tend to consider more operation costs and after-sales service like availability of spare parts, mechanics and service reception, since they need to generate enough revenues to cover expenses and generate profits. 4P model needs to go together with the service encapsulation delivery model in order to convince customers to purchase luxury cars.

Figure 22 shows that during the transition of sole distributor to NSC in 2000, Mercedes-Benz suffered a huge drop in sales, which mainly came from running out of stock to sell to customers. In contrast, at BMW, the former distributor decided to take up all remaining stock at the discounted price, resulting in a jump in BMW new car sales in 2000. Only in 2000 did the sales of BMW exceed the sales of Mercedes-Benz. Since then, Mercedes-Benz has outperformed Thai luxury car industry, with average sales growth of 11% during 2000 to 2010. While BMW reached its peak in 2002 with the sales figures of 3,361 units, BMW has also experienced marginal growth of 0.5% during the same period. Volvo has suffered the largest sales decline by more than 100%. Audi has experienced negative growth during the same period.

¹¹⁶ The marketing mix and the 4Ps are often used as synonyms. Marketing mix describes the choices organizations have to make in the process of bringing a product or service to the markets.

Figure 22: Thailand luxury car – New car registration (2000 – 2010)



Source: Thailand's Ministry of Transport

The number of new cars sold will eventually impact on the total car population of luxury car brands. The importance of car population by brands is that this figure determines the potential success of after-sales businesses. While the after-sales business is not the first priority from NSC's point of view, the after-sales business is the 'bread-and-butter' for dealers. Dealers decide to enter a dealership agreement in anticipation of the potential revenues and incomes from sales and after-sales. The success of new car sales will eventually support the dealer's future after-sales business. Some portion of the car population might not come to dealers for service since the units might be too old to be serviced at the authorized dealers. Table 30 shows the luxury car population that is still active in Thailand. Mercedes-Benz once again leads the car population by having 157,638 units that are still active which is twice as many as BMW (only 85,038 units). Volvo also shows a high car population figure despite the poor sales performance recently. This indicates that most of their active population is aged over five years. Audi and Lexus have fewer units and their customers are mainly in Bangkok.

Table 30: Luxury car population in Thailand as of November 2011

Total Car Population	Audi	BMW	Lexus	Mercedes-Benz	Volvo
Bangkok	1,447	61,102	3,021	125,219	37,864
Up-Country	311	23,936	225	32,419	16,987
Total	1,758	85,038	3,246	157,638	54,851

Source: Thailand's Ministry of Transport

6.1.1.2 Market Shares

Market share is a direct result of luxury car performance by comparison with the luxury car market in general. The Thai luxury car industry is an oligopoly which is best described as a few players dominating the market. Being number one always creates big marketing messages which emphasise brand recognition and potential for future purchase. Moreover, the sales performance of luxury products depends largely on the economic situation and political situation. During the past five years, Thailand has been through a series of economic downturns and political instability. In 2007, a military coup, and a series of political activities began. In 2008, the sub-prime crisis from the US had an impact on the world economy. Even though Thailand was marginally impacted, this crisis impacted directly on the structure of carmakers. General Motors (GM) decided to sell Volvo to the Chinese's Zhejiang Geely Holding Group in 2010, resulting in poor performance of Volvo globally. Market share is another key performance indicator that measures how well a carmaker is doing when compared to its direct competitors.

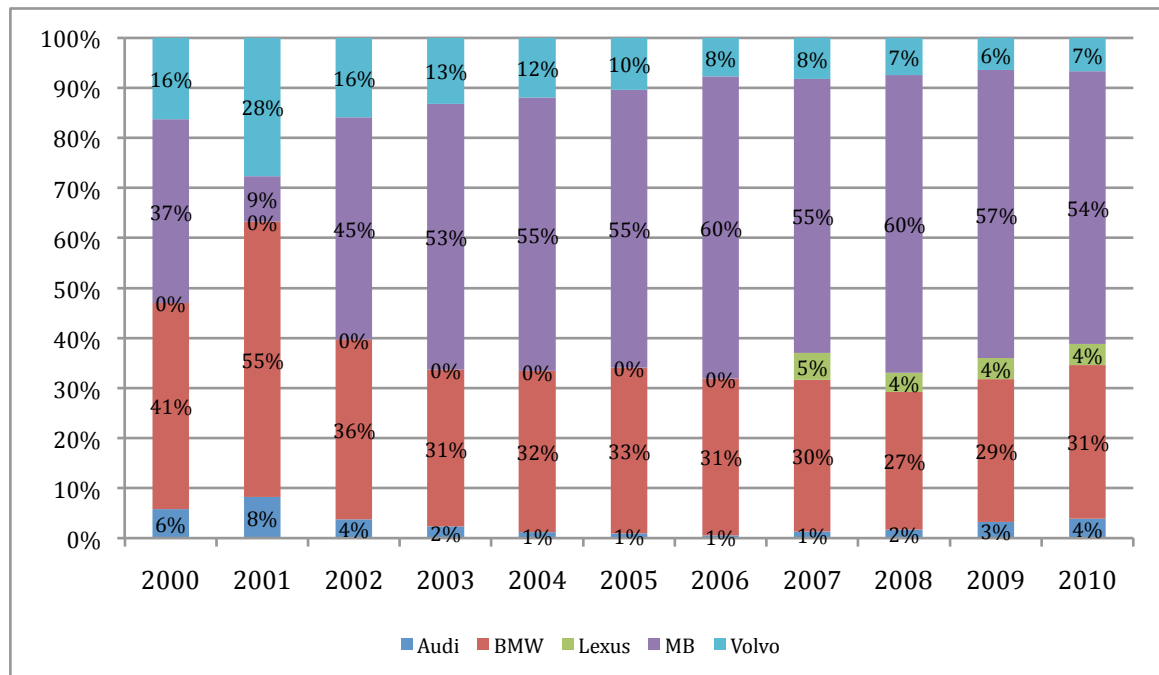
Mercedes-Benz has outperformed other competitors by achieving more than 50% of market shares in luxury car industry starting from 2003 onward. In both 2006 and 2008, Mercedes-Benz market share reached 60% due largely on the new model launches. BMW's market share reached the peak of 55% in 2001 because an ex-distributor decided to take old stock from the newly established BMW Thailand, while Mercedes-Benz ran out of stock to be delivered to customers in the same year. From the peak in 2001, BMW's market share has decreased and stabilized at around 30% of the total luxury car market. If we are compared to MB, our products have more innovations inside our car. Still they manage to capture more market share than us. MB is perceived as a status symbol. Customers of MB do not really compare the products with us¹¹⁷.

Figure 23 illustrates Thailand's luxury car market share by brands. The market shares of Volvo and Audi have decreased substantially and been taken up by

¹¹⁷ Interview with President, BMW Group Thailand, 11 June 2010

Mercedes-Benz. Lexus's market share has stabilized during 2007 – 2010 at around 4% of the total luxury car market in Thailand.

Figure 23: Thailand's luxury car market share by brands (2000 – 2010)



Source: Thailand's Ministry of Transport

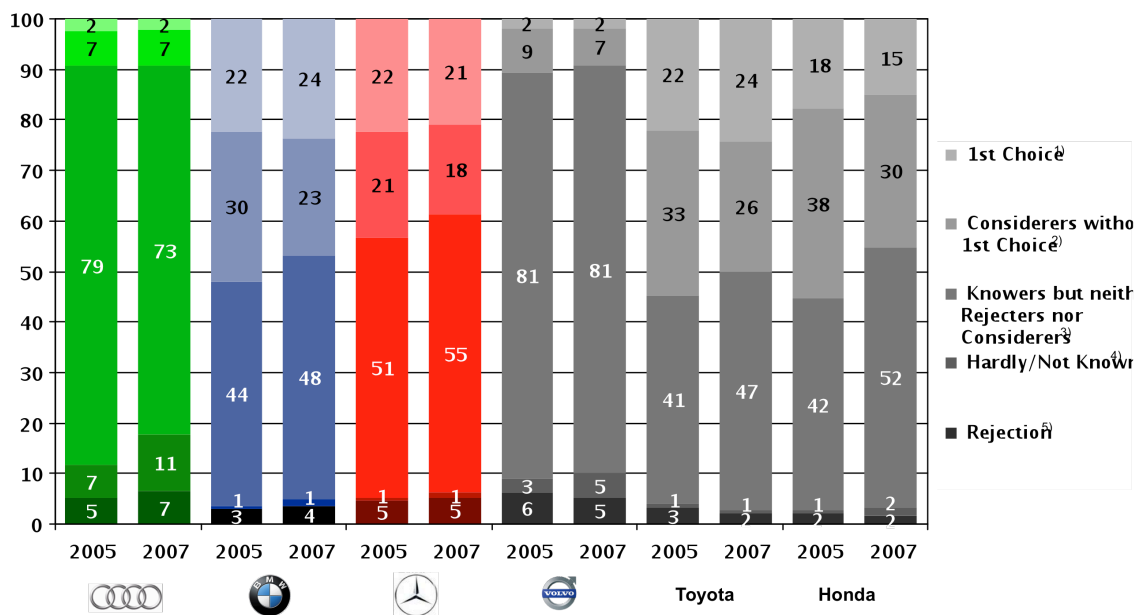
6.1.1.3 Brand Perception

Brands have a significant role in all luxury products (Coste-Maniere 2012). Unlike other luxury goods, luxury automobiles have unique branding characteristics since consumers demand the premium image together with extra innovations and features such as comfort, safety, and performance. Luxury car consumers have to live with the quality of after-sales for many years. Consumers also expect luxury cars to retain reasonable value in the future, which also means the brand perception should be positive in the future as well. Similar to other luxury products, luxury carmakers invest a lot in marketing activities and advertisements such as motor sports, yachting, brand experience, museum, motor shows, print ads and TV ads and so on. Ultimately, luxury carmakers wish to instil brand desire and brand preferences in consumers' minds, and expect that those preferences will be converted to brand consumption eventually.

It has become a normal practice for the luxury car industry to conduct brand monitoring to compare brand strength in the industry. Figure 24 shows the

results from the Brand Monitor Relevance Analysis for Thailand in 2007. This survey was conducted by the international marketing research firm, GfK, with 600 participants. Brand strength was the result from the averaged scores of 8 questions¹¹⁸. BMW and Mercedes-Benz came out on top of the luxury cars in terms of brand strength. Volvo and Audi came far behind. This outcome is also in line with the marketing budgets spent in the Thai market, where Mercedes-Benz and BMW have spent the most in the Thai luxury car industry¹¹⁹.

Figure 24: Purchase Funnel – Brand Affinity



Source: BMW Brand Monitor Relevant Survey for Thailand 2007, GfK

6.1.1.4 Luxury Car's Future Purchase

The size of the luxury car market in Thailand has shrunk by 60% from the peak in 1995 to 2010. The luxury car consumer group has become smaller. To sustain and improve the business performance of Thai luxury carmakers, companies deploy two customer strategies; i) customer retention – maintain current customers who already have product experience, and ii) customer conquest – take away customers from other automotive companies, not limited to luxury car

¹¹⁸ Average score over 8 questions, asked on a scale from 1 to 5, where 1 means 'doesn't apply at all', and 5 means 'applies completely', questions are: 1) I would like to own, 2) I would seriously consider buying, 3) I fully trust, 4) I or friends of mind have had very good experiences with, 5) I would also recommend to friend, 6) I have a good impression, 7) I can fully identify with, and 8) Fit well to my personal style.

¹¹⁹ Source: Marketinfo Co., Ltd. (www.marketinfo.in.th), in 2009, biggest marketing media spenders are; 1) BMW, 2) Mercedes-Benz, 3) Lexus, 4) Volvo

customers. While the strategy of customer retention must be carefully implemented by providing the retail experience, including product experience and after-sales experience, the customer conquest strategy requires a well planned marketing strategy to offer the right product at the right price as a complete solution to consumers' individual transportation needs and luxury image. Future purchase is also linked very tightly with the previous topic of brand strength. Without brand strength, there will be no future purchase. However, it is very interesting to observe that the performance in future purchase analysis does not necessarily guarantee commercial success in the future. For the desire for future purchase, consumers also rely on their emotion and desire for a certain brand, however when it comes to the real purchase, consumers apply reason and logic to select brands that best fit their transportation needs, including other factors such as luxury image, running costs, quality and convenience of after-sales, and economical values.

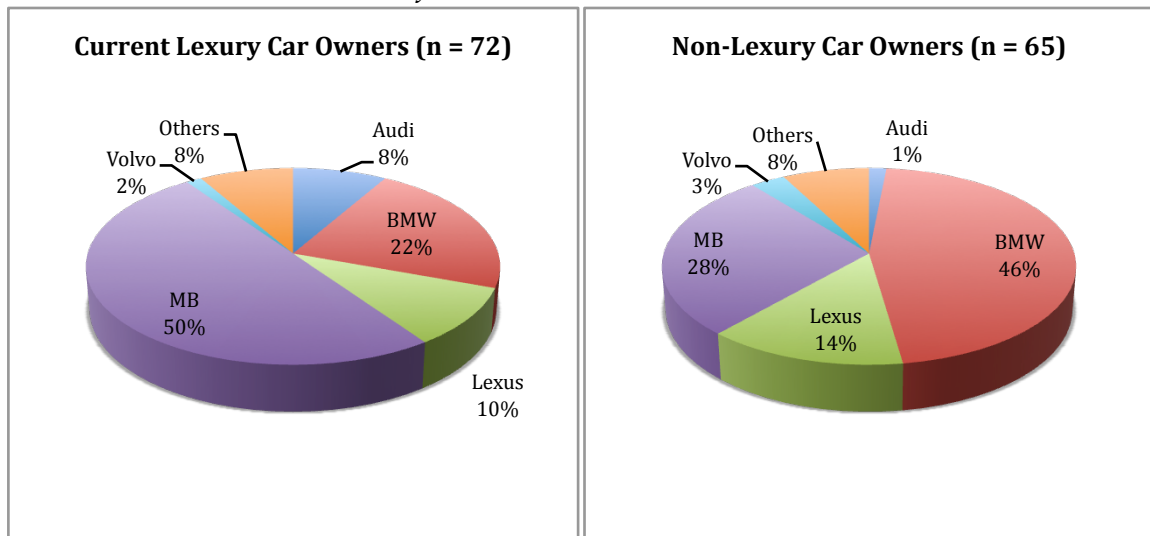
From market research conducted by R.L. Polk & Co. (2011)¹²⁰, results confirmed that consumers tend to be attracted by the young and sporty image of BMW over the mature and traditional image of Mercedes-Benz. Moreover, as research outcomes from GfK (2007) indicated, the number one preferred luxury car brand for future purchase from their study in 2007 was BMW. However, BMW did not successfully convert these preferred groups of consumers into real consumption, due to the overall performance under service encapsulation as mentioned previously.

Figure 25 indicates outcomes from the question that asked participants who planned to purchase luxury cars in the future to choose the brand of choice. Descriptive statistic analysis divided the participants into two groups: current owners of luxury cars and non-owners of luxury cars. 137 participants from the total of 206 or 66.5% expressed their interest and had plans to purchase luxury cars in the future. Out of 137 participants, 72 participants currently owned luxury cars, and 65 participants did not own luxury cars. For the current owner of luxury cars, the ranking was Mercedes-Benz (50%), BMW (22.2%), Lexus (9.7%), Audi (8.3%), Volvo (1.4%), and others (8.3%). Mercedes-Benz was the most

¹²⁰ R.L. Polk & Co.'s 2012 New Luxury Vehicle Loyalty Studies conducted by Polk and Autotrader.com

preferred brand for the current owners. Nevertheless, ranking outcomes from non-luxury car owners revealed the very interesting fact that the number one preferred choice was BMW (46.1%), followed by Mercedes-Benz (27.7%), Others (7.7%), Lexus (10.8%), Volvo (3.0%), and Audi (1.5%). BMW was the most preferred brand for the non-luxury car owners. This finding supported outcomes from GfK (2007) on Thailand automotive brand affinity.

Figure 25: Survey results of Qq12.1 - Do you have a plan to purchase a luxury car in the future and which brand?



6.2 Criteria for Future Purchase and Brand Loyalty: Findings from Quantitative Analysis

6.2.1 Consumers' reasons to purchase luxury cars in the future

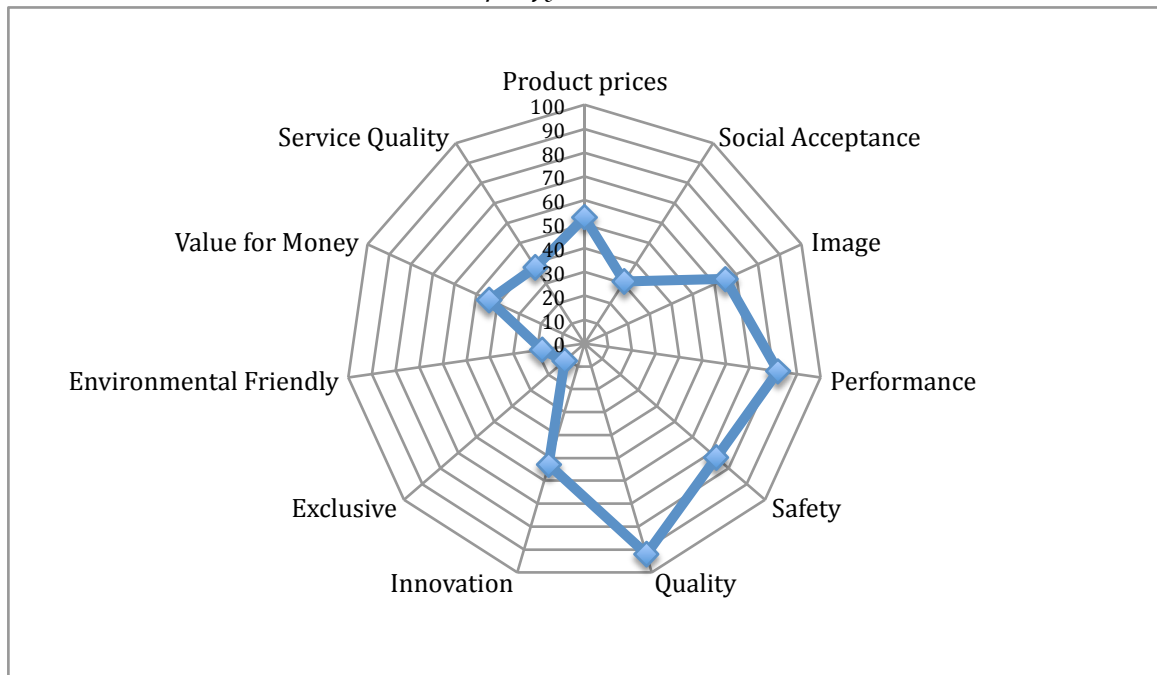
A new trend had emerged here: that customers were looking for 'performance' over 'social acceptance' and 'brand image', especially newly emerging customer groups, who currently might not own luxury cars but were willing to consider buying luxury cars in the future. Table 31 provided the descriptive statistic for Qq12.2 that asked participants who planned to purchase a luxury car in the future to state reason(s). Outcomes of reasons for purchasing luxury cars were the same for current luxury car owners and non-luxury car owners.

Table 31: Descriptive statistic for Q12.2 - if you plan to buy a luxury car in the future, please specify reason(s) (n = 206)

Reason	Current owners of luxury car		Total
	Yes	No	
Product Price	24	29	53
Social Acceptance	17	14	31
Image	33	32	65
Performance	43	39	82
Safety	36	37	73
Quality	47	45	92
Innovation	28	25	53
Exclusive	5	6	11
Environment Friendly	9	9	18
Value for Money	20	24	44
Service Quality	19	19	38

Therefore, Figure 26 illustrates a summary of replies that stated each reason for future purchase. For the luxury car buyers in the future, customers put high emphasis on five key areas: 1) 'quality', 2) 'performance', 3) 'safety', 4) 'image' and 5) 'product price'. 'Innovation' was ranked 5th for current luxury car owners and 6th for non-luxury car owners, which were far from the top criteria for luxury car buying in the future. Outcomes also revealed an interesting shift in desirable characteristics expected from luxury cars. Luxury cars could not rely on 'image' and 'social acceptance' alone, since consumers wanted to experience products. Demand for quality, performance and safety would shape future luxury car products. Even if innovation received a low ranking, however, innovation was integrated seamlessly in the key reasons for future purchase. Carmakers required innovation to deliver unique features of quality, performance and safety sought after by luxury car consumers.

Figure 26: Outcomes from Q12.2 - if you plan to buy a luxury car in the future, please specify reason(s)



6.2.2 Luxury car's brand loyalty

As numerous studies have demonstrated, satisfied customers exhibit considerable loyalty in respect of a product or service that they have already purchased previously from the same supplier; and loyal customers can be considered to represent an asset value (Herrmann et al. 2000). Table 32 illustrates the descriptive statistic analysis and t-test of Qq10 that asked participants to rate the level of importance of each factor that contributed to loyalty in the luxury car industry. Participants were divided into two groups, current luxury car owners and non-luxury car owners. A t-test of factors that contributed to customer loyalty in the Thai luxury car industry compared significance between current luxury car owners and non-luxury car owners. Results of the t-test implied that only 'image and social acceptance' factors showed significant difference between both groups ($t(200) = 2.84, p < .05$).

Table 32: Descriptive statistic and t-test for Qq10 – Ranking of customers' loyalty criteria for the luxury car industry

Currently own luxury car or not		N	Mean	Std. Deviation	t Value
Product quality	Yes	92	4.49	.671	1.565
	No	109	4.39	.732	
Customer satisfaction	Yes	91	4.45	.671	.978
	No	109	4.39	.720	
Resales value	Yes	91	3.47	1.148	6.796
	No	109	3.56	.886	
Service quality	Yes	91	4.46	.704	1.179
	No	109	4.31	.766	
Image & Social acceptance	Yes	92	4.16	.975	2.840*
	No	109	3.84	.807	
Innovation	Yes	92	3.97	.831	.970
	No	109	3.93	.857	
Value for money	Yes	89	4.07	.902	.130
	No	109	3.98	.923	
Environmental friendly	Yes	92	3.59	1.071	.010
	No	109	3.49	1.077	
Customer Relationship Management	Yes	92	3.40	1.049	.825
	No	109	3.12	.988	
Value added service	Yes	91	3.74	1.020	.115
	No	107	3.55	.964	

* $p < .05$

The ranking of factors that contributed to customer loyalty in the Thai luxury car industry were provided in Table 33. For current luxury car owners, the top three factors that contributed to customer loyalty were 'product quality' ($mean = 4.49$, $SD = 0.67$), 'service quality' ($mean = 4.46$, $SD = 0.70$), and 'customer satisfaction' ($mean = 4.45$, $SD = 0.67$). Outcomes from non-luxury car owners showed similar top three factors with different ranking. Top-three criteria for non-luxury car owners were 'customer satisfaction' ($mean = 4.39$, $SD = 0.72$), 'product quality' ($mean = 4.39$, $SD = 0.73$), and 'service quality' ($mean = 4.31$, $SD = 0.77$). Customers would stay loyal to the brand if the brand justified the premium price by providing superior product quality. Customers would also stay loyal to the brand when the brand delivered superior customer satisfaction. 'Service quality' came in the top-three and reconfirmed the level of importance of the area of service from customers' point of view. Survey results of 'service quality' consistently indicated that customers considered service when they made a buying decision.

Table 33: Mean ranking for Qq10 – Ranking of customers’ loyalty criteria for the luxury car industry

Ranking	Luxury car owners	Non-luxury car owners
1 st	Product quality	Customer satisfaction
2 nd	Service quality	Product quality
3 rd	Customer satisfaction	Service quality
4 th	Image & Social acceptance	Value for money
5 th	Value for money	Innovation
6 th	Innovation	Image & Social acceptance
7 th	Value added service	Resale value
8 th	Environment friendly	Value added service
9 th	Resale value	Environmental friendly
10 th	Customer relationship management	Customer relationship management

Customers would also be loyal to the brand when the brand justified their premium purchase for the purpose of ‘image and social acceptance’. Luxury brand still needed to deliver their premium image in order to keep customers loyal. ‘Value for money’ was the next criteria. Customers took into account the running cost to justify their value for money criteria. ‘Innovation’ was ranked number six for current luxury car owners and number five for non-luxury car owners. It is important to note that innovation was ranked among the lowest criteria for buying decision as well as criteria for customer loyalty.

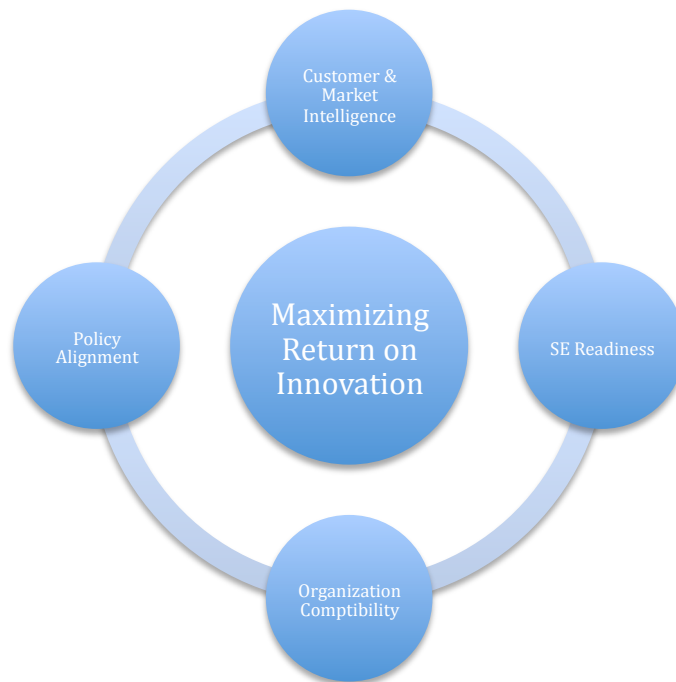
Another factor was ‘environmentally friendly’ which received the 8th ranking for current luxury car owners and the 9th ranking for non-luxury car owners. Perhaps, in Thailand, customers did not have to pay anything extra when their vehicles became less environmentally friendly, unlike the UK, where customers had to pay tax based on CO₂ emission. This required action from the government to put the environment issue back in the customers’ minds. Surprisingly, the lowest factor that contributed to customer loyalty for both groups is ‘customer relationship management (CRM)’. Providing CRM activities for mass customers was deemed ineffective. Luxury cars that could provide customer-specific CRM activities received a higher level of customer loyalty. As Lexus’s dealer owner explained ‘strengths of Lexus are we know customers and can offer a tailor-made service which creates higher brand loyalty¹²¹’. Customers value their immediate benefits over the long-term relationship with the brand.

¹²¹ Interview with Lexus’s Dealer Principle, Lexus Auto City, 28 June 2010

6.3 Discussion and Finding: Key Success Factors in Maximizing Return on Service Encapsulation

To maximize return on innovations through service encapsulation, there are 4 categories of key success factors. Firstly, organizations must clearly understand markets and customer intelligence. Organizations need to understand what the unique value proposition of service encapsulation, and whether or not it meets and exceeds the customers' requirements. Secondly, organizations must assess their readiness. Service encapsulation readiness includes understanding of the service encapsulation concept and strategic priority from organizations. Organizations also need to understand requirements and availability of related infrastructure and technologies. Thirdly, organizations must ensure their organizational compatibility to deliver values of service encapsulation. Organization compatibility includes topics of strategy, organization and people, working process and technologies. Many good initiatives on service encapsulation fail to deliver because the organization has no capability to do so. Lastly, the organization needs to ensure full compliance with government policies. Alignment to government policy will bring financial benefits like tax incentives, and non-financial benefits like image to local governments and consumers. Some dominant carmakers can even influence the government policy to fit with their technologies and innovations. These 4 service encapsulation key success factors enhance the performance of service encapsulation providers by maximizing the return on innovation through service encapsulation. Figure 27 illustrates four categories of service encapsulation's key success factors.

Figure 27: Four categories of service encapsulation's key success factors



Source: Author's analysis from face-to-face interviews

6.3.1 Market and Customer Intelligence

Innovation is nothing without delivering customer benefits. Customers do not simply buy an innovation. They buy their own benefits. Organizations must stay close to customers, listen to them and must anticipate their demands and offer solutions¹²². Carmakers can provide world-class technologies and the latest innovations in their products. However, those technologies and innovations might not bring any value if customers fail to understand what technologies and innovations can do for them. In many cases, organizations are so proud of their long history of innovation leadership and technology supremacy that they ignore the crucial fact that customers are not interested¹²³ (because they fail to see the benefits). Organizations must take a 'customer-centric' approach and evolve their technology and innovation around customers¹²⁴. Due to the fierce competition among carmakers, it is mandatory for players who want to succeed in the industry to understand customers, not only for today, but customers for the

¹²² Interview with General Manager, MINI Thailand, 2 April 2010

¹²³ Interview with Manager Dealer Development, BMW Thailand, 7 April 2010

¹²⁴ Interview with President, BMW Financial Services (Thailand), 22 June 2010

future as well. Empirical study also highlights the need for market and customer intelligence. An empirical study also supports this statement as followed:

What you need is a market investigation, economic study for example, who is your customers in the future? We need 5 years to develop a car. Within 5 years people change we need to consider who should be our customers? Who should I attract? The social economic level is always changing.¹²⁵

Luxury carmakers still believe that Asian people put more weight on image and prestige and much less on innovations and technologies and environmental issues. This assumption is invalid and needs to be proven. Carmakers cannot allow pre-assumption to dictate their products and innovation offering¹²⁶. Innovations and technologies need local adaptation. In order to launch GPS or navigation systems in Thailand, the system must be able to deliver in Thai¹²⁷. There is no real benefit from taking entire innovations or service encapsulations from another market and plugging it in into Thai customers without any proper customer feedback. Carmakers must be flexible enough to tailor their offering to suit the local taste¹²⁸. Carmakers have to understand the market need and look into the future; what is new, beneficial, reliable, or cost efficient, and it may be a customer choice to select whether to go for it or not¹²⁹.

In Table 34, the summary of Market and Customer Intelligence Checklist is presented to conclude the findings from face-to-face interviews and to provide suggestions on what organizations need to do to ensure their preparations match market and customer intelligence.

Table 34: Market & customer intelligence checklist

Market & Customer Intelligence Checklist
<ul style="list-style-type: none"> • Organization fully understands customers' values and needs for service encapsulation • Organization anticipates the trend of customer socio-factors including demographic change even if customers are not aware of such changes yet • Organization has a clear idea on service encapsulation's value proposition to customers • Organization closely monitors service encapsulation offered by their competitors • Organization closely monitors service encapsulation offered in other industries • Organization has mechanisms to investigate market intelligence to gain customer insights • Organization stays up to date with their customers

Source: Author's personal analysis from face-to-face interviews

¹²⁵ Interview with Managing Director, BMW Manufacturing (Thailand), 7 April 2010

¹²⁶ Interview with Manager Technical Support, BMW Thailand, 22 June 2010

¹²⁷ Interview with Manager Technical Support, BMW Thailand, 22 June 2010

¹²⁸ Interview with Motoring Journalist, the Nation, 28 June 2010

¹²⁹ Interview with Manager Dealer Development, BMW Thailand, 7 April 2010

Customer involvement refers to an in-depth understanding of customer needs. Also, the involvement of customer contact personnel (frontline employees) is essential because they are the actual deliverers of the service in question (de Brentani 1995). Innovators all too often allow themselves to be led by supposed general knowledge, instead of conducting independent market research. Everyone seems to 'know' what the customers want but nobody has actually asked them (Dorner et al. 2011).

6.3.2 Service Encapsulation Readiness

Service encapsulation must be able to deliver value to consumers. It is important for organizations to ensure that all related features such as infrastructures are ready. Customers need simplified and user-friendly innovation. In the automotive industry, car owners might get excited about new innovations and features in the beginning. If the total package of innovations and service encapsulation fails to deliver value, customers will stay away from carmakers. Organizations need to ensure that quality and reliability is in-place as well. Otherwise, there is no point in organizations offering any new fancy service or innovation. Service encapsulation mindsets might not come naturally to organizations. Instead, organizations need to incubate service encapsulation readiness. Organizations need to explore beyond their immediate industries to search for ideas and potential for service encapsulation that might fit with their customers' service expectations. Having ideas is just a starting point; organizations need to assess the readiness of infrastructure and technologies in the local market. Many good service encapsulation ideas from other markets cannot simply be implemented without careful assessment of infrastructure readiness¹³⁰. Best practices from other industries can serve as an inspiration since when you focus on a single product, the focus is only on the product, which has to be based on pricing and discount. There is no clear structure in the service industry, which captures about 70% of world GDP¹³¹.

Outcomes from empirical studies also reveals that organizations often fail to demonstrate a full commitment to service encapsulation. Customers also feel overwhelmed by the amount of service encapsulations and feel confused on

¹³⁰ Interview with Director Dealer Development, BMW Thailand, 28 June 2010

¹³¹ Interview with General Manager, BMW Financial Services (Thailand), 9 June 2010

which one is right for them as Director of Dealer Development from BMW Thailand explained:

The problem of carmakers is not because they lack innovation or service encapsulation but, surprisingly, they offer too many without real commitment. This situation is very close to the topic of trust. In order to deliver service encapsulation value, customers need to trust service providers. Customers might give service providers a chance by trying their service encapsulation offering but if the experience is negative, they will leave dissatisfied and might not return at all. The key point is focus on and commitment to service encapsulation that organizations can deliver exceptionally well¹³².

Service encapsulation must be provided with economic and financial values in mind. The cost of ownership for innovation should be reasonable. Innovation must deliver benefit, not burden. Innovation that creates a high cost of ownership will not survive. Table 35 summarizes checklists under the category of service encapsulation readiness. Organizations need to ensure that they have sufficiently gone through the checklist to ensure their readiness before embarking on service encapsulation.

Table 35: Service encapsulation readiness checklist

Service Encapsulation Readiness Checklist
<ul style="list-style-type: none"> • Organization has a clear idea on service encapsulation's value proposition to customers • Organization has well-defined and focused service encapsulation strategies in place • Organization ensures the simplicity and ease to understand and communicate • Organization fully understand technology requirements • Organization fully understand others infrastructure requirements • Organization gains the reasonable high level of trust from customers • Organization has a good service encapsulation plan in place • Organization has an ability to form up co-operation with other service encapsulation partners as required • Organization has processes that enable data transparency that integrated throughout the service encapsulation process

Source: Author's personal analysis from qualitative analysis

Market research helps firms gain a better understanding of customer needs and allows them to design service packages to fit different customer profiles (John and Storey 1998). Formal market tests create customer feedback for evaluating and further redefining new services (de Brentani 1995). The responsibilities for developing new services are frequently unclear. The sales and marketing departments are inclined to promote services, which facilitate more effective marketing of core offerings. Typically, R&D sees itself rather as the driver of

¹³² Interview with Director Dealer Development, BMW Thailand, 28 June 2010

technical innovation and not as a contact point for services, which are oriented directly to customer needs (Dorner et al. 2011).

6.3.3 Organization Compatibility

Many managers who make investment decisions do not fully recognize the value of service innovation as a competitive advantage (Dorner et al. 2011). Moreover, for a successful new service development, it is important that senior management constantly encourage service innovation. In order to deliver their services, organizations must deliver the whole customer experience, the full service process and skills of the employees (Dorner et al. 2011). The knowledge embedded in human capital enables firms to enhance distinctive competencies and discover innovation opportunities. When firms develop innovation activities, they encounter relatively greater uncertainty and variability in the innovation process (Luca and Atuahene-Gima 2007), and they need creative employees, who are flexible, risk taking, and tolerant of uncertainty and ambiguity (Madsen and Ulhoi 2005). Good innovation needs strong full organizational supports. To become a competent organization, the organization must start with capable management, clear vision, and innovation readiness supported by competent staff. If organizations fail on these requirements, they have no chance to succeed commercially. An empirical study also supports this argument.

There are three parts; firstly, the policy level from the management needs to be clear, secondly, people in the organization must have the ability to understand about the new policy, thirdly, financial cost per head should be justifiable and reasonable¹³³.

For a profit seeking organization to survive in the long run, organizations need to be financially successful. Innovation is an investment. The return on investment should be well justified and should propel organizations into the future. There is no point in coming out with the best in class innovation if the cost of such innovation just pulls the whole organization down¹³⁴. Organizations must focus on their strengths. Findings from an empirical study also support this statement:

If innovation is the backbone of carmakers, carmakers cannot give up inventing new technology to set the benchmark for the whole automotive industries.

¹³³ Interview with BMW's Dealer Principle, Barcelona Motor, and Managing Director, Ducati (Thailand), 21 June 2010

¹³⁴ Interview with President, BMW Group Thailand, 11 June 2010

Carmakers cannot think short-term by cutting off their technology in order to reduce their product prices and gain market share. This strategy might work but only for the short term. Carmakers must find their strengths and recapitalize on them. When you have innovation, reliability is reduced. It can't go together. It's like one coin always has two sides. Support from service processes must be ready. Innovation can't come alone because it needs reliability. Internal parties must be able to support innovation as well¹³⁵.

Table 36 summarizes the checklist for organization compatibility. Organizations need to ensure that their organizations have clear vision and goal, adequate competencies and well-structured processes to implement service encapsulation ideas.

Table 36: Organization compatibility checklist

Organization Compatibility Checklist
<ul style="list-style-type: none"> • Organization knows their core strengths and weaknesses • Organization has clear goals, vision and priority on service encapsulation • Organization has well-defined set of realistic expected outcomes • Organization has a reasonable investment plan for service encapsulation • Organization has existing competencies to execute service encapsulation • Organization has a clear articulated plan to acquire competencies that are critical to service encapsulation • Organization has well structured working process to support service encapsulation • Organization has flexibility to modify their strategic direction, acquire competencies and restructure process to fit with service encapsulation

Source: Author's personal analysis from qualitative analysis

6.3.4 Policy Maker Alignment

In order to deliver values of service encapsulation, organizations need to understand the existing rules and regulations. Organizations need also to anticipate new rules and regulations that might replace the existing ones. Some rules and regulations are barriers to Service Encapsulations. For example, new financial products are subject to approval by the Bank of Thailand and Ministry of Commerce¹³⁶. New technologies and innovations must pass the homologation process conducted by the Ministry of Transport regardless of how such technologies are widely used in other markets¹³⁷. One of the most important topics of current business operation is environment issue. The automotive industry is unarguably the main contributor to releasing CO₂ and creating the greenhouse effect. The automotive industry needs to take charge and collaborate

¹³⁵ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

¹³⁶ Interview with General Manager, BMW Financial Services (Thailand), 9 June 2010

¹³⁷ Interview with former Director After-sales Services, BMW Thailand, 1 June 2010

to solve this issue. The first priority of innovation in the automotive industry is how the future car can consume less, run on clean energy, be able to reuse and recycle. All governments in the world are trying to find the best eco-friendly solutions in their local contexts. It has become the first priority for carmakers to understand what energy policy and alternative drive train will be given priority in the local market. Typically, governments provide tax incentives and other privileges to push such innovations and technologies. There is no point in offering new innovations, only to realize later that such innovation goes against the local rules and regulations.

Due to significant Japanese's contribution to Thai economy, Japanese carmakers have influence over local government when determining the preferred new technology and future drive train¹³⁸. Japanese carmakers are ahead in terms of smaller size car and hybrid technology and it comes as no surprise that the Thai government is providing a huge tax incentive for eco-car and hybrid technology¹³⁹. European carmakers are very experienced in the high performance diesel technology, but they receive little attention from the local government. Working hand in hand with the local government and creating good understanding with policy makers is the smart way to get the best technologies and innovations through. Table 37 summarizes the checklist for Alignment with Policy Makers. Organizations must ensure sufficient assessment especially for rules and regulations that are required by law.

Table 37: Alignment with policy maker's checklist

Alignment with Policy Maker's Checklist
<ul style="list-style-type: none"> • Organization fully understands current rules and regulations that impact their businesses, and complies with the existing rules and regulations • Organization closely anticipates future rules and regulations that will impact their business • Organization who is a subsidiary of international company also complies with WTO and other international business laws and requirements • Organization anticipates the impacts of future innovation and service encapsulation introduction • Organization acts as a representative of certain innovations and can assist the local government when they decide the new rules and regulations, when requested • Organization can work effectively with local authorities to present and defend the future implications of rules and regulations that impact their businesses and innovations

Source: Author's personal analysis from qualitative analysis

¹³⁸ Interview with Motoring Journalist, the Nation, 28 June 2010

¹³⁹ Interview with Manager Sales Planning, BMW Group Thailand, 1 June 2010

Box 14 describes efforts by non-Japanese manufacture, BMW, who proposed to Thai government to recalculate the excise tax base on CO₂ emissions rather than engine size. The direction of German engine technology is efficient engines with less CO₂ emissions while Japanese engine technology is small engines with no focus on CO₂ emissions to gain benefit from excise tax.

Box 14: BMW pushes for CO₂ excise tax

: BMW pushes for CO₂ excise tax

The example of the vital roles of policy makers toward the introduction of technologies and new innovations can be demonstrated by the case of interpretation of environmental friendly vehicle. Thailand's current excise tax system for vehicles is calculated based on engine size and horsepower. BMW said engine displacement and horsepower are not indicators of an environmentally friendly vehicle as opposed to the level of CO₂ emissions, said Ronald Gentsch, Managing Director for vehicle distribution at BMW AG. "With the ASEAN Economic Community coming in 2015, it will be crucial for Thailand to consider a long-term strategic plan for its automotive industry to achieve sustainable development". A key component of sustainable development is CO₂ reduction, especially as CO₂ limits are soon to be enforced in many parts of the world. If incorporated into Thailand's excise tax, the restriction would encourage other automakers to invent and integrate new technologies for CO₂ reduction. BMW Group has been named the world's most sustainable automobile company in the Dow Jones Sustainability Index seven years in a row.

Source: Bangkok Post, February 2012

6.4 Discussion and Finding: Service Encapsulation Commercialization Framework

Since the background of this study involved a significant volume of face-to-face interviews and a significant number of surveys, outcomes from the study provided relevant results on how important the roles of innovation in the luxury car market were. The study also touched upon the roles of service encapsulation in Thailand's luxury car market. This study also led to the construction of a Service Commercialization Framework that was refined from the work of Sundbo and Gallouj (2000). The Service Commercialization Framework highlights the interplay between internal factors, external factors, market enablers and service encapsulation enablers.

Internal and external driving forces stimulate service innovations. Firstly, internal driving forces create and facilitate service innovations. They are composed of the management and strategy, employees and innovation departments or R&D departments. The top managers are important in the innovation process. As service innovations are often market driven, the management of the marketing department plays a key role. Employees are a

crucial driving force. The involvement of employees in the innovation process is necessary for service innovation. The innovation department or R&D department has the task to induce innovation ideas among the employees and managers and to collect these ideas. Secondly, external forces can be divided into trajectories and actors as Sundbo and Gallouj (2000: 22) described:

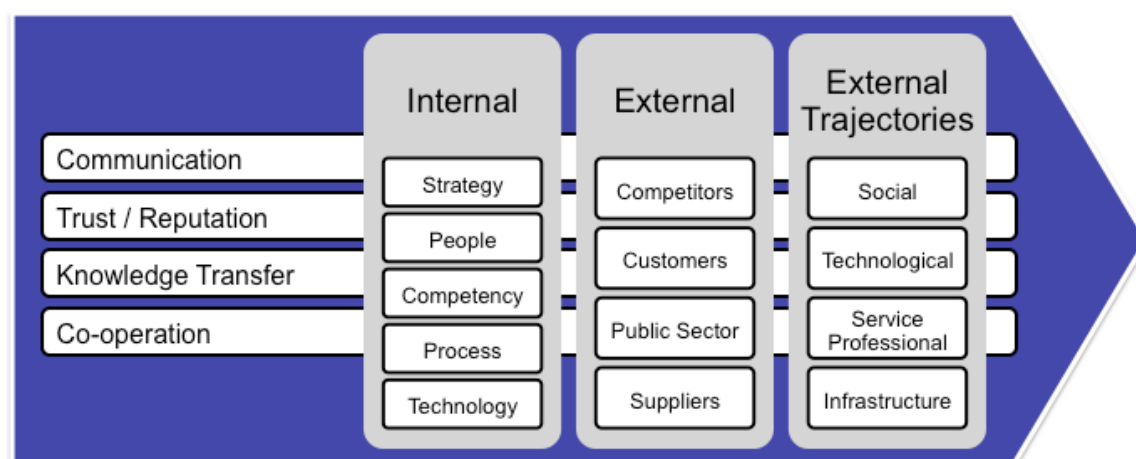
Trajectories are ideas and logics that are diffused through the social system. Four Trajectories are described; 1) Service professional trajectories – methods, general knowledge and behavioural rules that exist within the different service professional, 2) General management ideas – ideas for new organizational forms such as motivational system, 3) Technology trajectories – new logics for using technology that generally influence service products and production processes, and 4) Social trajectory – the evolutions of general social rules and conventions such as environmental consciousness.

Actors refer to persons, firms, or organizations whose behaviour has importance for the service firms' possibilities for selling services and their innovation activities. Actors influencing service innovation as described by Sundbo and Gallouj (2000: 22-23) are:

1) Customers – they give information as well as contributing to the innovation process in the case that they co-produce new service products with the service provider, 2) Competitors – generally, with offensive innovation strategies, service firms may imitate competitors' innovations, 3) Suppliers – suppliers can assist a service firm to create new service products, especially knowledge business service suppliers. Suppliers and service firms co-operate to develop service products, 4) Public sector – the public sector can support and deliver research and education necessary to innovation processes. Also, the public sector can regulate the service sector.

Figure 28 illustrates the proposed service encapsulation commercialization framework as an outcome from merging and integration of qualitative analysis and quantitative analysis.

Figure 28: Service encapsulation commercialization framework



Sources: Author's modification from 'Innovation as a loosely coupled system in services' by Sundbo and Gallouj (2000)

6.4.1 Internal Factors

The innovation process in service firms is mainly driven by internal forces (Sundbo and Gallouj 2000). Service Encapsulation needs internal support, which is very critical¹⁴⁰. Organizations need to align their strategy, people, competency, process and technology to be able to deliver commercial values of service encapsulation.

6.4.1.1 Management and Strategy

Sundbo and Gallouj (2000: 21) explained management and strategy driving forces as

Management could be the top manager, but is often the management of the marketing department since service innovations very often are market driven and the marketing department which has the direct customer contact and market knowledge, is the leading actors in innovation activities.

Strategy also drives all other management dimensions (Fallah and Lechler 2008). Moreover, strategy must provide for efficient access to the dispersed technology and market knowledge, and allow prioritization of the potential for innovation and market success. In the case of luxury cars in Thailand, it becomes even more complicated and requires a sophistication of strategy integration and

¹⁴⁰ Interview with Manager Dealer Development, BMW Group Thailand, 7 April 2010

management practice between the head office and local office¹⁴¹. Innovations and service encapsulation from international companies need a clear strategy, priority, and implementation plan to compete with the local entrepreneur and to create a competitive edge¹⁴². For MNCs, the paradox is to achieve the efficiencies of centralized innovation processes (headquarters) with the synergies of decentralized innovation processes (subsidiary), in other words, 'to establish an integrated innovation strategy for managing multiple sources of innovation (i.e., internal R&D, acquisitions, joint ventures and licensing) as portfolio of opportunities' (Homes and Glass 2004).

It is also important to mention the impact of management and management of culture in the process of strategy execution, especially in the context of innovation management in MNCs. Global companies need to take advantage of the diversity and cultural strengths of their staff in this distributed structure. Understanding the needs and requirements of the global diverse markets and developing products and services to best meet those needs requires a culturally diverse workforce that is able to apply its strength to the innovation process (Fallah and Lechler 2008). Organization structure must also be aligned with the strategy in order to maximize the efficient and effective allocation of resources for competitive advantage (Jones 1998).

Ultimately, service encapsulation requires a well-formulated strategy that combines global best practice and success story with local adaptation. Especially for MNCs, it might take longer to get the right strategy especially when such strategy involves customer interactions. Most service encapsulation strategy that fails comes from the misperception that every market is the same: that a success in one market can be transferred to another market with minimum modification (More 2011). This is a risky assumption, especially for the management at the local subsidiary. The success of service encapsulation requires time to understand the local requirements and build trust. Managements need to truly understand the local context or at least have internal resources who understand the local context.

¹⁴¹ Interview with President, BMW Group Thailand, 11 June 2010

¹⁴² Interview with BMW's Dealer Principle, Performance Motors and Group General Manager, Sime Darby (Thailand), 18 June 2010

6.4.1.2 Organization and People

Sundbo and Gallouj (2000) stated that 'the innovation process in services is mostly a loosely coupled process in which the employees (including managers at all levels) are an important driving force'. Innovation initiatives tend to depend heavily on employees' knowledge, expertise, and commitment as key inputs in the value creation process (Youndth et al. 1996). From the empirical findings, it becomes evident that organization structure has a great impact on its ability to deliver service encapsulation to customers. Good organizations also structure the way that they allow their talent to work together and do not waste their energy in office politics, red tape and bureaucracy. For innovation to take place, firms have to leverage human capital to develop organizational expertise for creating new products and services (Chen and Huang 2011). Although a firm has access to the knowledge, skills and expertise of employees, it may need to possess good capacities in managing knowledge and have management tools in place to ensure effective utilization of human capital in the development of organizational expertise for innovation (Chen and Huang 2011).

The quality of employees' interactions with customers is also critical. Competitors can more easily imitate the infrastructure and technology of an innovator than they can re-create the employee culture (Berry et al. 2006). Organizations can rely more on their service encapsulation when they allow people in different departments to collaborate and work across a rigid organization structure in order to deliver value from service encapsulation to end customers. For the case of luxury cars in Thailand, the typical Thai luxury car company has top management who are non-Thai and operation managers who are Thai. Therefore, people in Thai luxury car companies need to understand and appreciate diverse culture and internal working style while keeping in sight market specific demands and customer demography. Moreover, most luxury car intermediary owners are Thai. This is one of the challenges: that expatriate management need to understand local business practices and how to work effectively with local people.

Ultimately, service encapsulation needs organizations that support the new paradigm of delivering customer values through seamless integration within the internal organization. Especially for MNCs, the balance between autonomy and

policy at headquarters and adaptation at the local level should be made very clear for the organization. Organizations should organize themselves around customers in order to stay competitive and successfully deliver service encapsulation. Knowledge workers no longer stay with their employers for life, careers are made by moving not staying (Martinson 1995). Employees need to understand what service encapsulation is all about, as well as needing to accept the concept of service encapsulation. If employees are not convinced about what service encapsulation can do, they will not communicate and convince end-customers of such benefits.

6.4.1.3 Competency

When organizations embrace the service encapsulation journey, they will soon realize that they need a new set of competencies as they move into unknown territory. Competency is defined as a set of knowledge, skills and attitudes. In a product-centred firm, customer satisfaction is based on the product, but in a service-centred firm it is based on service delivery, employee friendliness, value-added flexibility, customization, etc. Thus, customer satisfaction may be more difficult to achieve in service firms (Susman et al. 2006). de Brentani (1995) concludes that having a highly trained workforce that has an intimate knowledge of the customer plays an important role in the success of new services. The knowledge embedded in human capital enables firms to enhance distinctive competencies and discover innovation opportunities (Hansen 1999; Grant 1996; Wright et al. 2001).

In the past, luxury carmakers were able to sell their products based mainly on brand perception and brand image. However, as customers become more educated and more aware of what is available from other automotive carmakers, they demand best-in-class services such as product warranty, service inclusive, first-class dealer service, and etc. In order to keep up with these demands, luxury carmakers need to equip themselves and their dealers with competencies that help them to deliver the best after-sales service with the most cost effective method. They need to work closely with their partners such as dealers and vendors to provide a satisfactory service to keep customers loyal to their brand. Moreover, those dealers and vendors need to be equipped with the competencies

necessary to effectively deliver values of service encapsulation. Relying on current and obsolete competencies will force such organizations out of business.

Organizations also need to find the practical way to introduce and disseminate such new competencies into their network and staff. With the demographic profile of luxury car users, who are normally well educated, they are very quick to spot any weakness or service dissatisfaction and share their experiences and perceptions in their community in ways like the on-line community¹⁴³. Poor and unsatisfactory service perception travels fast, especially in on-line forums. Staff qualifications need to be improved in order to understand technology and appreciate innovation even more. Moreover, more important than education level are attitude, dedication, motivation and commitment to innovations and service encapsulations¹⁴⁴. Through effective strategic HR practices in terms of staffing, training, participation, performance appraisal, and compensation, firms can enhance their capability in introducing new products, services, and management systems, and thus achieve better innovation outcomes (Chen and Huang 2011). Finally, it is essential to link the reward structure to the firm's strategy. This means that a service centred firm's reward structure should focus on services and customer relationships (Susman et al. 2006).

Selling services encapsulated together with products requires a different skills set than selling products alone. New competencies on customer intelligence and understanding the local context with the mixture of the global brand and product perception have become mandatory in order to successfully compete by leveraging service encapsulation. The concept of service encapsulation is not complicated but requires a good understanding of customers, their values and how to deliver such values to the end-customers. Especially for the luxury car segment, customers go beyond the buying of transportation to buying brand, perception, and image. Employees are not only delivering the tangible product but also intangible services, brand experiences and service encapsulation experiences as a whole. Customers' perceptions of employee efforts in delivering service have an especially strong impact on customer satisfaction and switching behaviour. Services are performances, and well-managed companies invest in

¹⁴³ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

¹⁴⁴ Interview with Manager Technical Support, BMW Group Thailand, 22 June 2010

their performers regardless of whether they are 'onstage' or 'offstage'. (Berry et al. 2006)

6.4.1.4 Process

Sundbo and Gallouj (2000) stated that empirical research indicates that there are some common characteristics of the process of innovation, due to the specific nature of service production which is common to all service industries. When rolling out service encapsulation in the local context, all parties and actors, including the available infrastructure and the choice of technology, can influence the process of service encapsulation. More importantly, the innovation management process becomes paramount in order to originate and transfer innovation, and for this to be accepted by end-consumers. Innovation management process covers all of the tasks that are required to create technology know-how and to transform this know-how into marketable innovations. Innovation management also deals with the design of processes and functions, which are tailored to the creation and commercialization of innovative ideas (Samsonowa 2012).

Service innovations are becoming increasingly systematic (Miles 2004). The implication for MNCs is that ideas for innovation could come from any place in the global market and are not limited to the luxury car industry. MNCs must transcend the traditional home base affinity to create a global unbiased process for project selection and development assignments (Fallah and Lechler 2008). While the process of product launch is very streamlined in sectors like the luxury car industry, the new model premiere is likely to attract global interest even if such products will not become available in the near future. Nevertheless, the process of service encapsulation is left to the management of the local subsidiary with limited influence and inspiration from headquarters. Headquarters does not have a specific department who take care of service encapsulation, which represents a high potential source of revenue and can increase the level of customer satisfaction. This fact requires more attention in the area of service encapsulation from headquarters.

Service Encapsulation also requires new thinking toward the operational process. Service encapsulation process must be designed around customer demands and

how to fulfil them¹⁴⁵. New processes also require a new and closer cooperation among luxury carmakers, intermediary, external and customers, since delivering service encapsulation often cuts across many departments and organizations. All departments must have sufficient customer information in order to deliver the quality service that fits with customers' needs. Customer databases must be integrated as a core part of the service encapsulation process. Techniques like service blueprinting and understanding of the design and integration of touch point become major integration parts to share service encapsulation vision and translate such vision into operational activities. Roles, responsibilities, outcomes and measurements should be stated very clearly among service encapsulation providers such as luxury carmakers, dealers, and externals. Most organizations still face the situation that there is no clear ownership who are responsible for designing a service blueprint and integrating all touch points in the design. For success in service encapsulation, organizations must organize their process around customers, not the other way round.

6.4.1.5 Technology

Technology also plays an important part for the service encapsulation providers to better understand their customers, purchasing pattern, buying criteria, and customer loyalty criteria. Even if some scholars have suggested that 'technology is less important for the development in new service as many times the face-to-face relationship building component becomes more important (Susman et al. 2006)', nevertheless, understanding technology and what is available locally helps the organization design a service blueprint that will effectively deliver outcomes with price competitiveness. Technology can be 'pushed' by technical staff or 'pulled' by customers (Salavou 2005). This study also highlights the effect of rushing to introduce innovation without understanding the local capability to handle new innovations and technologies. Outcomes of such poor design of technology introduction in the local context often turn negative. In the Thai luxury car industry, BMW is often regarded as the first mover in innovations and technology. Nevertheless, the organization often fails to ensure that their technical staff and dealers are well trained to cope with technical knowledge and to be able to maintain such complicated technologies.

¹⁴⁵ Interview with Director Dealer Development, BMW Group Thailand, 28 June 2010

Technology is the backbone of the service encapsulation delivery process¹⁴⁶. Technology enables service encapsulation providers to identify customers' needs, how to fulfil those needs and who should deliver such services, by when, and where. In order to achieve the level of technology that enables service encapsulation, the technology platform such as the use of programs and IT platforms must be agreed and accepted across service encapsulation providers. Failure to reach operational agreement on the technology platform often prevents good service encapsulation progress and thus yields a diminishing commercialization opportunity. Technology identification and implementation is not the sole task of one luxury carmaker. The collaboration of designing the new technology among luxury carmakers will eventually reduce development costs to all players and gain better acceptance from customers¹⁴⁷. Customers also expect luxury carmakers to keep investing in new technologies and innovations.

Even within MNCs, headquarters and local subsidiaries might not share the same technology platform. While headquarters and important markets get all the latest technology and IT systems, small local subsidiaries are often stuck with obsolete technologies due to lack of financial resources to fund the new system. More importantly, luxury car companies, dealers and their counterparts need to agree on the common platform of technologies. Since it becomes evident that service encapsulation providers and partners still run on different technology platforms, the values of service encapsulation including the level of customers' understanding might be lost due to system incompatibility. Luxury car companies often need to request their dealers to make new investment in technology. Service encapsulation can be used as a justification for investment to bring more revenue and gain higher customer satisfaction.

6.4.2 External Factors

External factors may well include customers, thus making the service firm focus on achieving customer satisfaction with the total encounter. Customer satisfaction, in terms of service quality, has become more important to service firms than innovation (Sundbo and Gallouj 2000). Service encapsulation requires

¹⁴⁶ Interview with Manager Technical Support, BMW Group Thailand, 28 June 2010

¹⁴⁷ Interview with President, BMW Group Thailand, 11 June 2010

a lot of interaction with external parties. Service encapsulation is very dynamic and flexible. In the luxury car segment in a country like Thailand, there are many external parties who have a huge impact on the business, like the government, or the customs department¹⁴⁸. Other parties are competitors, customers, vendors and suppliers.

6.4.2.1 Competitors

Sundbo and Gallouj (2000) indicated that 'competitors are important for innovation activities. Service firms may imitate competitors' innovations, and since service industries have not generally been characterized by offensive innovation strategies, a condition for starting an innovation activity has often been that the competitors should move first'. Since service requires less capital investment and is easily imitated, roles of competitors become increasing important and often can spark the innovation activities and imitation of innovation activities within the same industry and across industries.

As competition is a key driver for innovation¹⁴⁹, competitors in the same industry also help drive service encapsulation forward. Contributions from the competition can be delivered in two ways. Firstly, direct competition challenges players in the industry to come up with better service encapsulation in order to maintain and grow their market share further. Competitors who fail to perform will be forced out of business. During the 2008 sub-prime crisis, the automotive industry was the hardest hit industry. The number of automotive makers was significantly reduced through liquidation and acquisition. One of the main reasons that a company survived was the ability to offer a better value package and service encapsulation to customers. Carmakers who survived were the organizations that had the ability to maintain their values through product differentiation and better service encapsulation.

Secondly, competitors in the same industry can collaborate to agree on a common service encapsulation platform, a certain type of innovation that they want to keep as an industry standard and the joint investment in the new type of

¹⁴⁸ Interview with President, BMW Group Thailand, 11 June 2010

¹⁴⁹ Interview with General Manager, MINI Thailand, 2 April 2010

technology like new technology platform in automotive industry such as drive train and alternative fuel. Joint co-operation will propel specific product technologies and innovations, and the service encapsulation that comes with them¹⁵⁰. Competition also creates demand for a particular service such as roadside service, motor exhibition, and others. Such demands help impel other industries to start up business and up-grade their skills to become capable of delivering superior services that fit the image of the luxury car segment. An example is the Thailand motor show, which is the largest motor show in Southeast Asia and has often served as an event to launch a strategic product for the region. The success of the motor show is dependent on the cooperation of all players in the automotive industry, not a single player alone.

As the number of firms who compete in the same industry grows, more investment in human capital and a bigger pool of talents can be expected. Currently, most of the top executives for the local automotive companies are expatriates. Competition within the industry requires local automotive companies to groom the local talent in order to better understand the local context and reduce the cost of expatriate managers. This practice also helps automotive companies understand and appreciate how to effectively offer service encapsulation for local consumers. Competition also helps the automotive industry evaluate technologies and innovations based on customers' response across automotive market segmentations.

6.4.2.2 Customers

Numerous concepts have been developed in order to account for this client participation (co-production, servuction, service relationship, the moment of truth, presumption) (Sundbo and Gallouj 2000). Madsen (1998) interestingly found that customers were identified by the innovating firm as the most important sort of collaboration partner. A new model of knowledge production in the service literature shows the importance of integrating the customer into the production and innovation process. It is not uncommon for a service firm's client to initiate and stimulate innovations; and often customer participation is a necessary condition for success (Preissl 2000). Considering the different types of

¹⁵⁰ Interview with President, BMW Group Thailand, 11 June 2010

interaction between the service provider and the customer, various elements are being exchanged: information and knowledge, emotions, verbal and gesture signals of civility. It is via informal or formal modes of communication that service innovation can ultimately be created. Empirical evidence from German manufacturers suggests that the lack of customer participation can make a project fail (Preissl 2000). It is worth mentioning that it is essential that a firm understands the needs of its customers, and that the new solution addresses their needs. In Box 15, Dorner et al. (2011) explained the different roles of customers in various stages of innovation process as follows:

Box 15: Roles of customer over the innovation process

Roles of customer over the innovation process
In order to increase companies' ability to innovate services, organizations can divide the development process into three phases. Each phase comprises specific tasks with specific instruments to use. The role of customers changes over the course of the innovation process. While customers provides ideas in 1) the definition phase, describe their social reality and formulate their requirements, in 2) the development phase they become co-creators and testers, and in 3) the market launch phase they finally emerge as beneficiaries and consumers (Dorner, Gassmann and Gebauer 2011). Enterprises are familiar with this concept mainly from the consumer goods area, but can be transferred effectively to other sectors (Dorner et al. 2011)

One of the most prevalent reasons for failure among firms focusing on developing new services is an inadequate assessment of customer needs and problems (de Brentani 1995). In the automotive industry, many innovations fail because they are not explained properly to dealers and end customers, or because there is no adequate business design to make an attractive offer and to capture the value (Oliver Wyman 2007). Different customer groups have different perceptions of the benefits of automotive innovations. To a large extent, the success of innovative features also depends on geographical differences: Asian car buyers, for example, are much more interested in infotainment electronics than their American counterparts (Oliver Wyman 2007).

Kandampully (2002) states that among other networks, internal and external customers have become an essential prerequisite to achieve the capabilities and knowledge required to serve the needs of customers. Nevertheless, the definition of customer orientation directly relates to the role of employees in delivering customer satisfaction. Service encapsulation providers need to fulfil customers' demands, be flexible to adjust their service encapsulation offering to fit with the change in demands and find the effective way to communicate and take feedback from the customers. While technology might help in this area, nevertheless, face-

to-face and in-person communication is still proven to be the most effective way for customer interaction. The intermediary has a significant role: to gather reliable customer feedback and feed this into internal knowledge. Once again, communication and trust between internal and intermediary play a critical role in customer feedback integration.

Ultimately, the customer is one of the most important elements in the determination of success in commercialization. Service Encapsulation must be created differently to address different customer segmentations that share different interests, and decide on the consumption based on different sets of criteria. Understanding customer preferences enables companies to better focus their innovation efforts on relevant issues (Oliver Wyman 2007).

6.4.2.3 Government & Public Sector

According to Sundbo and Gallouj (2000: 23), the government and public sector actors are described as follows:

The public sector is the least important actor, but nevertheless an actor of some importance. The public sector demands services, and it delivers research and education necessary to innovation activities, but the public sector is rarely a direct actor in service innovation processes, neither as change agent nor as deliverer of knowledge. Further, the public sector has regulated the service sector, a function that in fact has led to many innovations, but has also impeded innovation. Many financial innovations are due to changes in tax laws. The contemporary tendency to deregulation makes this function of the public sector less important.

Preissl (2000) also mentioned that, in service firms, barriers to innovation comprise four categories: market risks, financial restrictions, legal and bureaucratic barriers and restrictions within the company. However, these barriers to innovation are not unique to services, as these conclusive findings may well pose adverse effects on manufacturing firms. The public sector has a direct and indirect influence on innovation commercialization. In the automotive industry, policy makers and regulatory bodies can influence certain technologies and innovations. Government authorities normally use tax structures and tax incentives to promote and demote technologies and innovations¹⁵¹. Each internal and external actor has to comply with rules and regulations. Therefore,

¹⁵¹ Interview with Motoring Journalist, UK's Car Magazine, 28 June 2010

government rules and regulations have influence over each party on how to run their businesses and operations.

An empirical finding also highlights the unique view that one problem in Thailand is political instability and the government should step away from making big and radical changes without carefully assessing the impact on the private sector.

One of the main problems in Thailand is that the government doesn't last very long. Nevertheless, our private sector is very strong. The only demand is the government should stay away from business and try not to create problems and interruptions. Government needs to support and use the diplomatic way to negotiate and set up bi-lateral discussion between countries to promote trade in the automotive sector¹⁵².

Government practices play a significant role in promoting innovations and service encapsulation. For example, the Singapore government have spent and invested a lot in innovation, simply by segregating the service sector since they know that in future the new economy has to rely heavily on new innovations and service sectors¹⁵³. Transparency of policy also plays a significant role in the level of confidence in local government. Luxury carmakers often feel that due to their small market shares and sales volume when compared to Japanese counterparts, the Thai government tends to favour Japanese carmakers by supporting innovations and technologies that benefit them the most¹⁵⁴.

Government regulations also govern and, in some cases, prevent the delivery of service encapsulation. An example is that automotive companies cannot access the financial data of their customers from financial leasing companies whether they are a subsidiary of the same group of companies (as in the case of BMW and BMW Financial Services) or not. A firewall has been created to protect customers' confidentiality and not to create unfair advantages among car companies. In 2015, Thailand will become part of the Asian Economic Community (AEC). While AEC requires the free flow of capital and workforce, it can only enforce this fully in the manufacturing sector. The service sector is still protected by the local government in almost all countries in the AEC. This indicates the impact of

¹⁵² Interview with Former Director After-sales Services, BMW Group Thailand, 1 June 2010

¹⁵³ Interview with BMW's Dealer Principle, Performance Motors, and Group General Manager, Sime Darby (Thailand), 18 June 2010

¹⁵⁴ Interview with Manager Sales, BMW Group Thailand, 1 June 2010

government policy toward the opportunities and effectiveness of service encapsulation.

6.4.2.4 Suppliers

According to Sundbo and Gallouj (2000), suppliers, and especially knowledge business service suppliers, are important sources of innovation. Many knowledge business service suppliers have been developed in cooperation between service firms that needed a new technology, and technology suppliers. An automobile is an outcome of many parts from multiple suppliers integrated into one package. It is less likely that the carmaker can produce all parts and keep on investing in the leading edge technology and innovation at the same time. The success of a modern automotive business is founded on the capability to work with various suppliers who own the technologies and innovations that fit best with the product profile at a competitive price to secure a reasonable profit margin to stay in business¹⁵⁵.

The impact of suppliers is even greater on the service side, although on the product side, the visibility of suppliers is more prominent, for example, customers perceive technology from Intel when they buy a computer, customers value fuel injection technology from Bosch, brakes from Brembo and so on. However in a service industry, the visibility of suppliers becomes much less¹⁵⁶. Customers focus on the end outcome of their product and service consumption. When customers buy a book from Amazon, they perceive the payment service and parcel service as a part of an on-line bookstore. They value their total experience; not just good and bad service provided only by Amazon and its partners, but the total chain of service providers. Box 16 underlines how the secret of Amazon's success is based on its suppliers.

¹⁵⁵ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

¹⁵⁶ Interview with General Manager, MINI Thailand, 2 April 2010

Box 16: Secret of Amazon is based on its suppliers

Secret of Amazon is based on its suppliers

The leader and pioneer of e-commerce business is Amazon. Amazon's success is based on the sharing of the same understanding on how Amazon wants to serve their customers.

Amazon was founded in 1995. The company began as an on-line bookstore. The company employs software developers in centres across the globe. Fulfilment centres are located in main cities near airports. These centres provide warehousing and order-fulfilment for third-party sellers before making shipments through third party courier services. Amazon product lines include books, music CDs, DVD, consumer electronics, toy and games, apparel, and more. In November 2007, Amazon launched Amazon Kindle, an e-book reader which downloads content over 'whispernet'. In July 2010, Amazon announced that e-book sales for its Kindle reader outnumbered sales of hardcover books for the first time.

Successes of Amazon are outcomes from the strong partnership with its suppliers with the firm's eyes on strategy of fulfilling customers' demands. Amazon's business model is the best success of dot.com and e-commerce era.

Source: Business Week, September 2011

Commercial success of service encapsulation depends largely on the overall interplay between the organization and its suppliers¹⁵⁷. Suppliers must share the service encapsulation vision and what it means in terms of their operation. Failure anywhere along the supplier's value chain will impact the quality of service from the customers' point of view. For a luxury car to gain acceptance for its innovation, it must also convince intermediary, external and its vendor, who will sell and recommend the product to customers, and producers of related goods, who in some cases determine how attractive it is. This process of convincing and training partners is long and expensive (Lenfle and Midler 2009). New innovation needs close alignment with the distribution channel (dealership), vendors and customers because these two parties are the ones who buy your products¹⁵⁸. Box 17 illustrates the largest automotive company, Toyota, on its practice of supplier management.

Box 17: Lesson learned from Toyota's supplier network

Lesson learned from Toyota's supplier network

Suppliers undoubtedly have critical roles toward the success of service encapsulation as best demonstrated by Toyota's supplier network. While many manufacturers admire Toyota's supplier network and envy them for having fostered such a strong sense of identification, Toyota's supplier network cannot be copied quickly. However a few premium car producers such as Porsche, BMW and Daimler in the German automotive industry began systematically engaging their suppliers in suppliers' forums many years ago where information is openly exchanged and new ways to improve productivity are jointly explained (Corsten et al. 2011).

¹⁵⁷ Interview with Automotive Part Providers

¹⁵⁸ Interview with Manager Dealer Development, BMW Group Thailand, 7 April 2010

6.4.3 External Trajectories

According to Sundbo and Gallouj (2000) trajectories are ideas and logic that are diffused through the social system such as a nation, an international network, and professional networks. They are often diffused through many and difficult identifiable actors. Trajectories are considered to be external driving forces, even through the innovation activities of the single firm can contribute to the reinforcement of a given trajectory.

6.4.3.1 Social

The social trajectory displays the evaluations of general social rules and conventions (Sundbo and Gallouj 2000). National culture has been related to various aspects of innovation such as national differences in invention and innovation rates (Shane and Ulrich 2004). Social trajectory also influences the way customers consume innovation and service encapsulation. For example, in other luxury service settings, luxury car owners are accustomed to individualized and personalized services that are tailored to their needs and can be consumed whenever they want. Therefore, service encapsulation that involves pre-arrangement and pre-appointments that need to be made by the owner through an automated machine or website might not be well accepted by the existing group of luxury car users. Luxury car users might perceive such services as very rigid, lacking the human touch, and not a premium service, even though similar service encapsulation might be well accepted in other markets because of its convenience and cost-effectiveness. However, if luxury car companies can provide an individualized pick-up and drop off service, this kind of service fits well with social norms and has a better chance of success even if the service fee might be higher.

The commercial success of service encapsulation depends largely on many social factors such as norms, beliefs and perceptions¹⁵⁹. Nevertheless, in many parts of the world, the word 'luxury' is closely associated with unnecessary, class discrimination and overpriced. For a developing country like Thailand, the word 'luxury' also carries a negative meaning. Especially, the majority of Thai people

¹⁵⁹ Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

are Buddhist and religious teaching warns people to stay away from an extravagant and luxury lifestyle. Therefore, luxury car companies should not create a negative perception of being careless and over-materialistic. Social norms also demand that car companies take responsibility for environmental topics¹⁶⁰. While luxury car companies try to capture the topic of exclusivity and uniqueness, the way that these companies deliver this perception must be done with full awareness of social trends and culture sensitive¹⁶¹.

6.4.3.2 Technological

Sundbo and Gallouj (2000) also stated that the technology that is used generally influences service products and production processes. Available infrastructure, especially in technology, e-commerce, and IT, has a direct impact on how far service encapsulation can be provided together with core products and services. With technological advancement, new services require more complicated and seamless connectivity. The success of service encapsulation commercialization needs to take into account the availability of such IT infrastructure in the local technology environment.

Technological trajectory also opens up many business opportunities and breaks the traditional rules of business. Especially for luxury car consumers, where IT literacy is high, customers frequently use a technology base and non-human interaction touch points like the internet and official web-portals with a combination of human interaction touch points like a visit to the dealership and going for a test drive. Luxury cars also need to catch up with the latest trends of technology. Technologies and innovations that were optional can quickly become standard equipment, such as ABS, MP3 players, or Electronic Stability Control (ESC). Availability of technology and acceptance of technology move very fast, so that organizations must keep up the same pace and consider how they can leverage such technology to improve the firm's service encapsulation performance.

¹⁶⁰ Interview with President, BMW Group Thailand, 11 June 2010

¹⁶¹ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

Organizations can leverage the use of technology when they want to communicate to the customers as well. The technology oriented communication channels and touch points such as email, websites, in-car communication and entertainment systems have recently become the backbone of customer communications. Broader technical bandwidths are improving the quality of communication and enabling the use of IT-supported social networks (Dorner et al. 2011). The luxury car industry will always be regarded as the leader on technological advancement and how to apply appropriate technology to help them gain competitive advantages and deliver commercial successes.

6.4.3.3 Service Professional

The most important factors are service professional trajectories, which means methods, general knowledge and behavioural rules that exist within the different service professionals (Sundbo and Gallouj 2000). Since service tends to require less capital investment and less formal R&D structure, new service development requires ideas that can come from internal customers (employees) or external customers. As a consequence, services can be easily imitated within the same industry or across industries. Once a player in the industry starts to gain competitive advantage through services, this player can rely on such service advantage lasting long term. Since two thirds of the world economy is service related economy, and the service industry has grown tremendously in the last fifty years, rapid growth in the service sector has developed sophisticated service professionals and practices within service industries. Service industry also opens more opportunities to encapsulate other services.

In the past, players in each business tended to focus on their own industry. Due to the growth of globalization and the increase in e-commerce, it is difficult to define industry parameters as they used to be in the past. As for the case of the automotive industry in Thailand, almost all service encapsulations are identical within the industry and across market segmentation (i.e. luxury cars and non-luxury cars). What makes a difference is the way that service encapsulation is delivered and value is captured within the organization and its partners. Service encapsulation also helps to start up many third party businesses such as used cars, car repair and maintenance, car cleaning, after-market parts and so on. Moreover, service industry has similar requirements for management practice

and operational excellence. The typical organization management practices can be applied across various types of service firms. As service industry increases, the number of service professionals and demands for standard and professional practices (managerial and operational) also increase accordingly.

6.4.3.4 Infrastructure

Service encapsulation providers represent all organizations who are interested to deliver service encapsulation values to the end customers. Such organizations might come from different organization settings and structures. Especially in MNCs, the organization might misjudge the similarity and availability of infrastructure in all markets where they are competing. This is a risky assumption since it will often influence the choice of technology and infrastructure which has proven to be very costly if it has to be changed at a later stage. For example, the use of fuel and alternative fuel without understanding basic infrastructure like the available of quality fuel (such as Euro 5 diesel standard) and so on.

In fact, different markets have their own unique infrastructure set up. Roads in Thailand are in much poorer condition when compared to road conditions in other developed countries. Therefore, the equipment that helps drivers to travel fast might be less important in Thailand. Instead due to the traffic conditions, Thai might prefer more in-car entertainment. Infrastructure such as telecommunication, public transportation and IT platform often take time to develop. Service encapsulation providers need to understand local requirements and opportunities and limitations that come with existing infrastructure in order to design and deliver service encapsulations.

Availability of infrastructure also dictates levels of service. Organizations cannot offer on-line service mobility if the Internet connection network is not reliable at a reasonable speed. A guaranteed time of shipment cannot be met if the road network is totally unreliable. Rules and regulations for some countries might prevent e-commerce since there is no hard evidence or paper to verify the transaction. Infrastructure takes a lot of time to develop. Availability of infrastructure requires organizations to consider how best to localize their service encapsulation to fit the current infrastructure. Service encapsulation providers

need to keep abreast of the planning and development of existing and new infrastructure.

6.4.4 Service Encapsulation Enablers

There are factors that contribute to the function and efficiency of service encapsulation in delivering customers' values, and that generate commercial values to businesses. These factors are called 'service encapsulation enablers'. Findings from the face-to-face interviews reveal that those factors are: 1) communication, 2) trust & reputation, 3) knowledge transfer, and 4) co-operation. Outcomes from service encapsulation in the Thai luxury car industry survey¹⁶² also reveal that 95.6% of survey participants rate 'quality of customer service' as the highest rank for level of importance when they consider buying products and services from car companies. 88.0% and 83.7% of survey participants rate 'trust' and 'reputation' as 2nd and 3rd factors that have the highest rating respectively.

6.4.4.1 Communication

Interestingly, communication has been the key topic of innovation and service encapsulation. Outcomes from interviews simply show that there are 'hard' and 'tangible' innovations, the real technology and innovation, as well as 'soft' and 'intangible' innovations like the image of invention, the perception of goodness, and the negative image of unreliability. Innovation in retail industry can only go as far as the customer communication can go¹⁶³. Customers do not expect to read a textbook sized manual. Organizations must use intelligent communication strategies and media to simplify and tailor the messages to the right audiences. Communication is a key enabler for service encapsulation. Outcomes from qualitative analysis emphasise the fact that good ideas on innovation and service encapsulation often fail to achieve proper communication¹⁶⁴. As a consequence, customers fail to understand the true benefit of innovation and service encapsulation. As customers become more frustrated, they might take a negative view of such innovation and service encapsulation.

¹⁶² Service Encapsulation in Thai Luxury Car Market, Q8: when you consider buying products and services from car companies, how do you rate the level of important of the following factors?

¹⁶³ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

¹⁶⁴ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

Qualitative analysis also highlights how being innovative is not just bringing in new innovations one after another. A large part of being innovative is also closely associated with packaging innovations and service encapsulation together with careful communication tactics, message and medium. Innovation with careful communication has a better opportunity of commercial success¹⁶⁵. Eiglier and Langeard (1987) thus emphasize the importance of clear communications and the simplicity of a new concept offered to customers. New product development performance depends greatly upon the quality of the communication process during the new product development process (Moenaert and Souder 1996). Within the service marketing and management literature, the role of effective internal and external communication has repeatedly been emphasized (Gronroos 1990). The role of communication is to be a 'harmonizer' of the organization, an orchestrator of its parts.

Communication is defined as effective if it generates change(s) in the receiver's behaviour that were intended by the information source. The effectiveness of communication depends on the quality of the communication flows. The quality of communication during the service innovation process can be described as the degree to which relevant and understandable information reaches the intended information sources/receiver in time (Lievens and Moenaert 2000). Box 18 describes an affect of communication toward the success of innovation by using a case of BMW Service Inclusive (BSI) communication.

Box 18: A case of BMW service inclusive (BSI) communication

A case of BMW Service Inclusive (BSI)
One example that BMW did but failed to communicate is BMW Service Inclusive (BSI). BSI is a terrific concept but failed miserably in the Thai market. Since the weaknesses of BMW are unreliability, high maintenance, poor resale value, BSI needs to deliver customers' values by instilling confidence in BMW products by providing solutions to eliminate most (if not all) of BMW's weaknesses. Nevertheless, BSI creates a very confusing service offering due to poor communications. Dealers and customers do not understand what services and service inclusive. Subsequently, no one feels confident to present BSI to customers. All in all, BSI is a good example of a good concept that they failed to execute ¹⁶⁶ .

¹⁶⁵ Interview with BMW's Dealer Principle, Performance Motors, and Group General Manager, Sime Darby (Thailand), 21 June 2010

¹⁶⁶ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

6.4.4.2 Trust and Reputation

Trust helps facilitate cooperation, lowers transaction costs, promotes smooth and efficient market exchanges, and improves firms' ability to adapt to complexity and change (F. Xavier Molina-Morales 2011). Organizations must be capable of creating trust in the customer's mind. Without trust from customers, organizations cannot realize commercial success through innovation¹⁶⁷. Quantitative analysis confirms that the most important element of a service encapsulation enabler as confirmed by the end customers is trust and reputation. Trust is defined as the sense of reliance on the integrity or strength of a person. Trust must come from the inner feeling of the person or the customer. Trust acts as a governance mechanism in embedded relationships between organizations, and facilitates the exchange of confidential information by diminishing the risk that one party will opportunistically exploit it to another's disadvantage (F. Xavier Molina-Morales 2011). Trust is the outcome from many customers' experience of the journey toward such products and services offered by individuals or organizations directly or indirectly. Customers collect evidence from various customer experience contact points and draw their own conclusion whether the individual or an organization is trustworthy or not.

With regard to the specific relationship between trust and innovation, previous researchers have shown that trust in inter-organizational settings can create collaborative climates that foster innovation by increasing both the quantity and quality of information flows and the sharing of relevant knowledge and resources. Thus 'crony capitalism' (which is prevalent in Southeast Asia, particularly Indonesia) involves high levels of trust among networks of friends and family, but can impede the creation of economically viable institutions in both public and private sectors (F. Xavier Molina-Morales 2011).

Reputation is defined as the estimation in which a person or thing is held, especially by the community or the public generally. Reputation is more the public perception which can be influenced largely by direct and indirect experiences. Reputation can come from the local market as well as the other markets.

The company's reputation is likely to have an important influence on the buying process that is different to the product specific influence of the brand's image. The influence of company reputation, or what is often referred to as corporate

¹⁶⁷ Interview with Director Dealer Development, BMW Group Thailand, 28 June 2010

reputation, can be expected to become more important when there are higher levels of service (Cretu and Brodie 2007).

In case of an automotive industry, reputation in one market will normally carry over to other markets. When Toyota has a quality and safety crisis in the US, customers in other locations are also concerned about Toyota products. Trust and reputation affirm the perception of service encapsulation offered by an individual or an organization. All the service encapsulation providers must ensure trust. Failure by one particular provider will jeopardize the trust in the customers' minds¹⁶⁸. Box 19 highlights a case study of Toyota's product recalled which had a severe impact on the level of trust and the company's reputation.

Box 19: A case of Toyota's products recalled

A case study of Toyota's products recalled

Trust and reputation take time to build. In case of Toyota, customers value Toyota's reliable products, low running cost and good resale's value. However starting from 2009, Three separate but related recalls of Toyota cars occurred at the end of 2009 and start of 2010.

The first recall, on November 2009, was to correct a possible incursion of an incorrect or out-of-place front driver's side floor mat, which can cause pedal entrapment. The second recall was in January 2010. Following the floor mat and accelerator pedal recalls, Toyota issued a separate recall for hybrid anti-lock brake software in February 2010. The total of products recalled of 7.5 Million units around the world was the largest recall ever.

Akio Toyoda, the president and CEO of Toyota, issued the following statement in regards to the recalled vehicles:

"Toyota has, for the past few years, been expanding its business rapidly. I fear the pace at which we have grown may have been too quick. Toyota's priority has traditionally been; first, safety, second, quality and third, volume. These priorities became confused, and we were not able to stop, think, and make improvement as much as we were able to before, and our basic stance to listen to customers' voices to make better products has weakened somewhat."

Source: BBC, February 2010

In case of BMW, the organization gains little trust from the end customers and suffers from a negative reputation in the Thai market. BMW is giving out innovations to our customers without focuses and prioritizes. Sometimes innovation is too much. The organization should prioritize and focus more on establishing trust from consumers¹⁶⁹. Consequently, regardless of what innovation the company wants to bring to the market, the customer communities are always sceptical about the innovation and service encapsulation. This also affects the commercial success of such innovation and service encapsulation. On the other hand, Mercedes-Benz holds a better level of trust and receives a

¹⁶⁸ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

¹⁶⁹ Interview with Director After-sales Services, BMW Group Thailand, 8 June 2010

position reputation from the market. Their innovation and service encapsulation are more welcomed by the end customers. Therefore, their commercial success is more likely.

In response to the need to evaluate intangibles associated with corporate value and reputation, several methodologies have been developed that incorporate market values and booked values to provide a residual measurement of intangibles (Gravens et al. 2003) as illustrated in Table 38.

Table 38: Components of the Reputation Index

Index components	Illustrative measures
Products/services	Quality associations, public awareness of corporate name and product/services, extent of brands and umbrella brands, warrantee claims, liability claims
Employees	
All levels	Employee satisfaction with employer, turnover, exit interviews, number of applicants for open positions, training and development efforts, employee feedback relative to meeting employee needs, coordination and communication efforts across functional and business areas
Upper management	CEO personal reputation only, competency, turnover, compensation and evaluation packages and goal congruence with strategic objectives, information collection from subordinates
External relationship (non- customer)	
Suppliers	Payment terms, major supplier quality, relationship quality of major suppliers, relationship duration for major suppliers, quality of suppliers for suppliers
Partners	Existence of alliance relationship, longevity of alliance relationships, recognition of key strategic partners, reputation of key strategic partners, joint venture contractual agreements
Competitors	Industry participation, competitor response to key corporate incentives
Investors	Market premium, market stability
Environment	Environment policy, dedicated employee positions, liability claims, regulatory intervention
Society	Charitable endeavours, employee quality of life initiatives
Innovation	Formalized program to generate and evaluate innovation, growth relative to customer needs, new product/service development
Value creation	Identification and responsiveness to customer needs, customer retention
Financial strength	Information content of annual report, additional disclosures
Strategy	Strategic priorities relative to reputation integration of strategy across business units, management control system fostering consistency
Culture	Ethics policy, reporting procedure for ethics violations, upper management attitudes, ethics committee on the board
Intangible liabilities	Inadequate research and development practices, lack of adequate information infrastructure, organizational structure – lack of flexibility, bad word-of-mouth among customers inadequate distribution channels

Source: Gravens et al. 2003

6.4.4.3 Knowledge Transfer

To successfully deliver service encapsulation, an organization and its value chain partner must share common understanding and knowledge. The success also comes from an ability to transfer such innovation and service encapsulation vision throughout internal and external parties. The speed of knowledge transfer among the manufacturers, head offices in each country, trainers, and mechanics in the dealership must move at a very fast pace to ensure the ability to repair hi-tech products like luxury cars¹⁷⁰. Knowledge must come hand in hand with benefits of innovation and service encapsulation to the end users. An automotive industry is a capital intensive and complicated industry. Players in the industry need to share some of their knowledge and keep some knowledge that will help them to retain and prosper their competitive position. Lovelock (1983) and Scheuing and Johnson (1989) point out the importance of training front-office personnel.

However, this empirical study shows concern over limitation of knowledge transfer due to lack of trust in local staff from the head office and intellectual property protection.

In the automotive business, the human resource (HR) function is still not the strategic business partner. Automotive industry also invests less in people. Executives of automotive makers are non-Thai. They always bring their own management and do not transfer knowledge to the operational staff. Innovation knowledge might be confidential or heavily rely on the nationality of owners. Local staff is responsible mainly for the operation function but not the key function like R&D, sales and marketing¹⁷¹.

6.4.4.4 Co-operation

Service encapsulation is a complete picture, which is different from many small pieces that fail to align to each other¹⁷². To propel innovation and service encapsulation forward, players in the same and across industries need to come up with the cooperation model in order to help them deliver innovation and service encapsulation values to end customers. Organizations need to get

¹⁷⁰ Interview with Former Director After-Sales Service, BMW Group Thailand, 1 June 2010

¹⁷¹ Interview with Manager Human Resources, BMW Group Thailand, 2 June 2010

¹⁷² Interview with Manager Sales Planning, BMW Group Thailand, 1 June 2010

involved and engage with other partners. They need to partner with technology and innovation partners. Otherwise, they will be left behind and uncompetitive¹⁷³. Recently, Toyota and BMW became partners in order to share their innovation and technology. Toyota will share their hybrid technology while BMW will share their diesel technology. This kind of co-operation will help both organizations to capture their competitive position in their own business territory. Co-operation will open to more new ideas, resources, and funding. Consequently, the exponential development can be realized at a much faster pace than going alone. Cooperation will also strengthen the value of service encapsulation. It also becomes a phenomenon as well that co-operation can cut across industries that might share the same customer groups. It goes far beyond the old mentality that ideas of service encapsulation are kept very close to the organization. An empirical study from the face-to-face interviews also confirms the same observation.

For me, we have four pillars plus two; people, knowledge, innovation, co-operation, process and system. Without people, you have no chance. Cooperation is one major pillar that we haven't yet fully explored the power of cooperation within our own companies¹⁷⁴.

As for the case of luxury car, service encapsulation can cut across car industry, finance and insurance, life style and travel. Service encapsulation goes as the customer goes. Box 20 highlights the cooperation between BMW and Toyota in order to share a green technology between two leading automotive companies.

Box 20: BMW and Toyota team up to share green technology

BMW and Toyota team up to share green technology

Automotive industry is a capital-intensive industry. With the rapid change in technology, customers' demography, reasons to purchase and demands for green and environmental friendly products, carmakers have to bring the best products that fit in customer's requirements.

In December 2011, the unusual partnership between BMW Group and Toyota Motor Corporation establish a mid-to-long-term collaboration to share environmentally friendly power train technologies. Memorandum of understanding (MOU) will see BMW enter a contract to supply Toyota's European arm with diesel power train from 2014, while on a global scale the two firms will collaborate on the development of next generation lithium-ion battery technology and other eco-friendly technologies.

Source: WSJ, January 2012

¹⁷³ Interview with President, BMW Group Thailand, 11 June 2010

¹⁷⁴ Interview with Manager Technical Support, BMW Group Thailand, 22 June 2010

6.5 Lessons Learned and Implications

6.5.1 Return on Innovation through Service Encapsulation

Returns on innovation through service encapsulation in the Thai luxury car industry are classified as 1) units sold and total car population, 2) market share, 3) brand strength, and 4) preferred brand for future purchase. These four performance indicatives are by no means intended to be the comprehensive list of returns on innovation through service encapsulation. Instead, these four items serve as a starting point to be further explored in other industries and for specific purposes such as efficiency of customer services, efficiency of operation process and so on. For profit seeking organizations, financial contributions always come as a high priority and it is imperative that service encapsulation must bring financial return, whether short-term or long-term, in order to justify the existence of such service encapsulation. For luxury cars, brand strength and brand perception are very significant to the survival of luxury carmakers. Brand strength must subsequently lead to future businesses. In other industries especially non-luxury, the degree of brand strength will have less impact on the returns on innovation through service encapsulation.

6.5.2 Key Commercialization Success Factors for Service Encapsulation

Key success factors for service encapsulation that bring commercial values are the attempts to categorize findings, concerns and observation of factors into 4 factors. These 4 factors also represent a natural flow to follow when organizations embrace the service encapsulation journey. Those steps are: 1) market & customer intelligence, 2) service encapsulation readiness, 3) organizational compatibility, and 4) alignment with policy makers. Each item is also associated with a checklist that serves as a starting point when organizations wish to implement service encapsulation ideas. It is worth mentioning that the checklist is not a full comprehensive list. The checklist should be modified to fit different industries and different market conditions. The checklist is prepared based on outcomes from face-to-face interviews together with the service encapsulation in the Thai luxury car industry survey.

6.5.3 Service Encapsulation Commercialization Framework

Ultimately, the value of service encapsulation commercialization framework is to link this comprehensive study that involved significant numbers of empirical findings from qualitative analysis and quantitative analysis to innovation literatures. The newly proposed framework is a creation that provides linkage between academic works and practitioner works that brings value to academic contributions as well as business practitioners. The framework is a modification of Sundbo and Gallouj (2000) work of 'Innovation as a loosely coupled system in services'. Service encapsulation commercial framework is the interplay among 4 key elements which are: 1) internal parties, 2) external parties, 3) socio-factors and 4) service encapsulation enablers. Each element has various actors¹⁷⁵ that contribute to outcomes of the framework. Large volumes of literatures and empirical studies are provided to support each element and actor. This service encapsulation commercialization framework is ready to be generalized in other industries. A certain amount of evidence from other industries besides the luxury car and automotive industry are provided to support the potential for future generalization.

6.6 Conclusion

This chapter started by introducing the concept of returns on innovation. Returns on innovation can be captured by 1) tangible returns measured by new car sales and car population, and market share and 2) intangible returns measured by brand strength and preferred brand for future purchase. Key success factors for maximizing returns on innovation through service encapsulation have been identified. Key service encapsulation success factors and checklists are prepared by using the natural flow of service encapsulation execution by identification of 1) market and customer intelligence, 2) service encapsulation readiness, 3) organization compatibility and 4) alignments to policy makers.

Findings, observations from empirical studies of face-to-face interviews and the service encapsulation survey, together with the academic literature, have been

¹⁷⁵ Sundbo and Gallouj (2000) defined 'actor' as 'Actors are persons, firms or organizations whose behavior has importance for the service firm's possibilities of selling services and therefore for their innovation and activities. The actors define the market possibilities and they are sometime involve in the development of the innovations.'

integrated and synthesized to come up with the proposal of a service encapsulation commercialization framework. This newly proposed framework aims to highlight the interplay and relationship among 4 key elements; 1) internal parties, 2) external parties, 3) socio-factors and 4) service encapsulation enablers. Each element also represents the list of actors inside. Service encapsulation will also lead to future commercial value for luxury carmakers, and evidence is presented using two future performance indicators of brand loyalty and criteria for future purchase. Lessons learned and implications are provided as a conclusion to support contributions for academics and general business practitioners.

Chapter 7 - Management Implications

The main purpose of this study is to investigate business practical issues by applying theoretical perspectives and using academic approaches. In return, the author anticipates a contribution to the body of knowledge, management implications and practical applications to business issues. Since the business operation of the luxury car industry is a multinational business, management implications include many actions that all service encapsulation parties, headquarters, local subsidiary and intermediary, can apply to three key findings from this research, which are: i) the innovation expectation matrix, ii) the service encapsulation delivery model, and iii) service encapsulation commercialization framework.

The chapter starts by drawing connections from research questions and empirical findings that lead to management implications. Then, three key findings from each research question are linked with management actions by different stakeholders, which are headquarters, local subsidiary and intermediary (section 7.1). Section 7.2 describes management actions for the innovation expectation matrix. Next, management actions for the service encapsulation delivery model are described (section 7.3). In section 7.4, management actions for the service encapsulation commercialization framework are explained. The chapter is concluded in section 7.5.

7.1 Key Empirical Findings and Management Implications

Literature reviews (chapter two) help to identify research questions (chapter three). Analysis chapters (chapter four, five and six) draw conclusions on discussion and findings. Table 39 illustrates the linkages and relationships between research questions and key empirical findings which ultimately drive implications for management practice.

Table 39: Connections of research questions, key empirical findings and management practices

Research questions	Key empirical findings	Implication for management practices
Roles of innovation	<ul style="list-style-type: none"> • Innovation is ranked 9th in terms of luxury car buying criteria • Current luxury car owners rate importance level of product innovation slightly higher than service innovation, non-luxury car owners give more weight to service innovation. • Luxury car company, dealership and customers have different expectations, concerns and demands of innovation • Hence, innovation acts as 'enabler' rather than 'main driver' 	<ul style="list-style-type: none"> • Headquarters must design innovation strategy and innovation management policy that works across different markets. • Local subsidiary must leverage the innovation investment and gain local customer acceptance at the same time. • Dealer must convince customers to trust new technology and innovation by interacting closely with customers and using effective communication.
Roles of service encapsulation	<ul style="list-style-type: none"> • Current luxury car owners and non-owners value some service encapsulation differently. • Top-three factors that contribute to success of service encapsulation are 'quality of customer service', 'trust', and 'reasonable price' • Success of service encapsulation delivery comes from interplay among three parties; internal, intermediary and external • 15 barriers of service encapsulation have been identified from empirical data 	<ul style="list-style-type: none"> • Headquarters help to strategize service encapsulation and help local organization by setting up service encapsulation platform with key partners. • Local subsidiary needs to come up with service encapsulation blueprint and identify local partners, work with internal and external to drive service encapsulation. • Dealer who interacts closely with customers and delivers service encapsulation operation, gets customer interaction and uses service encapsulation to differentiate products.
Maximizing return on innovation through service encapsulation	<ul style="list-style-type: none"> • Top-three factors that contribute to brand loyalty are 'product quality', 'service quality', and 'customer satisfaction' • Four categories of service encapsulation's key success factor are: market and customer intelligence, service encapsulation readiness, organization compatibility, and policy alignment • Service encapsulation commercialization framework comprises internal, external, external trajectories and service encapsulation enablers • Service encapsulation enablers are communication, trust/reputation, knowledge transfer and co-operation 	<ul style="list-style-type: none"> • Headquarters design global performance management system to reflect roles and responsibilities of headquarters and local subsidiary. • Local subsidiary must manage and measure success of innovation and service encapsulation by understanding and leveraging on factors that contribute to the success of innovations. • Dealer must justify the value of service encapsulation especially the impact on customer loyalty and customer satisfaction and understand factors that contribute to those successes.

Source: Author's own compilation

Consequently, management implications and key findings from this thesis help to identify nine management actions based on key inputs from each research question and key influence parties as illustrated in Table 40. Actions are categorized by headquarters (action 1, 2 and 3), local subsidiary (action 4, 5 and 6), and intermediary (action 7, 8 and 9).

Table 40: Research questions and management implication actions by relevant parties

Research Question	Key Findings	Actions		
		Headquarter	Local subsidiary	Intermediary (dealer)
Roles of innovation	Innovation Expectation Matrix	Action 1: Global innovation strategy	Action 2: Local innovation introduction and communication	Action 3: Innovation appreciation and education
Roles of service encapsulation	Service Encapsulation Delivery Model	Action 4: Service encapsulation strategy and platform management	Action 5: Service encapsulation Design and partners management	Action 6: Service encapsulation operation and customer interaction
Maximizing return on innovation through service encapsulation	Service Encapsulation Commercialize Framework	Action 7: Strategic global performance management	Action 8: Subsidiary Performance Management	Action 9: Innovation and Service encapsulation value justification and customer satisfaction

Source: Author's own analysis

7.2 Implications for Innovation Expectation Matrix

Empirical studies are used to synthesize findings on the innovation expectation matrix. The idea of this matrix is that there are differences in expectations, concerns and demands for innovations among luxury car companies (as an innovation originator and/or manufacturer), dealers (as an intermediary), and customers (as an innovation consumer). The success of product and service innovations comes from an understanding of these differences. Global luxury car companies need to balance between their global products, technologies and innovations to best fit with local customers, existing local infrastructure and specific local cultures and norms.

Dealers as an intermediary need to have long-term commitment with the luxury brand and understand what are the brand's differentiation factors. Dealers might

refuse new technologies and innovations due to the need to invest in extra training and equipment to operate new innovations. Nevertheless, without innovation as a product differentiation factor, the performance of luxury products in the local market might be diminished. Customers have plenty of choices when choosing luxury cars. Eventually, customers buy luxury cars with affordable service and running costs. Success of luxury cars depends on truly understanding customers' demands and matching the right products and innovations. Actions that help each party manage their roles effectively are listed below:

7.2.1 Action 1 for Headquarters: Global Innovation Strategy & Management

The luxury car company needs to craft their own market by carefully positioning their product and leveraging their unique competitive advantages. Empirical data and literature indicate that the luxury car industry uses various differentiation factors such as intangible factors (brand perception, image and luxury), and tangible factors (technology, safety features and performance) (Oliver Wyman 2007). The main objective of innovation is to increase the market position and commercial performance of the organization (Tyler 2001). Hence, it becomes critical for the luxury car company to manage their innovation strategy very well.

Since the luxury car industry is a global industry and all luxury car companies are MNCs, products' technology and innovation are created at headquarters or originate from their own or 3rd parties R&D facilities which are mostly located in a few places around the world. Luxury car companies face challenges to design new products, technologies and innovations for such highly varied and diverse groups of global customers. Empirical data reveal that luxury car companies need to balance between the automobile platform base on their product models and various options that match with local customers' preference and market specific requirements (such as geographic location, weather conditions, traffic conditions and so on). The major role of headquarters is to make sure that technology and innovation options are available for the local subsidiary at a competitive price. Moreover, headquarters needs to ensure that embracing the

new technologies and innovations will strengthen the market position and competitiveness of their luxury car brand in that specific market.

Headquarters also need to select the right technologies and innovations, so that the company sustains and gains competitive advantage in the short-term and long-term. The current choices of alternative fuel technology are the best example. Carmakers are evaluating which future alternative fuel technology has commercial potential and requires less time to introduce to the market. This decision must be taken at the global headquarters with inputs from customers in key markets. Headquarters needs to set up management practice to monitor global innovation management process. The literature also shows that a local subsidiary can be a source of 'reverse innovation' that contributes to market understanding and better products and innovations that fit with customers (Immelt et al. 2009).

R&D facility also needs to ensure the durability and reliability of such technology when introduced to the local market. Empirical studies also reveal that some technology when introduced to the local market is very unreliable due to many factors such as differences in weather conditions and road conditions. These unreliable technologies have a negative impact on brand reputation and trust (Gravens et al. 2003). Empirical studies also reveal the importance of both factors, and that it takes a long time to correct bad reputation and gain trust from customers again. Empirical studies also confirm that headquarters can launch a global marketing campaign and the outcome will be an impact at the local level.

7.2.2 Action 2 for Local Subsidiary: Market Innovation Introduction and Communication

Once headquarters and the R&D department come up with new products, technologies and innovations, the local subsidiary needs to apply their knowledge of local market requirements and local consumers' tastes, cultures and beliefs to decide on which products and innovations are to be introduced in the local market. Empirical study suggests that the commercial success criteria can be justified based on outcomes from financial performance and market performances (Drake et al. 2006). For a small sales volume country like Thailand, good products alone are not enough. The potential of product sales volume must

justify extra efforts to train internal staff and dealers to be capable of handling dedicated sales functions and, most importantly, technical requirements of new products and innovations.

In many markets sales volumes are much higher. The selection process often engages real customers by setting up focus groups to access the readiness, concerns and other issues that potentially come with products and innovation introduction¹⁷⁶. Nevertheless, for such a small market as Thailand, this process of customer involvement is always omitted due to the cost. Consequently, decisions on product and innovation selection are taken based on perceptions of market readiness and demands of a few luxury car executives who have limited knowledge of local customers and local market conditions. Therefore, the process of innovation introduction in the Thai luxury car market is best described as trial and error, which hopefully creates more winner products than loser products¹⁷⁷. However, without carefully assessing market readiness, a luxury car company risks introducing products and technologies that fail in term of financial and market performance. Even worse, such products and innovations might leave a negative impression of the reliability of innovation and the brand's trustworthiness.

Once products and innovations have been selected, there comes the most critical part which is the innovation introduction to dealers and customers. This process includes product testing in real driving conditions and delivering innovation communication. In particular, the design of communication channels and message must be carefully crafted in order to create a high impact message that will help bring commercial success and strengthen brand perception as a leader in innovation¹⁷⁸. Empirical study shows that BMW tended to rush to offer innovations without justification of benefits to dealers and customers. Consequently, BMW is recognized in terms of innovation leadership; however at the same time, BMW products are regarded as unreliable and often incur high running and maintenance costs. Luxury car companies cannot skip the process of product testing and communication strategizing and crafting in order to ensure the full benefits of innovations are appreciated by dealers and customers.

¹⁷⁶ Interview with Motoring Journalist, the Nation, 28 June 2010

¹⁷⁷ Interview with President, BMW Group Thailand, 11 June 2010

¹⁷⁸ Interview with Director Corporate Communication, BMW Group Thailand, 9 April 2010

7.2.3 Action 3 for Intermediary: Customer's Innovation Appreciation and Education

From empirical studies, dealers often react to new innovations in a more conservative manner. One reason is that new innovations require new investment from dealers in terms of technical training and new equipment for service and maintenance of the new technologies. New products also require dealers to invest in both sales functions (such as sales training) and operation functions (such as technical training) which incur extra investment. Nevertheless, some dealers wish luxury car companies to invest a lot more in product advertising to create more sales opportunities. More importantly, dealers want a higher margin for the new products and new sales incentive schemes that bring more revenue to dealers. While luxury car companies use innovation as a brand and product differentiation factor, dealers perceive some new innovations negatively¹⁷⁹. Dealers might not fully participate in the new product and innovation training or select any of their staff to attend the training. As a result, dealer staff might not have enough knowledge to communicate effectively and convincingly to customers about new innovations and benefits.

The disharmony in perspective between local subsidiary and dealer needs to be resolved effectively by creating an understanding of brand and the critical roles of innovation toward the success of brands, which will eventually bring business successes to the dealer. This also reflects the complex business relationship between global brand owners (internal and local subsidiary) and local intermediary. Cooperation and partnership between the two parties becomes very critical to the success of new products and new innovations being launched in the local market. Since the intermediary often has direct access to customers, they have a critical role in convincing customers to believe in the benefits of technologies and innovations. A luxury car business normally requires huge investment and trust among three parties: local subsidiary, dealer and customer. BMW in Thailand has suffered from the situation of inexperienced dealers who have an average dealership experience of less than five years while their archrival, Mercedes-Benz, has experienced and knowledgeable dealers with an

¹⁷⁹ Interview with BMW's Dealer Principle, Europa Motor, 9 June 2010

average experience of over ten years. Mercedes-Benz dealers have long trusting relationships with customers and are able to convince customers to accept new technologies and innovations in Mercedes-Benz products¹⁸⁰.

The ability to convince and create trust also relates to staff retention at the dealership. In Thailand, the career of car salesman is regarded as a less preferred and less prestigious career. Empirical data shows that the turnover rate for BMW dealers in Thailand is over 20%, while the turnover rate is much less for Mercedes-Benz. Consequently, the level of product knowledge and innovation appreciation at the dealer staff level is much less for BMW than Mercedes-Benz. Hence, the level of brand and innovation appreciation of sales person between two brands is very different. Sales person and internal dealer staff play a crucial role in convincing customers to appreciate new products, technologies and innovations. Luxury car dealers have to change their attitude about new technologies and innovations, manage their workforce, and equip them with product knowledge and innovation appreciation¹⁸¹. Then, dealers need to convey and convince the message of innovation appreciation to customers and make them trust and demand for new technologies and innovations.

7.3 Implications for Service Encapsulation Delivery Model

Empirical studies reveal that the success of service encapsulation comes from interplay among three parties: internal, who represents the brand owners or their local subsidiary representative, intermediary, who operates on behalf of internal and interacts directly with customers, and external third party, who works in collaboration with internal and/or intermediary to deliver service encapsulations. To successfully deliver service encapsulation, vision, goals and outcomes must be designed within internal parties (headquarter and local subsidiary). Then, internal will set up operational details including a service blueprint that highlights tasks and responsibilities for each task. Internal has to communicate the operating plan including incentive schemes to intermediary and/or external. Internal needs to also ensure the control of quality and how to measure customer satisfaction. Intermediary has the critical role of customer interaction and needs to ensure that service encapsulations are valued and

¹⁸⁰ Interview with Mercedes-Benz Dealer Principle, 9 July 2010

¹⁸¹ Interview with Director Dealer Development, BMW Group Thailand, 28 June 2010

appreciated by customers. The use of external is important to fulfil service encapsulation offering. Internal and intermediate must set up a mechanism to control the execution and quality of external's services.

7.3.1 Action 4 for Headquarter: Service Encapsulation Strategy & Platform Management

Literature review and empirical studies lead to the conclusion on the important roles of service innovation. Many studies confirm the importance of the automotive industry introducing service encapsulation together with their products as extra sources of revenue and increased customer loyalty and satisfaction (Horvart and Partners 2007). As for the creation of service encapsulation, headquarters can initiate ideas and conduct research on: i) type of service encapsulation, ii) how service encapsulation can be delivered (by whom and through which channel and touchpoints), and iii) global partners who share similar customer profiles and product positioning. As a product selling organization, specific regulations will clearly govern types of basic service encapsulations that might be required by laws, such as product warranty and product liability.

However, any service beyond basic regulatory requirements is up to the luxury car companies to strategize and provide service encapsulation to end-consumers. Even if headquarters might not be directly involved in the market-specific service encapsulation offering, they can leverage their capabilities and understanding of the global requirements of products and services that are associated with the luxury car industry. Understanding of global requirements within the automotive industry or across industry lead to the creation of services like financial and insurance service, extra-warranty purchase, service inclusive and so on (Howells 2004). Headquarters can facilitate the knowledge of what service encapsulation might be required by each market and why a specific market might require more than other markets. Service encapsulation that delivers value on image and social acceptance might become more popular than technology update and product training in Asian country (Oliver Wyman 2007). Headquarters can also play a vital role, influence, inspire and encourage with rewards for local subsidiaries to do more.

Interestingly, different products across industry might share a lot of similarity, for example customer profiles, preferences and tastes. These similarities create opportunities for joint branding to create more sales opportunities for complementary products that are not a direct competitor. For example, BMW creates a partnership with Apple. Since the profiles of the majority of BMW's customers are similar to those of Apple, which are best described as young, aesthetic, urbanism, IT literate, introducing Apple product interfacing in BMW products and conducting joint marketing events together brings success to both organizations. BMW can join sporting events as the main sponsor, such as PGA tournament, Formula car racing, President Club racing; or be a main sponsor of a newly emerging event like the TED Forum. This arrangement can be made at the global level and can be further leveraged at the local level. A major task for headquarters is to come up with the events for their global audiences.

7.3.2 Action 5 for Local Subsidiary: Market's Service Encapsulation Management and Operation

A local subsidiary can also get ideas on service encapsulation from various sources. Ideas might come from the luxury car industry or other automotive market segments. Moreover, other industries can bring new ideas for adaptation or modification. The local subsidiary can work closely with headquarters, who supposedly have a wealth of knowledge on innovation practices in different markets around the world (Luis et al. 2010). Next step for the local subsidiary is to design the delivery model which involves three parties (internal, intermediary, and external).

The local subsidiary needs to ensure that there is an availability of trusted and reliable partners locally. The choice of local dealers needs to be identified and chosen carefully. Empirical study also highlights that, since intermediary interacts directly with customers, from customers' point of view, they might not be aware that internal and intermediary are two separate entities. The local subsidiary also needs to be involved in the process of external vendor selection, since these vendors will eventually carry the image of luxury car and contribute to the effectiveness and satisfaction of service encapsulation. For example, when luxury customers interact with roadside assistance staff, they assume that their organization is part of the internal and intermediary even if the company is an

outsourced company. Hence, the local subsidiary must ensure an effective operational model between service encapsulation providers.

The local subsidiary can influence the operation platform for all service encapsulation partners to participate as a part of the operation setting. The use of technology, internet and resources needs to be agreed well in advance by using service level agreement, since this might impact on the level of service which eventually leads to customer satisfaction. Empirical study also indicates that it is standard practice for the local subsidiary to design a compensation scheme to incentivize the intermediary and, in some cases, external parties as a management and control mechanism. It is also normal practice for service encapsulation partners to invest in the agreed technology platform and a choice of software such as dealer management system (DMS) and measurement of customer satisfaction index (CSI).

7.3.3 Action 6 for Intermediary: Customer's Service Encapsulation Operation

Intermediary enters the dealership agreement with an internal or brand owner. The dealer agreement often states very clear retail standards and requirements that an intermediary needs to fulfil in terms of facility setting and infrastructure required for sales and operation activities. The internal team will often audit those standards for dealers in order to quantify for financial incentives. On a yearly basis, various targets have been set from internal to intermediary in order to govern the performance and operation of the intermediary. Empirical studies also indicate that a number of service encapsulations that are valued highly by customers are performed by intermediaries; in particular, services related to the direct use of the product such as after-sales service, product warranties, and customer service.

The intermediary needs to ensure that their dealership and staff are equipped with the right tools, resources and training to carry on service encapsulations that are offered to end customers. The intermediary needs to work closely with internal to agree on the training plan and knowledge transfer. The local practice of knowledge transfers is also different. While some luxury car companies provide knowledge transfer and technical training without extra cost, certain

luxury car companies charge training fees to dealers. If the intermediary has to pay for the technical knowledge and training, they will selectively send some of their staff or even avoid sending staff to attend training to save costs. Nevertheless, lack of product knowledge and improper technical knowledge training results in inability to service and maintain innovations¹⁸². Dealer personnel will be unable to convey and convince of the benefits of new technologies and innovations.

Since the luxury car industry is now competing by leveraging global brand perception and global product, the local intermediary needs to understand what the brand stands for, and what are the roles of innovation that contribute to the commercial success of the intermediary. Luxury cars tend to be equipped with the latest modern technologies, which have often not been available in the local market before. Intermediary can only provide service encapsulations for customers based on a true understanding of products, innovations and the effective service delivery process (Susman et al. 2006). Intermediary has the challenging role of maintaining a balance among global product appreciation, local operation, and achieving customer satisfaction. To achieve this challenge, the intermediary needs to equip their staff with knowledge and skills and upgrade their facility for delivering satisfactory service encapsulations. By failing to do these three tasks well, the intermediary cannot compete and customer preference will soon be moved to the competitors.

7.4 Implications for Service Encapsulation Commercialization Model

Consolidation of qualitative analysis and quantitative analysis led to the introduction of the service encapsulation commercialization model. This model is a modification of the work of Sundbo and Gallouj (2000). This model illustrates that there are four elements that drive the success of service encapsulation. Those four elements are: internal actors, external actors, external trajectories and service encapsulation enablers. This research newly identifies four service encapsulation enablers that are required in order to create success, which are: communication, trust and reputation, knowledge transfer, and cooperation. Communication plays

¹⁸² Interview with Managing Director, BMW Manufacturing (Thailand), 31 March 2010

a vital role not only in establishing trust and reputation but also in persuading customers to accept new innovations and identify benefits. Customers will not buy service encapsulation from luxury carmakers if they do not trust them, or if the service providers also have a negative reputation.

The luxury car industry requires very high investment since the key success factors of this industry involve technological advancement including local staff technical training in conjunction with sophisticated marketing programs including communication. It is important that the required knowledge is transferred to service encapsulation providers and that those providers are knowledgeable about the product and services. Ultimately, a knowledgeable workforce and advanced technology are needed to effectively deliver service innovations (Susman et al. 2006). Lastly, the cooperation among service encapsulation providers is critical to deliver values from one end (manufacturer) to the other end (customer). Without good cooperation, service encapsulation value will be diluted along the activity chain.

7.4.1 Action 7 for Headquarters: Strategic Global Performance Management

This study provides insights based on outcomes from empirical data showing that returns on innovation through service encapsulation can be captured by using financial indicators (unit sales and market share) and market performance (brand strengths and preferred brand for future purchase), as suggested by Drake et al. (2006). While financial indicators, especially unit sales and market share, are present-focus and can be used to create marketing message to emphasis on the success of products, in reality, automotive companies often sacrifice their long-term performance to justify the short-term performance. Car companies might decide to push products that are equipped with inappropriate and obsolete technologies to customers who might also not need such a product profile but decide to purchase a car due to price and discount factors. Such products might contain much technological advancement, which might become unreliable and not fit for use of customers in the end. For example, BMW in Thailand decided to equip their products with runflat tyres which did not fit the poor road conditions in Thailand; or they decided to equip cars for Thai customers with i-Drive that only had commands in English. These poor decisions

on the choice of option should not be pushed as burdens for customers to justify the short-term success of a car company.

Headquarters need to balance short-term returns and the long-term performance of its local subsidiary. In particular, when luxury car companies often rely on non-local expatriates who take a short-term assignment in the local market, those executives will go after short-term performance, since this will help them to get another assignment and advance in their career. Practice in the automotive industry, especially the luxury car industry, is to assign an international market research company to conduct a brand monitor study in comparison to competitors, as well as a study on desire for future purchase from current and potential customers. However, these predictive indicators often receive less weight when compared to the new car sales and market share figure. Once the local market starts to show strong development signs, headquarters will start to put more emphasis on brands and customer perceptions and preferred choice of future purchase. Nevertheless, this might be too late and luxury carmakers might face issues of lack of trust in innovations and technology. This issue can be avoided if headquarters constantly monitors performance of local subsidiaries, based on two dimensions criteria, 1) financial and market performance, and 2) short-term and long-term.

Headquarters can also help promote cooperation and knowledge transfer by offering opportunities to participate in events that are designed to transfer knowledge such as new vision and strategy, brand heritage, outcomes from marketing research, global consulting project, global and regional conference, and so on. Headquarters often group their markets into geographical zones which might share similarity in terms of customer demography and preference on product features and innovations. Many ideas and best practices can be shared among local subsidiaries and intermediaries in markets that share similarities. Headquarters can act as a host to encourage idea and best practice sharing in order to promote brands' competitiveness across markets.

7.4.2 Action 8 for Local Subsidiary: Local Subsidiary Performance Management

The local subsidiary needs to align their subsidiary performance management according to agreements and targets assigned by headquarters¹⁸³. The design of a performance management scheme becomes very important and influences the way the local subsidiary manages their business. Empirical study indicates that since most executives at Thai luxury car companies are expatriates who are on short-term assignments, they wish to deliver performance that they can influence on the short-term basis such as quarter or annual sales volume. Since the typical period of assignment is around three years, foreign executives might perceive that they cannot influence brand perception, which requires long-term effort to achieve, and might decide to deliver short-term performance. Trust and reputation take time. Cooperation needs support from partners to prove the value of cooperation. Ultimately, service encapsulation enablers need time to become established and effective.

Empirical data shows that Mercedes-Benz understands the impact of a long-term view of performance on the local subsidiary, they often assign their head of organization, the president, to stay in the local market or within a similar region for ten years or more. Consequently, their top executives have better understanding of the local market and Thai customers. More importantly, their president is responsible for the long-term performance, including brand perception and preferred brand for future purchase. Top executives become a key influence in installing trust, reputation, and cooperation among network. When top executives have successfully worked in the market for many years, they tend to be effective communicators and trust builders, since they know customers, dealers and other suppliers (like media) very well¹⁸⁴.

In the case of BMW, within the first ten years of operation in Thailand, there were four presidents who were assigned to lead the local organization. The organization tends to focus on short-term performance indicators such as periodic sales volume. Consequently, marketing promotions based mainly on

¹⁸³ Interview with President, BMW Group Thailand, 11 June 2010

¹⁸⁴ Interview with Motoring Journalist, UK's Car Magazine, 28 June 2010

prices and discount campaigns are normally used to promote short-term sales volume. Local subsidiary needs to assign and communicate performance criteria of financial performance and market performance with the balanced view of short-term and long-term. The balanced view of performance management needs to be shared with all service encapsulation partners. As indicated by the literature, services might require less capital and formal R&D structure. Nevertheless, services require trust from customers. Organizations need long-term relationships to build trust and sustain their reputation (Sundbo and Gallouj 2000).

7.4.3 Action 9 for Intermediary: Intermediary Performance Management

Owners of the local intermediary are often Thai with a few exceptions of regional groups of dealers who run dealers from overseas. Since the luxury car business requires a lot of upfront investment, there are not many opportunities for a local investor to become an intermediary. The intermediary might also be part of a local conglomerate group that has its own operation and management principles, including the way that owners control businesses and report financial performance. Empirical outcomes show that such practices might not be in line with internal standards and management practice of each luxury car nationality which are dominated by German. Financial data might be unreliable while management practices might lack transparency. Businesses might be run by family members who do not welcome external parties to check and audit.

Therefore, the efforts and returns on service encapsulation often go unnoticed. It becomes difficult to justify return and see how effective it is without transparency. Without a proper measurement, the clear direction and improvement actions become difficult to obtain. Internal and intermediary often get into disagreement and conflict due to the different views on how businesses should be managed and reported¹⁸⁵. Empirical study shows that internal often complains about lack of transparency and unprofessional conduct from the local subsidiary. While the local intermediary often complains about lack of culture sensitivity and knowledge about local customs and customers, nevertheless, successes of service encapsulations cannot be achieved without trust and close

¹⁸⁵ Interview with Director Dealer Development, BMW Group Thailand, 28 June 2010

cooperation between service encapsulation partners. The success of service encapsulation starts when all partners agree on the winning relationships and a reasonable profit distribution.

As the luxury car market in Thailand starts to show signs of improvement, internal gives priority to professionalizing its local intermediary. Intermediary needs to adapt its internal management and operation practices. The way that the intermediary recruits, develops and retains their human resources is critical for the success of both internal and intermediary. Without a knowledgeable and capable workforce, service encapsulation partners do not have a chance of success¹⁸⁶. Internal has a choice by investing in its own local dealer set-up. Even if this option might cost more and take longer to become successful, nevertheless in some markets, it has been shown that this set up helps internal to better control the service encapsulation experiences and establish a direct relationship with the customers. However, this set-up is more applicable in mature and sizable markets.

Intermediary has a critical role in creating trust and good reputation. Intermediary needs to understand that, when the customer is dissatisfied with the dealer's services, this impacts on brand perception and reputation. Since luxury car customers represent only 5% of total Thai automotive consumers, the market is rather small and it becomes clear that the success of a luxury car business is dependent on customer retentions. The mechanism of controlling trust and reputation at the intermediary level is rather reactive¹⁸⁷. Intermediary is incentivized based on feedback on a customer satisfaction survey. Empirical study also reveals that outcomes of the survey can be influenced and might not reflect the true perception of customer satisfaction. Intermediary needs also to participate in the design of and the roll out of communication. Local subsidiary and intermediary is often perceived as the same entity from customers. Any messages communicated by either party will impact the other. Intermediary needs to participate in cooperation and knowledge transfer in order to deliver effective and satisfactory service encapsulation to customers.

¹⁸⁶ Interview with President, BMW Financial Services (Thailand), 22 June 2010

¹⁸⁷ Interview with President, BMW Group Thailand, 11 June 2010

Lastly, intermediary needs to invest in Information and Communication Technology (ICT). For certain global IT systems, internal will have a vital role for selecting and implementing the system such as dealer management system (DMS) or financial reporting system like SAP. Standardized technology and global systems help the intermediary to streamline their operations and make it transparent. It also makes it easier for knowledge transfer among service encapsulation partners. Consequently, transparent management and operation systems make it easier to design and implement performance management systems. Such systems will contribute directly to the way that the intermediary designs, measures and follows up on the returns on innovation through service encapsulation by providing transparent and reliable measurements.

7.3 Conclusion

Management implications from this research are derived from research questions, empirical findings and management implications. There are three key findings from this research: innovation expectation matrix, service encapsulation delivery model and service encapsulation commercialization framework. This chapter highlights the actions for three key stakeholders: headquarters, local subsidiary and intermediary.

Actions relating to the innovation expectation matrix describe the unique roles of each party in terms of innovation expectations, concerns and demands for innovations. By understanding the difference in viewpoints, each party can perform their task more effectively. Management actions also suggested the improvements of each when carrying on their task as outcomes from empirical studies. Service encapsulation delivery model highlights interplays among three service encapsulation providers which are internal, intermediary and external. To deliver effective and satisfactory service encapsulation, three parties need to agree on the direction of service encapsulation, how service should be delivered, how to measure success, and how each party can work together with agreed service level agreement.

Lastly, empirical data from qualitative analysis and quantitative analysis are consolidated to introduce a service encapsulation commercialization framework. This framework aims to explain impacts of four service encapsulation enablers.

Headquarters can provide opportunities to build trust and reputation, enhance communication, promote cooperation and offer opportunities for knowledge transfers. Local subsidiary also needs to strengthen all four enablers by working very closely with service encapsulation partners. The urgency for the intermediary is to gain trust and reputation from customers and professionalize their operations. This process is often overlooked and the control mechanism that is being used is rather reactive such as the use of customer satisfaction scores.

Chapter 8 – Conclusions & Recommendations

The investigations of roles of innovation, roles of service encapsulation and maximizing returns on innovation through service encapsulation in Thai luxury car industry were unique. Research findings highlighted the misalignment of innovation expectations among the head office, National Sales Company (NSC) and customers. Research findings also introduced the service encapsulation delivery model that highlighted the importance of interplays among three service encapsulation players: internal, intermediary and external. The key finding from this study was the newly proposed service encapsulation commercialization model highlighted key elements and actors that contributed to the success of service encapsulation and contributed to the better returns on innovation.

By way of conclusion, this chapter reviews the research process and the way forward. It begins with a brief summary of the research process (section 8.1). The next section (section 8.2) highlights the distinctive findings and discussions in their theoretical context. Contributions to academic knowledge are described in section 8.3. The fourth section (section 8.4) suggests business implications in relation to the results of the research. The fifth section (section 8.5) discusses the applicability of this research and poses some issues for further research. Finally, the thesis ends with concluding remarks (section 8.6).

8.1 Revisiting the research process

8.1.1 Emerging gaps and research questions

Due to limitations of the literature on service innovation, service encapsulation and maximizing returns on innovation through service encapsulation, three literature gaps were identified in Chapter Three.

1. Most of the literature supports the importance of product innovation. However, there are a limited number of studies that collect customers' points of view on the importance level of innovations in comparison to other consumers' buying criteria.

2. The literature broadly mentions the roles of combining service with product. The combination would probably help the product performance. However, there is a lack of literature on what the mixture formula is to make the combination that creates value for manufacturers and end-consumers. How can services enhance product innovation? Who and which parties have an impact on the service encapsulation service delivery?
3. Besides the common assumption that good services yield a better product-commercialized performance, there is very limited evidence of academic research studies that examine the role of service encapsulation in the success of innovation commercialization. What are factors that contribute to the commercial success of service encapsulation?

These gaps cannot be explained by the literature. This thesis investigates these phenomena based on three research questions identified in Chapter Three:

RQ 1: What are the roles of innovation in the Thai Luxury Car Market?

RQ 2: What are the roles of Service Encapsulation in the Thai Luxury Car Market?

RQ 3: How can Thai luxury carmakers maximize returns on innovation through service encapsulation?

8.1.2 Methodology

Mixed research methodology was deployed in this research. Chapter Three explained how qualitative part – face-to-face interviews and quantitative part – questionnaire were used to triangulate empirical studies to enhance validity. Empirical findings from qualitative analysis helped the design of questionnaire. Outcomes from questionnaires were contributed to quantitative analysis. For the first research question, the face-to-face interviews focused on roles of innovation, while the questionnaire focused on luxury car buying criteria, brand perceptions, general concepts of product innovations and service innovations. For the second research question, the face-to-face interviews focused on roles of service encapsulation in the commercial success of product innovation, opportunities and barriers of encapsulation services in products, while the questionnaire focused on differentiation features between luxury car and non-luxury car and

level of importance of existing service encapsulations being offered in the Thai automotive industry. For the third question, the face-to-face interviews focused on external and internal parties who have impacts on service encapsulation, success criteria for the success of innovation commercialization, while the questionnaire focused on the importance of service encapsulation for the future purchase, luxury car loyalty criteria, and preferred luxury car brand for future purchase.

The fieldwork was conducted primarily in Thailand with the exception of some executives who also run business operations in other markets like Southeast Asia and Europe. The face-to-face interviews were conducted by interviewing 30 high profile executives in the Thai luxury car industry including Presidents, CEOs, Managing Directors and dealer owners at the corporate and subsidiary levels between April 2010 and April 2012. Questionnaires were conducted via paper-base and on-line between May 2010 and April 2012. 352 survey invitations had been sent out and 206 survey takers, or 58.5%, participated in the survey. The survey of 16 non-respondents was conducted in March 2013. Secondary data were gathered from the annual reports, automotive media magazines, and websites of the automotive industry and trade media.

8.2 Recalling findings and discussions

8.2.1 Roles of innovation in the Thai luxury car industry

In Chapter Four, the study revealed roles of innovation in Thai luxury car industry. Findings provided insights that there was a gap between the perception of the role of innovation between National Sales Company (NSC), dealers - intermediary, and end-consumers.

1. This chapter also presented the findings from the quantitative analysis on customers' feedback on luxury car buying criteria and revealed that innovation was ranked among the least important buying criteria, far below other factors like brand reputation, comfort, service quality and so on. Luxury carmakers who provide too many innovations that are unnecessary, unreliable and with high maintenance cost would

definitely suffer negative results and would directly impact the commercial performance of the product.

2. Outcomes from interviews also revealed an interesting finding regarding roles of innovation under the product consumption process, key concerns and expectations of innovation are vastly different between luxury carmakers, dealers and customers.
3. The chapter concludes by highlighting that the major role of innovations was to be 'the enabler' of luxury car consumption but not 'the main driver' of the consumption. Luxury car customers were after innovations that fitted with their desire for the tangible use of the luxury car products, like a means of transportation, and intangible use of the product like status symbol and means for social acceptance.

8.2.2 Roles of service encapsulation in the Thai luxury car industry

In the future, the revenue contribution of services to the total revenues from automotive industry will increase. This applies not only to the service sector, but also to manufacturing (Dorner et al. 2011). In Chapter Five, the critical roles of service were investigated. Current performances of service encapsulations offered by Thai luxury carmakers were also presented. Consumers' points of view in terms of value perception of Thai luxury car service encapsulations were presented and, ultimately, led to the proposal on the service encapsulation delivery model. There were three service encapsulation players who contribute to the success of service encapsulation delivery which are internal, intermediary and external. There were 2 main arguments reflected from this study.

1. There was a misalignment of value and priority among service encapsulation players. Even if the goal for entering business for the product owner – internal and its dealer – intermediary is financial returns, the approach to achieve such returns was different. Without sharing the same success and key performance indicators, dealers who focused on short-term performance can jeopardize long-term brand performances.
2. Success of service encapsulation depended largely on close interplay among service encapsulation players, which were broadly classified as internal (NSC), intermediary (dealer) and external (outsourcing

vendor). Luxury carmakers were all international firms with limited experience in the local market. Excellent and innovation-advanced products that may have proven very successful in other markets do not guarantee success in the local market. Poor service encapsulation delivery models would surely drive customers away. It also takes time to change the local perception of brands and their service reputations.

8.2.3 Maximizing return on innovation through service encapsulation

In Chapter Six, this study introduced the concept of returns on innovation. Returns on innovation can be captured by 1) tangible returns measured by new car sales and car population, and market share and 2) intangible returns measured by brand strength and preferred brand for future purchase. To deliver superior returns on innovation, organizations must ensure the acquisition of key service encapsulation factors. These factors were identified as 1) market and customer intelligence, 2) service encapsulation readiness, 3) organization compatibility and 4) alignments to policy makers. The proposal of a service encapsulation commercialization framework aimed to highlight the interplay and relationship among 4 key elements: 1) internal parties, 2) external parties, 3) socio-factors and 4) service encapsulation enablers. Each element also represented a number of actors. There were 3 main arguments:

1. Returns on innovation were broadly categorized as commercial performance – unit sold and total car population and market performance – market share, brand strength and preferred brand for future purchase. These four performance indicators were by no means intended to be a comprehensive list of returns on innovation through service encapsulation. Instead, these four items served as a starting point to be further explored in other industries and for specific purposes such as efficiency of customer services, efficiency of operation process and so on. For profit seeking organizations, financial contributions always come as a high priority and it is imperative that service encapsulation must bring financial return, whether short-term or long-term, in order to justify the existence of such service encapsulation.

2. Key success factors for service encapsulation that bring commercial values were the attempts to categorize findings, concerns and observation of factors into 4 factors. These 4 factors also represented a natural flow to follow when organizations embrace the service encapsulation journey. They were 1) market and customer intelligence, 2) service encapsulation readiness, 3) organization compatibility, and 4) alignment with policy makers. It needed to be mentioned that that the checklist is not a fully comprehensive list but rather served as a starting point. The checklist should be modified to fit different industries and different market conditions.
3. Ultimately, the value of the service encapsulation commercialization framework was to link this comprehensive study that incorporated a significant volume of qualitative analysis, quantitative analysis, and the service innovation literature. Service encapsulation commercialization framework is the interplay among 4 key elements: 1) internal parties, 2) external parties, 3) socio-factors and 4) service encapsulation enablers. The newly proposed framework was a creation that provided linkage between academic work and practitioner work that brings value to academic contributions as well as the real world implications.

8.3 Contributions to academic knowledge

This thesis contributes to academic knowledge in the areas of innovation, service innovation and service encapsulation. The contributions were in the luxury car industry with the potential to extend to the area of multinational organization management in other industries. In addition, this thesis contributes to academic knowledge through the vigorous empirical data that is reported on roles of service innovation, roles of service encapsulation, barriers and opportunities of service encapsulation, service encapsulation success factors, and how organizations can maximize returns on innovations through the implication of service encapsulation. More widely, there have been no other studies that consider the role of service innovation and more specifically, service encapsulation in the luxury car industry in Thailand. Therefore this study presents new empirical evidence and knowledge for academic researchers, as well as new insights for industry managers highlighting the importance of

service encapsulation to innovation and industry competitiveness. The contribution of the thesis to academic theory is discussed in the following sections.

8.3.1 Roles of innovations in the luxury car industry

Within the automotive industry, revenues from services have started to contribute far more than revenue from selling products alone (Oliver Wyman 2007). However, there is a lack of study of the relationships between product innovation and service innovation in product-driven organizations. Susman et al. (2006) indicated that there is a significant shortfall in fundamental research on service innovation when embedded within a manufacturing firm, even if innovation in services typically results in increased customer satisfaction and loyalty. The research from Godlevskaja et al. (2011) also indicated that product-based differentiation in the automotive industry is increasingly difficult and companies cannot compete on product alone. Eventually, automotive companies realized enormous growth opportunities in the service area as indicated by the work of Horvath and Partners (2007).

Innovation is often assumed to be the key contribution to the success of product commercialization. There is also a broad categorisation of innovation within the luxury car industry to hard and soft innovations. Hard innovations involve primarily technical innovations in automotive key components like engine, suspension, drive train and so on. Soft innovations were on the refinement of customers' product perception – perception of innovation through product design, brand innovation and products' aesthetic elements. Very often, luxury carmakers feel obliged to introduce new innovations or match innovations that are offered by competitors. The thesis findings revealed that innovation was not among the highly important customer buying criteria. Instead, trust and reputation of the innovation provider, timing of launching of innovations and innovation communication were much more critical from the customer point of view. Selecting of innovations and ensuring that technological innovations keep the running and maintenance costs at a very reasonable level are crucial to the long-term performance for luxury car brands.

8.3.2 Roles of service encapsulation and the unique role of local intermediary

Luis et al. (2010) described that it is essential for MNCs to develop and leverage company-wide as well as subsidiary-specific capabilities for the creation, transfer, assimilation, and exploitation of new knowledge and innovation. Howells (2004) also identified that there is a complex interplay between services and goods in the innovation process, and individual product and service innovations seldom add any value in isolation. Eventually, service encapsulation has emerged from urgency to capture commercialized values and create customer satisfaction as confirmed by the work of Susman et al. (2006). Johnson and Clark (2008) indicated that adding a service element could enhance performances of products and services. Service encapsulation providers often offer services without assessing the impact of service encapsulation. Services should, at least, bring benefits to organizations as broadly categorized in the areas of sales and marketing, competitive performance, and cost performance (de Brentani 1995).

The thesis also revealed the misalignment gap of innovation expectations among three parties which were brand owner, dealer – intermediary, and customers. Moreover, key concerns of innovation and demands for innovation were vastly different among the three groups. Since luxury carmakers rely heavily on their dealers, dealers or – intermediaries act as a middleman to interface with customers, receive knowledge transfer and convince customers on new products, new technologies and innovations. The intermediary has a crucial role in the process of innovation acceptance, innovation communication, affirmation of product, and brand image. This critical role is also supported by the work of Howell (2006). This thesis revealed that the process of service innovation introduction in the Thai luxury car industry was normally a one-way approach, where there was limited feedback from intermediary and customers toward customers' requirements on new innovations. Therefore, innovation introduction was more of a hit-and-miss practice.

The intermediary also had the crucial task of convincing end-consumers to try out new product and service innovations. A lesson learned from the Thai luxury car industry is that the most successful luxury carmaker manages to work

collaboratively with its dealers and leverage the relationship for the process of new service encapsulation introductions. Since dealers know their luxury car customers very well, they gain a high level of trust and are able to convince customers to try new product and service innovations in return.

8.3.3 Maximizing returns on innovation through service encapsulation: a case study in the Thai luxury car industry

Due to the importance of the service element, manufacturing firms are starting to offer extensive service encapsulations to customers as a new source of revenue and key factor to drive customer satisfaction (Susman et al. 2006). However, there are many issues and gaps of knowledge in terms of service offerings in product-driven organizations. Holmen and McKelvey (2007) stated that innovation measurement does not appear to take place routinely within management practice. Prior research had not yet developed a definitive measure of innovation (Nohria and Gulati 1996). As for the measurement of returns from innovations, the work of Drake et al. (2006) indicated that there are two broad classes of performance measurement: financial and market performance. Samsonowa (2012) suggested that there are 11 generic performance clusters based on common research processes. Gebauer et al. (2005) also conducted research on the return from service as offered by the manufacturing firm and found that product manufacturing firms that invest heavily in extending their service businesses increase their service offering and incur higher costs, but do not always get the expected corresponding higher returns.

Moreover, the work of Sundbo and Gallouj (2000) provided the framework of 'Innovation as a loosely coupled system in services' which involves many elements and actors in the process. This thesis revealed that, when it comes to the topic of service encapsulation, there are a number of service encapsulation enablers that facilitate the process of service encapsulation commercialization. Service encapsulation enablers consist of four actors namely communication, trust and reputation, co-operation and knowledge transfer. Communication helps service encapsulation providers differentiate their service from competitors. Since service innovations appear very similar and customers normally fail to differentiate services from various providers, communication creates better understanding of product innovation and service encapsulation.

Hence, it will increase the chance for organizations to succeed in innovation commercialization.

Trust and reputation have a profound impact on the commercial success of service encapsulation. Product innovations and service encapsulation require a high level of trust and reputation from end consumers to deliver the commercial success. Co-operation among service encapsulation players is crucial and directly contributes to the overall performance of service encapsulation. Since more than one party engages in the process of service encapsulation delivery, the common understanding of the value proposition and expectations from the end customers needs to be shared among these players. Lastly, since the technologies in today's automobiles are very advanced and change very rapidly, knowledge transfer between brand owner and intermediary needs to be done on a timely basis through effective use of human resources and dealers' personnel. Intermediaries need to understand not only product technologies but also the service side to encapsulate in order to outperform competitors. The competition in the luxury car industry has become world-class, but requires local adaptation.

8.4 Applicability of the research and agenda for further research

8.4.1 Applicability of research

While this thesis provides insights into the particular issues on service innovation, service encapsulation and maximizing returns on innovation through service encapsulation, it still holds certain limitations.

1. The findings of this empirical study are enriched with evidence mainly from five international luxury carmakers who dominate Thai luxury car market for more than ten years. The main reason for selecting cases in the Thai luxury car industry is to investigate roles of service innovation, roles of service encapsulation and how luxury carmakers can maximize returns on innovation through service encapsulation. The purpose of this research is not intended to offer general explanation to other settings. Instead, it provides an in-depth analysis of roles of service innovation, roles of service encapsulation and maximizing the returns on innovation through service encapsulation in the selected luxury carmakers operating in

Thailand. The conclusion of this research has limited applicability in other settings or cases. However, application of the findings in other settings may yield theoretical generalizations.

2. Given limitations of time and resources, this thesis concentrated on the internal mechanisms of Thai luxury carmakers in maximizing returns on innovation. Some external driving forces that directly and indirectly impact returns on innovation through service encapsulation were indicated only briefly. Moreover, the scope of the investigation excluded impacts on branding and brand perception. Branding was excluded from this study to give priority to the study of service innovation and innovation commercialization.
3. During the fieldwork, there were constraints of time and financial resources in collecting data. During the fieldwork of face-to-face interviews (April 2010 – April 2012), there have been many executive rotations in organizations. These changes in management might represent different points of view due to different market situations. In addition, as the time span for data collection lasted over two years, many changes especially market situation changes may have occurred in the Thai luxury car industry during this time.
4. During the fieldwork, there were the uncontrollable factors of the US economic crisis in 2008 and the natural disasters: the Japanese tsunami and Thailand's mega-flood in 2011. During the questionnaire fieldwork (April 2011 – May 2012), the economic crisis and natural disasters might have impacted on the perceptions and demands of luxury automobiles. As the time span for questionnaire collection lasted over thirteen months, the market conditions and product profiles of luxury cars and non-luxury cars have changed quite dramatically. This might have impacted on the Thai luxury car industry as well.

8.4.2 Agenda for further research

This study provides opportunities for further research, identified as follows:

1. Roles of service innovation in other markets and industries

Luxury products have elements of exclusivity, premium, craftsmanship and image that are integral to the products. The empirical study suggested that, at least in the automotive industry, innovation was not among the highest importance buying-criteria. It would be very interesting to know whether this observation is also true in other markets and industries or not. In a developing country like Thailand, brand might become more important than the product substance. However, in a more matured market, the role of innovation might become more prominent.

2. Service encapsulation delivery model

The service encapsulation delivery model highlighted the parties who contribute to the success of service encapsulation which are internal, intermediary and external. A future study could investigate the cooperation model among these three parties in each important area such as strategy, organization, process and infrastructure. Outcomes from the study would help organizations to improve their business performance, especially the multi-national organizations, who tend to rely on local partners for strategy execution and client interface. Here, it would also be very interesting to learn some more lessons from the perspective of the carmaker corporate head office, especially in relation to the introduction of new innovations (as part of service encapsulation). A future study on whether or not the head office fully understand the way in which service centres or other types of local partners would approach adopting the new innovation and one could utilize the open innovation framework to better understand the dependencies (e.g. other actors you wish to partner with) in the existing business model in order for organizations to successfully deliver a service encapsulation experience for their customers in developing and emerging country markets. Outcomes will highlights the fact that commercial success depends not only on company's own

innovation, but also on the success of the partners within an open innovation setting (e.g. suppliers, distributors, financiers, retail outlets and others).

3. Returns on innovation through service encapsulation

The study relied on the concept of returns on innovation from various research studies. Returns on innovation can be broadly categorized into tangible returns - financial, and commercial, and intangible returns like market performance. More frequently than not, organizations provide service encapsulation without a clear measurement of success and failure. Service encapsulation can create returns beyond the point of single contact. The performance of service encapsulation sets customers' expectations for future purchase and helps create an interest in the organization's product and service offerings. By understanding business outcomes derived from service encapsulation, organizations can judge what works best for them and align strategy and policy accordingly. Since the linkage between service innovation and its performance does not appear straightforward enough, more studies must be conducted to understand the concept of return on innovations.

4. Service encapsulation commercialization framework

The framework consists of four key elements which are internal, external, external trajectories and service encapsulation enablers. This newly proposed framework must be supported by empirical study. Service encapsulation enablers were integrated outcomes from empirical studies and literature reviews. However, each service encapsulation enabler represents potential for future research.

1. **Communication:** This study highlighted the critical role of communication toward the success of product innovation and service encapsulation. Communication is also a key feature of luxury products. Since luxury brands become global, it is very interesting to investigate the practice of communication for the global product for the local audiences. It is interesting to know the roles of communication for service innovation in luxury products compared to non-luxury products.

2. **Trust and Reputation:** Roles of trust and reputation are very important to the success of product innovation and service encapsulation. Empirical study revealed that, in the Thai context, trust and reputation were the number one factor contributing to the success of service encapsulation. It would be interesting to investigate the roles of trust and reputation in the success of product innovation and service encapsulation in other markets where the culture might be different. Moreover, since the intermediary interacts directly with customers, it would also be interesting to understand the roles of intermediary in the process of trust and reputation establishment between intermediary and end consumers.
3. **Co-operation:** More and more studies highlight the importance of co-operation in new product innovation and new service delivery (NSD). However, only a limited number of studies have investigated the roles of co-operation in the success of service encapsulation. Operational models need to cover the strategic direction as well as the operational aspect.
4. **Knowledge Transfer:** Since the brand owner needs to rely on an intermediary to convince customers on new innovations and service encapsulation, the intermediary's role also takes care of innovations by providing technical support and after-sales service. It is interesting to understand the current practice of the balance between knowledge transfer and knowledge withholding in order to protect intellectual property and maintain trade secrets. Level of knowledge transfer is closely linked to the co-operation among service encapsulation providers.

8.5 Concluding remarks

This thesis was prepared during a challenging time for the world automotive industry. Starting in 2008, the US sub-prime crisis shook up the whole automotive industry, especially US carmakers. The crisis sent a shock wave and created a restructuring in all players in automotive businesses one way or another. The significant jump in the crude oil price in 2009 triggered R&D work on disruptive innovations to come up with alternative fuel technologies that avoid the traditional fossil fuels. On March 2011, a tsunami hit Japan and sent another shockwave to the whole automotive production and suppliers. The situation was worsened by the Thailand mega-flood in the latter part of 2011. Economic crisis, high fuel prices and natural disasters have been a perfect recipe

for luxury consumers to review their need for luxury products. Never before had luxury car customers investigated the importance of product innovations and service encapsulation when they consider purchasing luxury cars. Brand and heritage alone do not guarantee the commercial success of luxury carmakers.

With these dramatic changes in the automotive business, it has become crucial for all luxury carmakers to re-evaluate the roles of innovations. Most of the literature and scholars accept that innovation helps to improve product performance but it remains unknown to what extent. Nevertheless, outcomes from the empirical study revealed that innovation is not among the first-priority buying criteria valued by luxury car consumers. The thesis also identified that not only did customers have different views on the role of innovation from the brand owners, but also that dealers – or intermediary were not convinced that the luxury car market was ready for many innovation introductions. Instead, roles of communication, trustworthiness and reputation all contribute more to luxury car consumption.

Service encapsulation has been offered in the Thai luxury car industry since the commencing of the industry. However, this thesis reveals that there was a misalignment in terms of which service encapsulations were treated as a high priority by the carmakers and which service encapsulations were highlighted as highly important by luxury car consumers. Service encapsulations like financial services and brand experience received the highest treatment and gained the largest proportion of marketing campaign supports from the car companies. However, both financial services and brand experience received the lowest rating from luxury car consumers in term of level of importance from customer' perspectives. Moreover, the study also highlighted the interplay among service encapsulation players which are internal, intermediary and external. The success of the leading luxury car brand demonstrated a better service encapsulation delivery model with its close collaboration among service encapsulation players.

Ultimately, an effort to provide product innovation and offer service encapsulation is intended to enhance the commercial returns on innovation through the use of service encapsulation. Organizations must understand the basic requirements for service encapsulation before they can embrace the service encapsulation concept. Service encapsulation success factors comprise four

factors: customer and market intelligence, service encapsulation readiness, organizational compatibility and policy alignment. The service encapsulation commercialization framework helps an organization to understand different elements and actors that contribute to the commercial success of the service encapsulation efforts. This framework was modified from the original work of Sundbo and Gallouj (2000). The newly proposed element of service encapsulation enablers was an outcome from empirical studies and literature reviews. The finding stressed the point that luxury carmakers need four service encapsulation enablers to deliver commercial success and maximize returns on innovation. Those enablers are communication, trust and reputation, co-operation and knowledge transfer.

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APPENDIX I: LIST OF INTERVIEWEES

Interviewee

- President, BMW Group Thailand
- After-sales Director, BMW Group Thailand
- Former After-sales Director, BMW Group Thailand
- Dealer Development Director, BMW Group Thailand
- Corporate Communication Director, BMW Group Thailand
- General Manager – MINI Thailand
- General Manager – BMW Motorrad Thailand
- Manager Area Sales Operation, BMW Group Thailand
- Manager Technical Support, BMW Group Thailand
- Manager Sales Planning, BMW Group Thailand
- HR Manager, BMW Group Thailand
- Dealer Principle, Europa Motor
- Dealer Principle, Barcelona Motor
- Dealer Principle, Performance Motors
- Dealer's Sales Manager, German Motor
- Dealer's After-sales Manager, Europa Motor
- Motoring Journalist, the Nation (English Newspaper)
- Motoring Journalist, UK's base car magazine
- Managing Director – BMW Manufacturing (Thailand)
- Managing Director – BMW Financial Services (Thailand)
- Managing Director – Volkswagen Thailand
- Managing Director – Ducati Thailand
- General Manager & Owner – Lexus Dealership
- Dealer Principle – Mercedes Benz Thailand
- General Manager – Honda Dealership
- Managing Director – Thailand's 2nd Largest Financial Services Company
- Former Director – Mercedes Benz Thailand
- Owner – Luxury Fleet Provider

APPENDIX II: AN EXAMPLE LETTER ASKING FOR AN INTERVIEW

The University of Manchester
Manchester
Business School



Dear Executive,

I would like to express my deepest appreciation for participation in this questionnaire. This question is an important part/input of Doctoral in Business Administration (DBA) at University of Manchester.

This questionnaire is under the research topic of 'Maximizing Return on Innovation through Service Encapsulation'. The starting point of this research topic comes from the simple question of 'if the innovation always sells or innovation is something customers want, the best innovation or the more innovations offered to customers will surely guarantee the commercial success of product/service'. For an experienced executive like yourself, you know this statement doesn't always true. Therefore, the second question is 'well then, what else that needs to be packaged (or encapsulated) with innovation in order to increase the succession rate, whether measured in sales or other commercialize measurements (such as brand recognition and so on)'.

The study will cut across many industries and organizations in order to observe the roles of service encapsulation toward the success of product/service innovation. The information of questionnaire taken will be kept confidential. If there is any request from the school to disclose the identity of the questionnaire taker in order to verify the true identity of the questionnaire taken, I will ask for your permission prior to the disclosure of your information.

Once again, your co-operation is highly appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Nattavut K.".

Nattavut Kulnides

Member of DBA Program
Manchester Business School
University of Manchester

Maximizing Return on Innovation through Service Encapsulation

Introduction – คำนำ

- This interview is part of the doctoral research and will be used for the research purpose under the supervision of Manchester Business School – การสัมภาษณ์ในครั้งนี้เป็นส่วนหนึ่งของการทำวิจัยในโครงการการศึกษาในระดับปริญญาเอกและการทำกับดูแลของทาง Manchester Business School
- During the interview, interviewee will be informed about the use of a recorder. The transcript of recorder will be provided to an interviewee for an approval if required – ระหว่างการสัมภาษณ์จะมีการใช้เทปบันทึกเสียง และจะมีการถอดเทปเสียงเป็นข้อมูลที่เป็นประโยชน์และใช้ซ้ำอีกต่อไป

1. Roles of Innovation in your organization/industry (rating from 1 – not at all, to 5 – very critical) – บทบาทของนวัตกรรมในธุรกิจหรือในองค์กรของท่าน (จาก สเกล 1 – “ไม่มีความสำคัญเลย จนถึง 5 - - มีความสำคัญอย่างยิ่งยวด)
2. Roles of service toward the commercial success of product innovation in your organization/industry – ความสำคัญของการนำเสนอการบริการควบคู่ไปกับนวัตกรรมในสินค้าและบริการ มีบทบาทแค่ไหนแต่ความสำเร็จในด้านการค้า
3. What are opportunities of packaging (encapsulating) service in your products? – ท่านมีโอกาสในการนำเอาการบริการมานำเสนอพร้อมกับนวัตกรรมใหม่ในอุตสาหกรรมหรือธุรกิจที่ท่านดูแลอยู่ มากน้อยแค่ไหน และอย่างไร
4. What are barriers of packaging (encapsulating) service in your products? – อะไรคืออุปสรรคในการนำเอาการบริการมานำเสนอพร้อมกับนวัตกรรมใหม่ในอุตสาหกรรมหรือธุรกิจที่ท่านดูแลอยู่
5. What are external parties who have the greatest impact of service encapsulation? Please provide a ranking (number 1, 2 and 3) – อะไรคือปัจจัยภายนอก (บุคคลหรือองค์กร) ที่มีผลต่อความสำเร็จของการนำเสนอนวัตกรรมใหม่หรือการนำบริการเสริมอื่นๆมาเพิ่มเติมเพื่อเอื้อให้นวัตกรรมหลักประสบความสำเร็จ
6. Does service encapsulation need internal parties support to become a success? (rating from 1 – not at all, to 5 – very critical) – ท่านคิดว่าปัจจัยภายใน คน และ องค์กร ของท่านมีผลต่อความสำเร็จของ นวัตกรรมเสริมและนวัตกรรมหลักมากน้อยแค่ไหนและอย่างไร
7. What are criteria for the success of innovation commercialization in Thailand Luxury Car industry? – อะไรที่เป็นปัจจัยสำคัญที่มีผลต่อความสำเร็จของนวัตกรรมใหม่ๆของธุรกิจยานยนต์ในขนาด
8. What are the innovation(s) that will have the great impacts to your business in the future? Please explain provide reasons – นวัตกรรมใดกำลังเพิ่มบทบาทและคาดว่าจะมีผลกระทบอย่างยิ่งยวดในองค์กรและธุรกิจของท่านในอนาคต โปรดอธิบายเหตุผลเพื่อสนับสนุนแนวคิดของท่าน

***APPENDIX III: SERVICE ENCAPSUALTION IN
THAI LUXURY CAR INDUSTRY SURVEY***

R

เรียนท่านผู้ร่วมตอบแบบสอบถามท่าน ได้รับเชิญให้มีส่วนร่วมในการตอบแบบสอบถามซึ่งเป็นส่วนหนึ่งของการศึกษาระดับปริญญาเอกทางด้านการจัดการทางธุรกิจในหัวข้อ

การเพิ่มผลตอบแทนในการลงทุนด้านนวัตกรรมผ่านขบวนการเพิ่มมูลค่า โดยใช้การบริการ (Service Encapsulation) ในธุรกิจยานยนต์หรู (Luxury Car) ในประเทศไทย แบบสอบถามนี้จะมีผู้เข้าร่วมประมาณ 400 ท่าน

โดยแบบสอบถามจะรบกวนเวลาของท่านประมาณ 15 นาทีการมีส่วนร่วมของท่านขึ้นอยู่กับความสมัครใจของท่าน และคำตอบของท่านจะไม่มีผลกระทบใดๆต่อท่าน ข้อมูลที่ท่านได้ตอบในแบบสอบถามจะถูกรักษาเป็นความลับ สิ่งที่จะได้รับการเผยแพร่จะมีเฉพาะข้อมูลรวมที่ได้รับการประมวลผลแล้วเท่านั้น

ขอขอบคุณเป็นอย่างสูงที่ท่านได้ใช้เวลาอันมีค่าเพื่อตอบแบบสอบถามจำกัดความ“นวัตกรรม” หมายถึง ความคิด การปฏิบัติ หรือสิ่งประดิษฐ์ใหม่ ๆ ที่ยังไม่เคยมีใช้มาก่อน หรือเป็นการพัฒนาตัดแปลงมาจากของเดิมที่มีอยู่แล้ว ให้ทันสมัยและใช้ได้ผลดียิ่งขึ้น

เมื่อนำนวัตกรรมมาใช้จะช่วยให้การทำงานนั้นได้ผลดีมีประสิทธิภาพและประสิทธิผลสูงกว่าเดิม ทั้งยังช่วยประหยัดเวลาและแรงงานได้ด้วย นวัตกรรมยังสามารถแบ่งเป็น นวัตกรรมของสินค้า (product innovation) และ นวัตกรรมของการบริการ (service innovation) และการเพิ่มมูลค่าโดยใช้การบริการ (service encapsulation) เพื่อช่วยให้ผู้บริโภคตัดสินใจในการเลือกซื้อสินค้านั้นๆได้ง่ายขึ้น ตัวอย่างเช่น

การบริการสินเชื่อบริการรถยนต์เพื่อให้ผู้ซื้อรถสามารถเป็นเจ้าของได้ง่ายขึ้น แบรินดร์รถยนต์หรู

หมายถึงแบรนด์ที่มีค่าเฉลี่ยของราคาารถที่ขายในเมืองไทยสูงกว่า สองล้านบาท และมียอดขายสูงกว่า 400 คันต่อปี อาทิเช่น แบรินดร์ Audi BMW Lexus Mercedes-Benz และ Volvo

Dear survey participant, You are invited to participate in our survey Maximizing the return of Innovation through Service Encapsulation in Thailand's luxury car market. In this survey, approximately 400 people will be asked to complete a survey that asks questions about luxury car and its value added services. It will take approximately 15 minutes to complete the questionnaire. Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any question, you can withdraw from the survey at any point. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below. Definitions Innovation is the process by which an idea or invention is translated into a good or service for which people will pay, or something that results from this process. Service Encapsulation is the effort to offer related services with the main product to increase the chance of commercial success of the main product. Luxury Car Brand The term suggests a vehicle with greater equipment, performance, construction precision, comfort, design ingenuity, technological innovation, or features that convey brand image, cachet, status, or prestige—or any other discretionary feature or combination of features

1. โปรดจัดลำดับปัจจัยที่มีผลต่อการตัดสินใจซื้อรถหรูของท่านสามลำดับแรก โดยใส่เลข 1-3

สำหรับปัจจัยที่ท่านคิดว่ามีผลมากที่สุดเป็นลำดับที่ 1 ถึง 3 ตามลำดับ Please rank the top three luxury car buying criteria (please select three criteria and rate from one to three)

- ความหรูหรา (Luxury) _____
- ความสะดวกสบาย (Comfort) _____
- การออกแบบ (Design) _____
- ความปลอดภัย (Safety) _____
- ชื่อเสียงของแบรนด์ (Brand Reputation) _____
- ภาพลักษณ์ (Image) _____
- ประสิทธิภาพ (Performance) _____
- คุณภาพ (Quality) _____
- นวัตกรรม (Innovation) _____
- ผู้นำเทรนด์ (Trend setter) _____
- เป็นมิตรต่อสภาพแวดล้อม (Environmental friendly) _____
- การได้รับการยอมรับทางสังคม (Social acceptance) _____

2. โปรดระบุแบรนด์รถหรูที่ท่านนึกถึงเป็นอันดับแรกเมื่อพูดถึงหัวข้อดังต่อไปนี้ Luxury Car Brand that capture the following topics (choices of: Mercedes Benz, BMW, Audi, Volvo and Lexus and none)

	Audi	BMW	Lexus	Mercedes Benz	Volvo	N/A
ความหรูหรา (Luxury)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความสะดวกสบาย (Comfort)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรม (Innovation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ประสิทธิภาพ (Performance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพการบริการ (Service quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความไว้วางใจได้ (Reliability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ภาพลักษณ์ (Brand image)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความปลอดภัย (Safety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความยอมรับทางสังคม (Social acceptance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ตัวแทนจำหน่ายที่เป็นมืออาชีพ (Professional Dealership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. ท่านเห็นด้วยหรือไม่ว่า เมื่อเปรียบเทียบกับรถยนต์นั่งทั่วไป รถยนต์หรูมีคุณลักษณะในหัวข้อต่อไปนี้ดีกว่าอย่างเห็นได้ชัด Do you agree that luxury car offer the following distinctive features when compared to other passenger cars

	ไม่เห็นด้วยอย่างยิ่ง Strongly Disagree	ไม่เห็นด้วย Disagree	ไม่มีความเห็น Undecided	เห็นด้วย Agree	เห็นด้วยอย่างยิ่ง Strongly Agree
คุณภาพของสินค้าที่ดีกว่า (superior quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความหรูหราที่เหนือกว่า (more luxurious)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรมของสินค้าที่ดีกว่า (more innovative product)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความคุ้มค่าที่ดีกว่า (better value for money)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพการบริการที่ดีกว่า (better service quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความปลอดภัยที่ดีกว่า (safer product)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความเป็นมิตรต่อสิ่งแวดล้อมที่ดีกว่า (more environmental friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การได้รับการยอมรับในสังคมที่เหนือกว่า (better social acceptance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ประสิทธิภาพที่เหนือกว่า (better performance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพการบริการลูกค้าที่ดีกว่า (better quality of customer service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของตัวแทนจำหน่ายที่ดีกว่า (better quality of dealership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. โปรดระบุนวัตกรรมใหม่ที่เกี่ยวข้องกับสินค้า (product innovation) ที่นำมาใช้ในในธุรกิจรถยนต์ที่ท่านสามารถนึกได้ (Please identify innovation products in Automotive industry that you can recall)

5. โปรดระบุนวัตกรรมใหม่ที่เกี่ยวข้องกับการบริการ (service innovation) ที่นำมาใช้ในในธุรกิจรถยนต์ที่ท่านสามารถนึกได้ Please identify innovation services in Automotive industry that you can recall

6. ท่านเห็นด้วยกับข้อความดังต่อไปนี้หรือไม่ Do you agree that:

	ไม่เห็นด้วยอย่างยิ่ง (Strongly Disagree)	ไม่เห็นด้วย (Disagree)	ไม่มีความเห็น (Undecided)	เห็นด้วย (Agree)	เห็นด้วยอย่างยิ่ง (Strongly Agree)
นวัตกรรมทางด้านสินค้า (product innovation) มีความสำคัญมากที่สุดสำหรับรถยนต์หรู (Product Innovation is the utmost important factor in the luxury car industry)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรมทางด้านบริการ (service innovation) มีความสำคัญมากที่สุดสำหรับรถยนต์หรู (Value added service is the utmost important factor in the luxury car industry)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. โปรดจัดอันดับความสำคัญของบริการเสริมต่อไปนี้ในความคิดของท่าน (Please rate the following service offering that you perceive values)

	สำคัญน้อยที่สุด (least important)	สำคัญน้อย (fairly important)	สำคัญ (important)	สำคัญมาก (fairly important)	สำคัญมากที่สุด (high important)	N/A
การรับประกันสินค้า (Product warranty)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
บริการช่วยเหลือฉุกเฉิน (Mobility service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการหลังการขาย (After-sales service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการทางการเงิน (Financial Services)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการด้านการประกันภัย (Insurance Service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้รถยืมระหว่างซ่อม (Loan car)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
บริการรถทดลองขับ (Test drive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ได้รับเชิญให้ร่วมในกิจกรรมการตลาด เช่น งานอีเวนต์ต่างๆ (Be part of Brand's marketing and CRM events)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้บริการสิทธิพิเศษในคลับพิเศษสำหรับสมาชิก (Assess to private clubs and exclusive events)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้ความรู้เกี่ยวกับสินค้าและเทคโนโลยี (Product info. & Technical updates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมีบริการรับส่ง รถที่ต้องเข้ารับบริการ (Service pick-up and drop-off)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การรับประกันราคาขายต่อ (Guarantee resale's value)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การประเมินราคาค่าซ่อมที่ค่อนข้างแม่นยำ (Accurate service price estimation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมีเครือข่ายดีลเลอร์ที่ครอบคลุมทั้งประเทศ (Nationwide service network & dealer coverage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความเป็นมิตรต่อสิ่งแวดล้อม (Environmental friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
งานบริการที่เที่ยงตรงในเรื่องของเวลา (Service Punctuality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
สถานที่และคุณภาพของการต้อนรับของดีลเลอร์ (Dealer amenity & reception service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. โปรดระบุงานบริการอย่างอื่นที่ท่านต้องการและมีความสำคัญ (Please identify other services that you may need)

9. เมื่อท่านตัดสินใจซื้อรถจากบริษัทรถยนต์ ท่านให้ความสำคัญกับปัจจัยดังต่อไปนี้อย่างไรบ้าง When you consider buying products/services from car companies. How do you rate level of important of the following factors

	สำคัญน้อยที่สุด (least important)	สำคัญน้อย (fairly important)	สำคัญ (important)	สำคัญมาก (fairly high important)	สำคัญมากที่สุด (high important)	N/A
ความเชื่อถือและไว้วางใจได้ของบริษัท (Trust)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ชื่อเสียงของบริษัท (Reputation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การตั้งราคาที่สมเหตุสมผล (Reasonable price)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมอบโอกาสในการใช้ชีวิตเหนือระดับ (Luxury lifestyle)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การสร้างควมมีส่วนร่วมในตัวสินค้า (Sense of belonging)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของตัวแทนจำหน่าย (Quality of dealership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
เครือข่ายตัวแทนจำหน่ายที่ครอบคลุม (Dealer network coverage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของงานบริการลูกค้า (Quality of Customer Service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. โปรดลำดับความสำคัญของปัจจัยต่อไปนี้ที่มีผลต่อความจงรักภักดีในแบรนด์ของรถหรู (brand loyalty) Please range the following key criteria that keep customers with the luxury car brand

	สำคัญน้อยที่สุด (least important)	สำคัญน้อย (fairly important)	สำคัญ (important)	สำคัญมาก (fairly high important)	สำคัญมากที่สุด (high important)	N/A
คุณภาพของสินค้า (Product quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความพึงพอใจของลูกค้า (Customer satisfaction)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
มูลค่าการขายต่อ (Resales' value)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของการบริการ (Service quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ภาพลักษณ์และการได้รับความยอมรับ (Image & Social acceptance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรม (Innovation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความคุ้มค่า (Value for money)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความเป็นมิตรต่อสิ่งแวดล้อม (Environmental friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การสร้างควมมีส่วนร่วมของลูกค้า (Customer Relationship Management)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
บริการเสริมที่คุ้มค่า (Value added service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. โปรดระบุปัจจัยอื่นที่ทำให้ลูกค้ามีความภักดีในแบรนด์ของรถหรูที่ยังไม่ได้กล่าวไว้ในข้อข้างต้น(ถ้ามี) Please identify other key criteria to keep customers with the luxury car brand that hasn't been mentioned

12. ท่านมีแผนที่จะซื้อรถยนต์หรูในอนาคตหรือไม่ Do you have any plan to purchase a luxury car(s) in the future?

1. มี (Yes)
2. ไม่มี (No)
3. ยังไม่ได้ตัดสินใจ (Undecided)

12.1 ถ้ามี โปรดระบุแบรนด์ (If yes, please state brand)

1. Audi
2. BMW
3. Lexus
4. Mercedes-Benz
5. Volvo
6. อื่นๆ โปรดระบุ (Other, please identify) _____

12.2. ถ้าท่านมีแผนที่จะซื้อรถยนต์หรู โปรดระบุเหตุผลที่ท่านตัดสินใจซื้อ โดยท่านสามารถระบุเหตุผลได้มากกว่าหนึ่งข้อ If you plan to purchase the luxury car, please identify reason(s), can choose more than one

1. ราคาสินค้า (Product price)
2. การได้รับความยอมรับทางสังคม (Social Acceptance)
3. ภาพลักษณ์ (Image)
4. ประสิทธิภาพ (Performance)
5. ความปลอดภัย (Safety)
6. คุณภาพ (Quality)
7. นวัตกรรม (Innovation)
8. สิทธิพิเศษเหนือระดับ (Exclusive)
9. ความเป็นมิตรต่อสิ่งแวดล้อม (Environmentally Friendly)
10. ความคุ้มค่า (Value for Money)
11. คุณภาพด้านการบริการ (Service Quality)
12. Other _____

13. ถ้าท่านยังไม่มีแผนที่จะซื้อรถยนต์หรู โปรดระบุเหตุผลที่ท่านยังไม่ซื้อ โดยท่านสามารถเลือกได้มากกว่าหนึ่งข้อ (If you have no plan to purchase the luxury car, please state reason(s), can choose more than one reason

1. ราคาสินค้า (Product Price)
2. คุณภาพของสินค้า (Product Quality)
3. คุณภาพของการบริการ (Service Quality)
4. ชื่อเสียง (Reputation)
5. ความคุ้มค่า (Value for Money)
6. ค่าใช้จ่ายในการใช้งาน (Running Cost)
7. ราคาขายต่อ (Resale Value)
8. ภาพลักษณ์ (Image)
9. เครือข่ายตัวแทนจำหน่ายที่ครอบคลุม (Dealer Coverage)
10. ความหรูหรา (Luxurious)
11. ความประหยัดน้ำมัน (Fuel Efficiency)
12. คุณภาพของเครือข่ายตัวแทนจำหน่าย (Quality of Dealer Network)
13. Other _____

ข้อมูลของผู้ทำแบบสอบถามท่านมีแผนที่จะซื้อรถยนต์หรูในอนาคตหรือไม่ Do you have any plan to purchase a luxury car(s) in the future?

1. มี (Yes)
2. ไม่มี (No)
3. ยังไม่ได้ตัดสินใจ (Undecided)

โปรดระบุแบรนด์รถยนต์นั่งที่ท่านเป็นเจ้าของ ณ ปัจจุบัน ท่านสามารถเลือกได้มากกว่าหนึ่งแบรนด์ Please identify brand(s) of passenger car that you currently own (can chose more than one brand)

1. Alfa Romeo
2. Audi
3. Bentley
4. BMW
5. Chevrolet
6. Ferrari
7. Fiat
8. Ford
9. Honda
10. Hummer
11. Hyundai
12. Isuzu
13. Jaguar
14. Kia
15. Lamborghini
16. Land Rover
17. Lexus
18. Mazda
19. Mercedes-Benz
20. MINI
21. Mitsubishi
22. Nissan
23. Porsche
24. Subaru
25. Suzuki
26. Toyota
27. Volkswagen
28. Volvo
29. others
30. ไม่ได้เป็นเจ้าของรถยนต์นั่ง (not own any passenger car)

ข้อมูลของผู้ทำแบบสอบถาม ช่วงอายุ (Age group)

1. 30 and younger
2. 31- 40 year old
3. 41 - 50 year old
4. 51 - 60 year old
5. over 60 year old

เพศ (Gender)

1. ชาย (Male)
2. หญิง (Female)

ที่อยู่ (Location)

1. กรุงเทพฯและปริมณฑล (Bangkok and Greater Bangkok Areas)
2. อื่นๆ (Others)

ระดับการศึกษา (Level of Education)

1. มัธยมศึกษา (High school)
2. มหาวิทยาลัยระดับปริญญาตรี (University - Bachelor Degree)
3. สูงกว่าปริญญาตรี (University - Master Degree and higher)

ระดับรายได้ต่อเดือน (Level of Income)

1. สูงกว่า 400,000 บาทต่อเดือน (Above 400,000 baht per month)
2. ระหว่าง 200,000 - 400,000 บาทต่อเดือน (200,000 - 400,000 baht per month)
3. ระหว่าง 100,000 - 200,000 บาทต่อเดือน (100,000 - 200,000 baht per month)
4. ระหว่าง 50,000 - 100,000 บาทต่อเดือน (50,000 - 100,000 baht per month)
5. ต่ำกว่า 50,000 บาทต่อเดือน (below 50,000 baht per month)

***APPENDIX IV: SERVICE ENCAPSUALTION IN
THAI LUXURY CAR INDUSTRY SURVEY for Non-
Respondents***

NR

เรียนท่านผู้ร่วมตอบแบบสอบถามท่านได้รับเชิญให้มีส่วนร่วมในการตอบแบบสอบถามซึ่งเป็นส่วนหนึ่งของการศึกษาระดับปริญญาเอกทางด้านการจัดการทางธุรกิจในหัวข้อ

การเพิ่มผลตอบแทนในการลงทุนด้านนวัตกรรมผ่านขบวนการเพิ่มมูลค่า โดยใช้การบริการ (Service Encapsulation) ในธุรกิจยานยนต์หรู (Luxury Car) ในประเทศไทย

แบบสอบถามฉบับย่อนี้ได้ส่งถึงผู้ที่ไม่ได้ตอบแบบสอบถามในครั้งแรก (non-respondent)

ที่ส่งมาเชิญให้เข้าร่วมเมื่อประมาณ เดือนเมษายน 2554 แบบสอบถามครั้งนี้อาจจะมีผู้เข้าร่วมประมาณ 30

ท่านเพื่อทราบสาเหตุในการไม่ได้เข้าร่วมตอบแบบสอบถามเพื่อหาข้อสรุปที่อาจจะมีนัยสำคัญทางสถิติ

โดยแบบสอบถามมี 7 ข้อและใช้เวลาประมาณ 5 นาทีการมีส่วนร่วมของท่านขึ้นอยู่กับความสมัครใจของท่าน และคำตอบของท่านจะไม่มีผลกระทบต่อท่าน ข้อมูลที่ท่านได้ตอบในแบบสอบถามจะถูกรักษาเป็นความลับ

สิ่งที่จะได้รับการเผยแพร่จะมีเฉพาะข้อมูลรวมที่ได้รับการประมวลผลแล้วเท่านั้น

ขอขอบคุณเป็นอย่างสูงที่ท่านได้สละเวลาอันมีค่าเพื่อตอบแบบสอบถามจำกัดความ“นวัตกรรม” หมายถึง ความคิด การปฏิบัติ หรือสิ่งประดิษฐ์ใหม่ ๆ ที่ยังไม่เคยมีใช้มาก่อน หรือเป็นการพัฒนาตัดแปลงมาจากของเดิมที่มีอยู่แล้ว ให้ทันสมัยและใช้ได้ผลดียิ่งขึ้น

เมื่อนำนวัตกรรมมาใช้จะช่วยให้การทำงานนั้นได้ผลดีมีประสิทธิภาพและประสิทธิผลสูงกว่าเดิม ทั้งยังช่วย

ประหยัดเวลาและแรงงานได้ด้วย นวัตกรรมยังสามารถแบ่งเป็น นวัตกรรมของสินค้า (product innovation) และ

นวัตกรรมของการบริการ (service innovation) และการเพิ่มมูลค่าโดยใช้การบริการ (service encapsulation) และ

เพื่อช่วยให้ผู้บริโภคตัดสินใจในการเลือกซื้อสินค้านั้นๆได้ง่ายขึ้น ตัวอย่างเช่น

การบริการสินเชื่อบริการรถยนต์เพื่อให้ผู้ซื้อรถยนต์สามารถเป็นเจ้าของได้ง่ายขึ้น แบรินดร์รถยนต์หรู

หมายถึงแบรนด์ที่มีค่าเฉลี่ยของราคาารถที่ขายในเมืองไทยสูงกว่า สองล้านบาท และมียอดขายสูงกว่า 400 คันต่อปี อาทิเช่น แบรินดร์ Audi BMW Lexus Mercedes-Benz และ Volvo

Dear survey participant, You are invited to participate in our survey Maximizing the return of Innovation through Service Encapsulation in Thailand's luxury car market. This brief survey invitations are sent to non-respondents who didn't complete the survey on the similar topics sent on April 2011. In this survey, approximately 30 people will be asked to complete a survey that asks questions about luxury car and its value added services. Reasons for not participating in the first survey will also be asked to evaluate the statistical significant and to confirm findings and conclusion. This survey has 7 questions and take approximately 5 minutes to complete. Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project. However, if you feel uncomfortable answering any question, you can withdraw from the survey at any point. Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. Your information will be coded and will remain confidential. Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below. Definitions Innovation is the process by which an idea or invention is translated into a good or service for which people will pay, or something that results from this process. Service Encapsulation is the effort to offer related services with the main product to increase the chance of commercial success of the main product. Luxury Car Brand The term suggests a vehicle with greater equipment, performance, construction precision, comfort, design ingenuity, technological innovation, or features that convey brand image, cachet, status, or prestige—or any other discretionary feature or combination of features

1NR. โปรดระบุเหตุผลที่ท่านไม่สามารถตอบแบบสอบถามในหัวข้อ

การเพิ่มผลตอบแทนในการลงทุนด้านนวัตกรรมผ่านขบวนการเพิ่มมูลค่า โดยใช้การบริการ (Service Encapsulation) ในธุรกิจยานยนต์หรู (Luxury Car) ในประเทศไทย ที่ส่งมาในครั้งแรกเมื่อประมาณปี 2554

โดยท่านสามารถเลือกได้เพียงหนึ่งข้อ Please provide reasons why you were unable to respond to the similar on Service Encapsulation in Thai luxury car market sent by 2011. (please select one reason)

1. ไม่ได้รับแบบสอบถาม (did not receive questionnaire)
2. เกิดปัญหาทางด้านเทคนิคในการทำและส่งแบบสอบถาม (had technical problems completing survey)
3. ได้ทำการส่งกลับ โดยไม่ทราบว่าไม่ได้รับ (sent completed survey - not sure why didn't receive)
4. ไม่มีเวลา (time constraint)
5. ไม่สนใจในหัวข้อของแบบสอบถาม (no interest in the survey topics)
6. ไม่มีข้อมูลเพียงพอที่จะตอบแบบสอบถาม (not relevant and doesn't have sufficient knowledge to reply)
7. ลืม เพราะ ไม่มีการแจ้งเตือน (forgot, because there is no reminder)
8. ไม่มีสาเหตุ (no reason)
9. อื่นๆ โปรดระบุ (other please identify)

2NR. ท่านเห็นด้วยหรือไม่ว่า เมื่อเปรียบเทียบกับรถยนต์นั่งทั่วไป รถยนต์หรูมีคุณลักษณะในหัวข้อต่อไปนี้ดีกว่าอย่างเห็นได้ชัด Do you agree that luxury car offer the following distinctive features when compared to other passenger cars

	ไม่เห็นด้วยอย่างยิ่ง Strongly Disagree	ไม่เห็นด้วย Disagree	ไม่มีความเห็น Undecided	เห็นด้วย Agree	เห็นด้วยอย่างยิ่ง Strongly Agree
คุณภาพของสินค้าที่ดีกว่า (superior quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความหรูหราที่เหนือกว่า (more luxurious)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรมของสินค้าที่ดีกว่า (more innovative product)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความคุ้มค่าที่ดีกว่า (better value for money)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพการบริการที่ดีกว่า (better service quality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความปลอดภัยที่ดีกว่า (safer product)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความเป็นมิตรต่อสิ่งแวดล้อมที่ดีกว่า (more environmental friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การได้รับการยอมรับในสังคมที่เหนือกว่า (better social acceptance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ประสิทธิภาพที่เหนือกว่า (better performance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพการบริการลูกค้าที่ดีกว่า (better quality of customer service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของตัวแทนจำหน่ายที่ดีกว่า (better quality of dealership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3NR. ท่านเห็นด้วยกับข้อความดังต่อไปนี้หรือไม่ Do you agree that:

	ไม่เห็นด้วยอย่างยิ่ง (Strongly Disagree)	ไม่เห็นด้วย (Disagree)	ไม่มีความเห็น (Undecided)	เห็นด้วย (Agree)	เห็นด้วยอย่างยิ่ง (Strongly Agree)
นวัตกรรมทางด้านสินค้า (product innovation) มีความสำคัญมากที่สุดสำหรับรถยนต์หรู (Product Innovation is the utmost important factor in the luxury car industry)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
นวัตกรรมทางด้านบริการ (service innovation) มีความสำคัญมากที่สุดสำหรับรถยนต์หรู (Value added service is the utmost important factor in the luxury car industry)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4NR. โปรดจัดอันดับความสำคัญของบริการเสริมต่อไปนี้ในความคิดของท่าน (Please rate the following service offering that you perceive values)

	สำคัญน้อยที่สุด (least important)	สำคัญน้อย (fairly important)	สำคัญ (important)	สำคัญมาก (fairly important)	สำคัญมากที่สุด (high important)	N/A
การรับประกันสินค้า (Product warranty)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
บริการช่วยเหลือฉุกเฉิน (Mobility service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการหลังการขาย (After-sales service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการทางการเงิน (Financial Services)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การบริการด้านการประกันภัย (Insurance Service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้รถยืมระหว่างซ่อม (Loan car)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
บริการรถทดลองขับ (Test drive)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ได้รับเชิญให้ร่วมในกิจกรรมการตลาด เช่น งานอีเวนต์ต่างๆ (Be part of Brand's marketing and CRM events)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้บริการสิทธิพิเศษในคลับพิเศษสำหรับสมาชิก (Assess to private clubs and exclusive events)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การให้ความรู้เกี่ยวกับสินค้าและเทคโนโลยี (Product info. & Technical updates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมีบริการรับ ส่ง รถที่ต้องเข้ารับบริการ (Service pick-up and drop-off)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การรับประกันราคาขายต่อ (Guarantee resale's value)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การประเมินราคาค่าซ่อมที่ค่อนข้างแม่นยำ (Accurate service price estimation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมีเครือข่ายดีลเลอร์ที่ครอบคลุมทั้งประเทศ (Nationwide service network & dealer coverage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ความเป็นมิตรต่อสิ่งแวดล้อม (Environmental friendly)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
งานบริการที่เที่ยงตรงในเรื่องของเวลา (Service Punctuality)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
สถานที่และคุณภาพของการต้อนรับของดีลเลอร์ (Dealer amenity & reception service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7NR. เมื่อท่านตัดสินใจซื้อรถจากบริษัทรถยนต์ ท่านให้ความสำคัญกับปัจจัยดังต่อไปนี้อย่างไรบ้าง When you consider buying products/services from car companies. How do you rate level of important of the following factors

	สำคัญน้อยที่สุด (least important)	สำคัญน้อย (fairly important)	สำคัญ (important)	สำคัญมาก (fairly high important)	สำคัญมากที่สุด (high important)	N/A
ความเชื่อถือและไว้วางใจได้ของบริษัท (Trust)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ชื่อเสียงของบริษัท (Reputation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การตั้งราคาที่สมเหตุสมผล (Reasonable price)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การมอบโอกาสในการใช้ชีวิตเหนือระดับ (Luxury lifestyle)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
การสร้างความมีส่วนร่วมในตัวสินค้า (Sense of belonging)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของตัวแทนจำหน่าย (Quality of dealership)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
เครือข่ายตัวแทนจำหน่ายที่ครอบคลุม (Dealer network coverage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
คุณภาพของงานบริการลูกค้า (Quality of Customer Service)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ข้อมูลของผู้ทำแบบสอบถามท่านมีแผนที่จะซื้อรถยนต์หรูในอนาคตหรือไม่ Do you have any plan to purchase a luxury car(s) in the future?

4. มี (Yes)
5. ไม่มี (No)
6. ยังไม่ได้ตัดสินใจ (Undecided)

โปรดระบุแบรนด์รถยนต์นั่งที่ท่านเป็นเจ้าของ ณ ปัจจุบัน ท่านสามารถเลือกได้มากกว่าหนึ่งแบรนด์ Please identify brand(s) of passenger car that you currently own (can chose more than one brand)

31. Alfa Romeo
32. Audi
33. Bentley
34. BMW
35. Chevrolet
36. Ferrari
37. Fiat
38. Ford
39. Honda
40. Hummer
41. Hyundai
42. Isuzu
43. Jaguar
44. Kia
45. Lamborghini
46. Land Rover
47. Lexus
48. Mazda
49. Mercedes-Benz
50. MINI
51. Mitsubishi
52. Nissan
53. Porsche
54. Subaru
55. Suzuki
56. Toyota
57. Volkswagen
58. Volvo

- 59. others
- 60. ไม่ได้เป็นเจ้าของรถยนต์นั่ง (not own any passenger car)

ข้อมูลของผู้ทำแบบสอบถาม ช่วงอายุ (Age group)

- 6. 30 and younger
- 7. 31- 40 year old
- 8. 41 - 50 year old
- 9. 51 - 60 year old
- 10. over 60 year old

เพศ (Gender)

- 3. ชาย (Male)
- 4. หญิง (Female)

ที่อยู่ (Location)

- 3. กรุงเทพฯและปริมณฑล (Bangkok and Greater Bangkok Areas)
- 4. อื่นๆ (Others)

ระดับการศึกษา (Level of Education)

- 4. มัธยมศึกษา (High school)
- 5. มหาวิทยาลัยระดับปริญญาตรี (University - Bachelor Degree)
- 6. สูงกว่าปริญญาตรี (University - Master Degree and higher)

ระดับรายได้ต่อเดือน (Level of Income)

- 6. สูงกว่า 400,000 บาทต่อเดือน (Above 400,000 baht per month)
- 7. ระหว่าง 200,000 - 400,000 ต่อเดือน (200,000 - 400,000 baht per month)
- 8. ระหว่าง 100,000 - 200,000 บาทต่อเดือน (100,000 - 200,000 baht per month)
- 9. ระหว่าง 50,000 - 100,000 บาทต่อเดือน (50,000 - 100,000 baht per month)
- 10. ต่ำกว่า 50,000 บาทต่อเดือน (below 50,000 baht per month)

APPENDIX V: Descriptive Statistic Analysis and t-test between Respondents and Non-Respondents

The survey of non-respondents was conducted in March 2013. In total, there were 16 non-respondents who participated in this survey. Demographic of non-respondents were 9 males and 7 females. All participants owned cars and 6 participants owned luxury cars. The prominent differences between the first survey and the survey of non-respondents are: 15 participants (93.5%) had master degree or higher (compared to 58.2% of the first survey) and all participants were aged between 31 – 50 (compared to 55.8%).

The survey of non-respondents was conducted approximately one year after the completion of the first survey. The tables below (Table A1, A2, A3 and A4) illustrate descriptive statistics and t-test of a shorter service encapsulation in Thai luxury car survey (see Appendix IV) which contained four questions taken from the first survey. Outcomes from t-test indicated that only in Qnr3 was there significant difference between respondents and non-respondents ($t(212) = 0.01$, $p < .05$). The rest of questions and answers show no statistical different between respondent and non-respondent.

Table A1: Descriptive statistics analysis and t-test of Qnr1

Respondent (Yes) or Non-respondent (No)		N	Mean	Std. Deviation	t Value
Qnr1: Do you agree that luxury car offer the following distinctive features when compared to other passenger cars?					
superior quality	Yes	201	4.29	.597	1.99
	No	16	4.38	.806	
more luxurious	Yes	201	4.35	.768	0.915
	No	16	4.63	.619	
more innovative product	Yes	201	4.04	.853	0.26
	No	16	4.06	.772	
better value for money	Yes	200	3.42	1.118	0.71
	No	16	3.19	1.047	
better service quality	Yes	201	3.56	1.108	1.443
	No	16	3.31	.873	
safer product	Yes	201	4.19	.798	0.216
	No	16	4.13	.806	
more environmental friendly	Yes	200	3.35	1.083	8.375
	No	16	3.00	.816	
better social acceptance	Yes	200	4.31	.876	1.11
	No	16	4.38	.619	
better performance	Yes	200	4.12	.774	0.219
	No	16	4.06	.772	
better quality of customer service	Yes	200	3.64	1.099	0.003
	No	15	3.60	1.121	
better quality of dealership	Yes	198	3.45	1.074	0.505
	No	16	3.31	1.014	

Table A2: Descriptive statistics analysis and t-test of Qnr2

Respondent (Yes) or Non-respondent (No)	N	Mean	Std. Deviation	t Value	
Qnr2: Do you agree that:					
product innovation Product Innovation is the utmost important factor in the luxury car industry	Yes	201	3.98	.863	0.114
	No	16	4.00	.894	
service innovation Value added service is the utmost important factor in the luxury car industry	Yes	201	4.03	.848	1.155
	No	16	4.31	1.014	

Table A3: Descriptive statistics analysis and t-test of Qnr3

Respondent (Yes) or Non-respondent (No)	N	Mean	Std. Deviation	t Value	
Qnr3: Please rate the following service offering that you perceive values.					
Product warrantee	Yes	201	4.22	.924	0.415
	No	16	4.44	.727	
Mobility service	Yes	201	3.77	1.033	1.228
	No	16	3.75	.856	
Aftersales service	Yes	201	4.52	.715	9.058
	No	16	4.81	.403	
Financial Services	Yes	199	2.99	1.078	0.006*
	No	15	2.47	.915	
Insurance Service	Yes	201	3.60	1.119	1.357
	No	16	2.75	.931	
Loan car	Yes	201	3.50	1.101	0.122
	No	16	3.50	1.033	
Test drive	Yes	200	3.51	1.094	5.24
	No	16	3.75	.775	
Be part of Brands marketing and CRM events	Yes	201	2.88	1.204	0.108
	No	16	2.63	1.204	
Assess to private clubs and exclusive events	Yes	200	3.20	1.181	1.919
	No	16	3.00	1.033	
Product info Technical updates	Yes	200	3.49	.997	1.474
	No	15	3.80	.862	
Service pickup and dropoff	Yes	201	3.50	1.087	1.671
	No	15	3.13	.915	
Guarantee 260esale's value	Yes	199	3.47	1.127	5.82
	No	16	3.13	.806	
Accurate service price estimation	Yes	201	3.67	.917	0.351
	No	16	3.81	.981	
Nationwide service network dealer coverage	Yes	201	3.85	1.015	0.083
	No	16	3.44	1.031	
Environmental friendly	Yes	201	3.59	1.036	0.264
	No	16	3.75	.931	
Service Punctuality	Yes	200	4.17	.867	1.214
	No	16	4.44	.629	
Dealer amenity reception service	Yes	200	3.92	.841	0.105
	No	16	3.88	1.025	

*p<.05

Table A4: Descriptive statistics analysis and t-test of Qnr4

Respondent (Yes) or Non-respondent (No)		N	Mean	Std. Deviation	t Value
Qnr4: When you consider buying products/services from car companies. How do you rate the level of important of the following factors?					
Trust	Yes	200	4.32	.762	0.455
	No	16	4.56	.727	
Reputation	Yes	200	4.16	.821	2.758
	No	16	4.25	.577	
Reasonable price	Yes	200	4.21	.830	0.838
	No	15	4.27	.704	
Luxury lifestyle	Yes	199	3.34	1.103	0.24
	No	16	3.19	1.109	
Sense of belonging	Yes	199	3.20	1.095	1.414
	No	16	2.75	.856	
Quality of dealership	Yes	200	4.07	.783	0.337
	No	15	4.13	.915	
Dealer network coverage	Yes	200	3.91	.881	0.327
	No	16	3.63	.885	
Quality of Customer Service	Yes	200	4.53	.649	4.194
	No	16	4.69	.479	