Business coordination across borders within Toyota
A case study focusing the coordination between
Japan and Thailand

Tutor: Leif Linnskog
Authors: Supadet Promprasit (19811002)
        Nathida Jumreorn (19840411)
Group: 2268
Date: May 28, 2009
Abstract

Date: May 28th, 2009
Level: Master Thesis: EFO705 (15 Credits)
Authors: Nathida Jumreorn (NJN08002)
Supadet Promprasit (SPT08001)
Title: Managing Multinational Corporation: Coordination Mechanisms within the MNCs
Tutor: Leif Linnskog

Research Problem:

How does Toyota coordinate its business across borders? A case study with particular focuses on the relationship between Japan and Thailand.

Purpose: To describe how Toyota manage its business across borders in perspective of relationship and coordination between Japan and Thailand. Also to provide the information to the reader who interested in studying the international management area.

Method: The research design is the qualitative case study approach with the use of Semi-Structured interview, artifact and Secondary information. Toyota is selected as our unit of study with focus on relationship between Japan and Thailand. The structural approach is used as to the theories is generalized in to model that used for information gather and analysis.

Conclusion: Due to the fact, there is no particular coordination mechanism that perfectly governs the large and complex multinational corporation. The combination of several well organized methods is efficient approach to manage such a complex organization. In various ways, coordination mechanisms are commonly applied in the organization. The structural as well as informal coordination mechanisms are being used in Toyota organization to facilitate the collaboration between headquarters and distance subsidiaries.

Keywords: Coordination Mechanism, Control, Relationship, Multinational Corporation
Acknowledgement

In order to complete this research we would like to acknowledge and express our cordial gratitude to the following persons who provide possibility to make the completion of this research. First of all this research would not be perfectly completed without continuously advice from our professor, Leif Linnskog and fellow students in seminar group who gave constructive comments during all seminars.

Further thanks should also go to all interviewees who dedicate their time for giving useful information to use as our primary data. In addition we would like to thank all lecturers and classmates from all courses we have taken for sharing their knowledge and information throughout the international business and entrepreneur program. Enormous thanks to our prove readers to devote their effort on our research.

Finally we would like to thank again for contribution to this research from everyone who researchers did not mention earlier.
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<tr>
<td>AP-GPC</td>
<td>Asia Pacific global production center</td>
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<td>GPC</td>
<td>Global Production Center</td>
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<tr>
<td>IMV</td>
<td>International Multipurpose Vehicles</td>
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<td>MNC</td>
<td>Multinational Corporation</td>
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<tr>
<td>TMAP-EM</td>
<td>Toyota Motor Asia Pacific Engineering &amp; manufacturing Co., Ltd.</td>
</tr>
<tr>
<td>TMAP-MS</td>
<td>Toyota Motor Asia Pacific Pte Ltd.</td>
</tr>
<tr>
<td>TMC</td>
<td>Toyota Motor Corporation</td>
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<tr>
<td>TMT</td>
<td>Toyota Motor Thailand Co., Ltd</td>
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<tr>
<td>TPS</td>
<td>Toyota Production System</td>
</tr>
<tr>
<td>TTCAP</td>
<td>Toyota Technical Center Asia Pacific Co., Ltd.</td>
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<tr>
<td>TTCAP-TH</td>
<td>Technical Center Asia Pacific (Thailand) Co. Ltd.</td>
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1. Introduction

1.1 Research Background and Motivation
Presently, there are increasing numbers of firms expanding their businesses into foreign marketplace in order to seek and utilize the competitive advantage of foreign resources. The organizational structure of the multinational corporation (MNCs) becomes more complex in relation to the ongoing expansion. When a firm expands its operation abroad, the control mechanism becomes an important point of concern for MNCs to manage its subsidiaries’ operation to comply with the parent company’s global strategy. There are several numbers of relevant theories and literatures regarding the organization structure of MNC as well as managing business units across borders. To handle their operation, MNCs employ hierarchy, socialization and price system as their alternative strategies to manipulate business activities in their organization (Hennart, 2005, p.151). The cost of using these strategies differs depending on the nature of transaction and characteristics of the task in the company (ibid, p.161).
At the present time, in order to respond to the rapid global environmental change in business competitive pressure and at the same time to sustain the localness, many scholars argue that MNCs need to structure their organization so that appear to be distinctive from both home and host country. As asserted by Ghoshal (1987, p.426), managing large, complex and multinational organization is seen as an unclear alternative polar between centralization and decentralization that involve with the combination of simple global and local components. Also, Martinez & Jarillo (1989, p.500) assert that organization architecture must be extremely complex to away from centralization-decentralization dichotomy. Bartlett and Ghoshal, (1989, p.191) also claim that to remain in competitive environment, organization needs to be structured distinctively to respond to different requirements, transnational approach or integrated network that consider together the production efficiency and the local environment. The MNCs can be structured in numerous ways depending on the balance of control between headquarters and its subsidiaries. The structural approach of multinational organization can be categorized as decentralized federation, centralized hub and co-ordinated federation (Bartlett and Ghoshal, 1989). The decision of resource allocation and the structure of subsidiaries depend on many factors from headquarters that ultimately shape the control mechanism of the company.

1.2 Research Problem
The problem faced by MNCs when managing international business units is organizing several national markets simultaneously in different business environment. Building the optimum organizational structure becomes the important arena for management as well as the control mechanism being used among subsidiaries. In order to explore how MNCs structure and handle its organization, Toyota had been selected as our case study since Toyota not only ranks the number one as Thailand’s best seller automobile but is also presenty as a dominant company in automotive industry. Also, Toyota becomes the world’s number one in automotive industry in 2008 (Smith, n.d.). The success of Toyota can be a good example for the study of its organization. The significant growths of Toyota around the world present the remarkable point of interest in studying the organizational structure and the how Toyota effectively and efficiently coordinates with far-flung subsidiaries. Therefore, Toyota Motor Corporation has been selected to deeply investigate how Toyota manages its foreign business
units and becomes the world’s leading automotive company. And from all of its subsidiaries worldwide we’ll focus on Thailand since Toyota initially expanded its operation from Japan to Thailand and presently Thailand contains all of its core operations which consist of Design, Research & Development, manufacturing and is also one of its regional headquarters out of the total of four that Toyota has. To conduct our research regarding what we stated earlier, we develop research question as below.

“How does Toyota coordinate its business across borders? A case study with particular focuses on the relationship between Japan and Thailand.”

1.3 Research purpose
This paper aims to study a concept of control mechanism within MNCs as well as the overall organizational structure of MNCs that facilitates the control mechanism within the MNCs. To precise, the heart of this paper is to study the organizational structure of the Toyota and to describe how Toyota manages its subsidiaries (Toyota Motor Thailand) in the area of coordination mechanism between Toyota Motor Corporation (Japan) and Toyota subsidiaries in Thailand. Hence this research will focus on the relationship between Toyota Motor Corporation (Japan), which is headquarters and Toyota Motor Thailand (TMT) to provide further understanding on how MNCs are structured and how they coordinate their activities with subsidiaries and how the MNCs balance the coordination mechanism within organization to provide useful information or guidelines for future business opportunity to potential readers.

1.4 Research Target
This research is to provide the knowledge to business owners, entrepreneurs, management teams as well as readers who want to understand how Toyota manages its businesses across borders and how Toyota balance the control within their subsidiaries. Moreover, this paper’s intention is to provide the guideline or make use of knowledge for their career or future business. Also, to scholar who is interested in this field of business and want to understand the practical use of theory of organizational structure as well as the coordination mechanism in the MNC.

1.5 Research Methodology
The development of research presented in this part was initiated from idea generating and was used throughout this research until the conclusion of this research. According to Yin (1994, p.19) research design is the map or guideline for an investigator to implement the study that takes place from setting up the question all the way until conclusion. Though, this research will present the theories of structure and coordination mechanism of MNC, Toyota Motor Thailand (TMT) is selected as the case study and present as the central focus of this research. Yin (1994, p.20-25) also maintains that high-quality research design is composed of 5 elements; start with problem specification that will be the concentration in research. Then, the question established will be scoped down by study proposition or selected relevant theories through reviewing literatures in the study field. Also, research design followed by specifying the unit of analysis that will be examined with the specific research approach. Subsequent to that the collected data is linked to the theories or model developed and also link to criteria of interpretation in the analysis. The additional details will be presented in the following part.
1.5.1 Problem and aim specification
We're interested to study how MNCs structure their organization in a foreign country to support the localization and at the same time to pursue the globalization. In addition, the focal point of interest is to examine how MNC actually coordinates its activities around the globe. Toyota is selected as unit of analysis not only because it remains the world’s top leading company in this industry but since there are a large amounts of information available that make it possible to obtain the relevant information to implement this research. As state by Yin (1994, p.1), “case studies are the preferred strategy when “how” or “why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context”

1.5.2 Preparation and Literature review
As soon as the research problem has been specified, the process is followed by reviewing the literatures in the area of organizational structure and control mechanism in MNC at the same time the previous research in this field of study is examined. Importantly, we start to search for company information to assure the research possibility. At this period, the conceptual framework is drawn together with the literature review. After reviewing the literatures, in the early stage, the related concept or theories will be theorized into framework to give the overall construction of research. Yin (ibid, p.31) states that in case study, the theories are chosen and analytically generalized, which means that the theories developed in the past are presented as a models for comparing the empirical result. According to Fisher (2004, p.99), the structure of research based on previously developed theories or concepts is named as “structured approach” in which the defined structure is used as map for data collection.

1.5.3 Research approach
There are five different types of research approaches including experiment, survey, history, archival analysis and case study, each of which provides different advantages and drawbacks. According to Yin (1994, p.4), case study is the suitable approach for this research since the topic concern how MNCs coordinate their businesses around the world that deal with current circumstances and investigator has no control over the behavior of situation. Moreover, Fisher (2004, p.36) also claims that qualitative case studies allow researcher to get the comprehensive understanding of topic being studied. Therefore, the qualitative case study will be the methodology of this research by focusing on the case study of Toyota Motor Corporation based Thailand as unit of analysis.

1.5.4 Data Collection
Case study is akin to historical investigation apart from case study dealing with wider range of data collection including documents, artifacts, interviews and observations (Yin, 1994, p.8). To get a deep comprehension of how Toyota coordinates their businesses across countries, this research will be gathering both primary data as well as secondary data. Furthermore, both primary and secondary are linked to the model developed as the based for analysis and conclusion. Additional detail will be present in the following part.

1.5.4.1 Primary data
To cover all topics as planned, the telephone interview was performed as semi-structure basis in which the questions are set in advance while the questions can be adjusted during the interview in case the respondents do not fully understand the question (Fisher, 2004, p.133). The explanation of organization chart received from the interviewees was a part of
interviews. The interviews are aimed to be supplemental information to the secondary data. To get an overview on how Toyota coordinates within the organization, telephone interviews were conducted with 4 employees who are currently working in different departments of Toyota. The first interviewee previously worked in the human resource department in Siam Toyota Manufacturing Ltd. (Unit Plant), Human Resources Department, Thailand. He is working in Human Resource department in Toyota Motor Corporation (Japan) as Human Resources Officer / HR Specialist (Interviewee No.1). Second interviewee is a senior engineer from Toyota Motor Asia Pacific Engineering & Manufacturing Co., Ltd in Thailand. He was transferred to work in Toyota Motor Corporation in Japan for 2.5 years (Interviewee No.2). Third interviewee is a senior specialist working in purchasing department of Toyota Motor Asia Pacific Engineering & Manufacturing Co., Ltd (Interviewee No.3). The last interviewee is working as chief engineer in press production department at Toyota Motor Thailand Co., Ltd, Samrong plant (Interviewee No.4). Detail of interviews can be found from summary of each interview part in appendix.

1.5.4.2 Secondary data
The main source of information of this research will be secondary data including both documentary and archival records. Documentation is gathered through company website, company press releases, company annual report, company form 20-F, the university database, public databases, and also articles from search engines. In addition, the archival record which the organization chart is submitted by interviewers will also be a part of case study.

1.5.5 Analysis and Conclusion
In this phase, the information collected will be linked to the theories developed. The analysis will be present in this part by author’s interpretation of the information gathered from secondary source as well as interviews of employee regarding Toyota Motor Thailand. To be specific, the authors will analyze how Toyota coordinates business activities step by step based on model present in the framework compared to empirical data gathered.

1.5.6 Quality aspects of the research
Concerning the quality aspect of this research, Yin (1994) provides us the constructive methodology to perform this qualitative case study research that present as the methodology stance of this research from the setting up of research problem until conclusion. In addition, Fisher (2004 and 2007) are simultaneously used as guideline throughout this study. Thus, both Yin and Fisher take part in as the methodology of this research. At the very first stage of this research, several literatures, in the field of managing across frontier, had been review in order to gain the idea of subject of study. Then, we scoped down into the topic and unit of study by focusing on coordination mechanism. After the focus of study is specified, the literatures chosen are grouped and generalized into theory that present as the model for data collection and analysis (Yin, (1994), Fisher, (2004)). According to Fisher (2007, p.92), to get the high quality of the research, all of the literatures being used in this study are the scholar literatures that published in the academic database. As stated by Fisher (2007), journal articles provide the up to date information. For that reason, the main sources of literatures are journals so that contemporary pieces of information are attained. Additionally, the analysis part, the case study, theories as well as authors interpretation is presented at once. Fisher (2007, p.93) indicates that high quality of research is to offer the combination of descriptive story and analysis.
1.5.6.1 Construct Validity
This research conducted by means of qualitative case study that associated with secondary documentation, artifact as well as interview. Prior to developing interview question, the authors have gone through the study of secondary data to draw some necessary information regarding the company and scope of study before interviewing. Subsequently, the secondary information gathered and theories developed put together to form the questions for interview. The telephone interviews enable the researchers to get in contact with the interviewees who live in different country and time zone. The telephone interview carried out based on semi-structure interview in which the researchers can adjust the question whenever the interviewee do not clearly understand the question asked (Fisher, 2004, p.133). During the interview, the conclusion of answer was repeated at the end of each question to affirm the understanding of the researchers (ibid. p.143)

1.5.6.2 Internal Validity
According to Fisher, internal validity associated with the data presented certainly answer the research problem (2007, p.296). The question of internal validity of qualitative study cannot be explained by using the statistic test; in this case, the use of multiple sources of evidence can answer the problem of internal validity (ibid.). In this paper, the data is gathered through, secondary data, artifacts given by interviewer as well as the semi-structure interview. The assessment of data collection can achieved as a result of comparing the secondary information with the artifact and interviews to affirm the validity of the information. In this way, the multiple methods of data collection can solve the problem of internal validity.

1.5.6.3 External Validity
Fisher (2007, p.297) maintains that the external validity, and so-called transferability, deal with the generalization of the topic studied is valid to other context or population.

The main literature that the authors used as the based structure in this paper is belong to Martinez & Jarillo who did the research integration concerning coordination mechanism in the multinational corporation. This integration occupied the studies of 85 researches dated back from 1953 to 1988. This substantial sample research can represent the scope of coordination methods. In addition, the authors did further review some newly publication related to coordination mechanism and found that the pattern of coordination still valid until the present day. Beside, most of the secondary information is collected in the global perspective of Toyota with locating attention in Thailand. Therefore, the study could represent the other population for example Toyota in Europe or Toyota in North America.

However, due to the small sample size of primary data and some of secondary data shown in this paper are available in particular for Thailand. For that reason, the readers are likely to make their own judgment regarding transferability. As claim by fisher, if the samples are small, researchers accountable to supply the in depth detail so that the reader can make their own judgment relate to transferability (2007, p.298).
2. Literature Review

2.1 Coordination Mechanism

Over the past decades, the global competition influenced MNCs to expand their business into foreign markets. The distance or realm between home and host country make it difficult in managing subsidiaries in remote areas. To manage businesses globally, the structure as well as administrative mechanisms within the MNC becomes more complex in response to the diverse business environment. The control mechanisms within the MNC become the fundamental tool in managing its subsidiaries. To operate internationally, organizations that fail to obtain the control of their business and organize them into globally coordinated networks, will not succeed in internationally competitive environment (Bartlett and Ghoshal, 1988, p.54). With the rapid environment change, the structure and control within the MNCs change over time since MNCs need to adapt their strategies in accordance with the changing environment. Martinez & Jarillo (1989) had reviewed the evolution of coordination mechanism used in the MNCs based on 85 researches published from 1953 to 1988. According to their research, coordination mechanisms are categorized into two main groups, the formal or structural mechanisms and informal and subtle structure.

<table>
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<tr>
<td>1. Departmentalization or grouping of organizational units, shaping the formal structure.</td>
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<tr>
<td>2. Centralization or decentralization of decision making through the hierarchy of formal authority.</td>
</tr>
<tr>
<td>3. Formalization and standardization: written policies, rules, job descriptions, and standard procedures, through instruments such as manuals, charts, etc.</td>
</tr>
<tr>
<td>4. Planning: strategic planning, budgeting, functional plans, scheduling, etc.</td>
</tr>
<tr>
<td>5. Output and behavior control: financial performance, technical reports, sales and marketing data, etc., and direct supervision.</td>
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Other mechanisms, more informal and subtle

| 6. Lateral or cross-departmental relations: direct managerial contact, temporary or permanent teams, task forces, committees, integrators, and integrative departments. |
| 7. Informal communication: personal contacts among managers, management trips, meetings, conferences, transfer of managers, etc. |
| 8. Socialization: building an organizational culture of known and shared strategic objectives and values by training, transfer of managers, career path management, measurement and reward systems, etc. |

List of the Most Common Mechanisms of Coordination
Source: (Martinez & Jarillo, 1989, p.491)

2.1.1 The formal or structural mechanisms

Since 1989, many researchers have continued introducing new way of managing complex organization in the MNCs in spite of these soon after being published might not be much different from what had been introduced in the past by Martinez & Jarillo in 1989. Begin with the formal or structural mechanisms that compose of five elements.

2.1.1.1 Departmentalization

The first mechanism involves the cluster of activities within the organization into departmentalization. The concept of departmentalization is still applicable in the organization, Hedlund (2005, p.203) asserts that hierarchy is the system that associate with
the tie of interconnected units in the organization. Solvell and Zander (1995 p.20) claim that home based MNCs are a group of core functions established in specific area including core production department, research and development unit and also strategic decision making division. Even though Hedlund (2005, pp.210-211) claims for the alternative of Hierarchy, Heterarchy, once the organization become bigger and more complex that may not efficiently be managed by hierarchy system, still the construction of Heterarchy also concerns with division of organization into departmentalization but the reciprocal and interdependency between units are required.

2.1.1.2 Centralization/Decentralization of decision making
The second mechanism deals with decision-making authority whether centralization or decentralization that still exists as a fundamental concept of new coordination mechanisms. Hennart (2005, p.151) launches the price control as the alternative for managing complex organization instead of hierarchy. In price system, information is fully decentralized and price perfectly notifies individual the opportunities for the cooperation and benefit individual will gains from cooperation. “In price system individuals collect their own information, make their own productive decision” (ibid., p.152). Similarly, subsidiaries can carry on business function as independent unit in the price system. On the other hand, hierarchy centralizes information, all of information acquire by employees propose to boss who performs a decision making process and sent back to employee as the directions (ibid.). Likewise, centralization and decentralization is present at hand in Solvell and Zander’s home based and Heterarchy model. The semi-independent role of HQ in home based MNEs involve the decentralization but concentrating core activities to particular location while remaining centralized strategic decision and innovation at home based (Solvell and Zander, 1995, pp.28, 32). In addition, Solvell and Zander assert that the heterarchical organization is highly dispersed and decentralized according to the competency in each geographically but tightly connect to each other through coordination (ibid., pp.28-29). Also, the level of centralize and decentralize of decision making is mentioned in differentiated fit by Nohria and Ghoshal (1994, p.492) as to the balance between HQ and subsidiaries decision making to achieve structural differentiated in each subsidiaries. However, Rugman and Verbeke (1992, p.768) claim that the idea of centralize or decentralize aim to specify the locus of decision making not intend to gain coordination and control. “MNEs may adopt both participative decentralization and administrative centralization simultaneously” (Rugman and Verbeke, 2004, p.15). The effective coordination of MNEs may be led by participative decentralization which allows subsidiaries to be involved in strategic planning that is necessary to carry out the downstream activities in subsidiaries while administrative centralization more suitable for management of upstream activities across border (ibid)

2.1.1.3 Formalization and standardization
The third is formalization and standardization of policies, rules, and job descriptions that are available to the organizational member in a written document. Nohria and Ghoshal’s “differentiated fit” claims that the efficient ways to manage the relationship between headquarters and subsidiaries, “the structure of each headquarters-subsidiary relation is expressly differentiated to ‘fit’ the distinctive environmental and resource conditions of the subsidiary” (Nohria and Ghoshal, 1994, p.492). The formal structure of each subsidiary must be unique to fit the different environmental local context. The more resource occupied by the local subsidiaries, the lower degree of centralization applied, on the contrary, the
formalization increases since the headquarters try to track the performance of subsidiaries. The balance between formalization and localization strategy in order to fit the local context consider to be differentiated (ibid., p.493). Despite the fact that the new term “differentiated fit” is introduced, the logic behind differentiated fit is formalization of policies, rules and procedures to each subsidiary differently in order to monitor the performance in subsidiaries

2.1.1.4 Planning
Planning is the fourth mechanism associated with strategic planning, budgeting, scheduling and goal setting that aim to lead the action of subsidiary. Hennart’s price system is aligned with this mechanism as the employees will be notify in advance, as plan, the benefit they will receive from the cooperation, in the form of bonus, piecework or commission that preliminary informed in the job description. Also, in the view of subsidiary, when the goal launched by headquarters, the subsidiaries will be treated as independent profit center and the subsidiary will left free to maximize profit or to accomplish the goal that planned by headquarters, employee will be rewarded based on profit center’s performance (Hennart, 2005, pp. 160-161)

2.1.1.5 Output and behavioral control
The fifth mechanism is output and behavioral controls applied in the organization. The output control that can be called by the other writers as bureaucratic control, performance control, and impersonal control by means of measuring performance based on output record. The same concept was applied in Hennart’s price and hierarchy control. Hennart claims that price (output) and hierarchy (behavioral) controls are different mechanisms that produce the different consequence. In the price system, individuals are rewarded from their output. However, if output cannot be perfectly measured, consequently the individuals are likely to cheat, therefore, govern by hierarchy can solve the problem of cheating (ibid.,p.156). Nevertheless, if output can be measured and subsidiary know how to achieve the target better than HQ, leaving subsidiary free for maximize profit is better than directly manipulate its behavior. Treating a subsidiary as profit center can be optimum choice for this situation. On the contrary, behavioral control or personal control focuses on manager’s examination of his behavior. Hennart emphasizes that if headquarters know how to achieve the goal better than a subsidiary and performance of subsidiary is difficult to measure; hierarchy control is the optimum mechanism to carry out. Although, hierarchy deals with the problem of cheating by separating the reward from output, employees are rewarded by their obedience to management directive but it might increase the possibility to shirk (ibid., p.156).

2.1.2 The informal and subtle mechanisms
Subsequently, another group of Martinez and Jarillo’s informal and subtle mechanisms includes three managerial tools; Lateral or cross-departmental relations, Informal Communication and Socialization

2.1.2.1 Lateral or cross-departmental relations
First of all, lateral relations that break the formal structure are associated with officially direct communication among managers from different organizational units that form together for problem solving or specific purposes. Hedlund (2005, p.201) states that MNCs appear to be a messy organization that relies on multidimensional coordination. He claims that MNCs become more complex and the nature of tasks need collaboration among both functional and geographical lines simultaneously which raise the importance of lateral communication
among different departments and subsidiaries, hierarchy or centralization become less applicable in the MNCs. Therefore, Heterarchy as an alternative starts to take place (ibid., pp.200-201). Similarly, lateral communication also explicit in Ghoshal and Bartlett (2005) that bring in the inter organization relationship within MNCs, along the line with Martinez and Jarillo’s informal and subtle structure. In the network, all organizational units are connected through network of resource exchange (Ghoshal and Bartlett, 2005, p.76). The organization sets of MNCs in different locations might directly connect or communicate through the network; for instance, “one of the supplying organizations in the local environment of A might be an affiliated unit of another multinational company, and may have exchange linkages with its counterparts in the local environment of B.” (ibid, p.77). Beside, building ‘share value’ is to build common organizational values with an emphasis on the important of open communication between HQ and its subsidiaries and also among subsidiaries themselves (Nohria and Ghoshal, 1994, p.494). In addition, Solvell and Zander (1995, p.29) assert that the heterarchiical organization is highly dispersed according to the capability but closely tied to each other via coordination that; therefore, involve the lateral communication between business units.

2.1.2.2 Informal Communication
Furthermore, in addition to the formal structural communication, informal communication exists between managers of different departments that further create the network of personal relationship. Similarly the organization in the heterarchy organization, information is broadly shared in all departments and uses of rotation of employee so as means to pass on the knowledge and information in the organization (Solvell and Zander, 1995, p.26). “Extensive socialization and communication also build trust among the managers and creates the foundation for reciprocity and easier negotiation and resolution of potential conflicts” (Nohria and Ghoshal, 1994, p.494). Socialization as the mean to develop shared value encourages open communication between organizational members (ibid.). Also, socialization of manager in subsidiaries encourages informal communication as well as the transfer of manager to subsidiaries so that the subsidiaries’ action or decision support or go in the same way as decision of HQ (Hennart, 2005, p.168)

2.1.2.3 Socialization
The third managerial tool is building the organizational culture by socializing organizational members with the philosophies, values, objective and goal of the organization. Creating organizational culture deals with training and transferring employees across the organization. Building the organizational culture can also be seen in Hedlund (2005)’s perspective of heterarchy whereby the objectives, knowledge and organizational cultures are shared across heterarchy organization. Additionally, the ‘shared values’ that is launched by Nohria and Ghoshal as the solution to work out the problem of control in MNC by socializing employees in all levels to have the same corporate values and goals that can minimize the differences and promote the mutual interdependence (1994, p.494). “Building shared values across headquarters and subsidiaries represents an alternate solution to the governance problem in MNCs” (ibid, p.499). According to Hennart, socialization is implicit control of behavior in which employee is inculcated with the philosophy of organization to reduce the diversity in the organization (2005, p.159)
To be precise, many scholars go on with commencing new administrative terms in the organization; however, the key concept behind these up-to-date terms still rely on the formal and informal structure that was formerly initiated. Doz and Prahalad argue that complex MNCs as network of exchange relationship is governed by both formal and informal structures (cited in Bartlett & Ghoshal, 1991, p.12)
3. Conceptual Framework

The basic concepts are defined to develop the conceptual framework for this section to study the coordination across border between headquarters and regional headquarters including other major subsidiaries. According to Martinez & Jarillo (1989), coordination mechanisms are categorized into two major groups, the formal or structural mechanisms and informal and subtle structure which consists of five and three subcategories respectively. The study will focus on these two major mechanisms together with other mechanisms from scholars which can be scoped into these two categories from literature review.

First mechanism consists of departmentalization, centralization or decentralization of decision making, Formalization and standardization, Planning, and Output and behavior control data which are summarized by reviewing literature from various scholars to form the “structural and formal mechanisms” according to structure from Martinez & Jarillo (1989). Second mechanism consists of Lateral or cross-departmental relations, Informal communication and Socialization are also summarized by the same way to formalize “other mechanisms, more informal and subtle”. Finally, these two major mechanisms will be used to explain how headquarters coordinate with its subsidiaries across border.
4. Empirical case of Toyota in Thailand

4.1 Background
Thailand was the first country where Toyota Motor Corporation started to expand its business overseas. The history of Toyota in Thailand started since 1956 when Toyota initially entered into Thai market as Toyota Motor Sales Co., Ltd. then transformed to Toyota Motor Thailand Co., Ltd (TMT) in 1962 with the capital of 11 million Baht. The continuous growth of TMT becomes visible with the capital of 7520 million Baht together with three production plants including Samrong plant, Gateway plant and Ban Pho plant with total production capacity of 550,000 units per year. Currently, TMT employ 13,500 workers. (Toyota, 2009a)

TMT comprises of 9 affiliate companies named as Toyota Auto Body Thailand Co., Ltd., Siam Toyota Industry Co., Ltd., Thai auto Work Co., Ltd., Toyota Body service Co., Ltd., Toyota Leasing (Thailand) Co., Ltd., Toyota Transport (Thailand) Co., Ltd., Toyota Automotive Technology Co., Ltd., Rachamongkol Rice Co., Ltd. and Toyota Technical Center Asia Pacific Co., Ltd. (TTCAP). Their products can be categories into Complete Build-Up and Complete Knock-Down. Toyota’s Lexus, Crown, Celica, Land Cruiser, Prado, Hi-Ace Commutor, Ventury, Avanza, and Innova are categorized as Complete Build-Up while Hilux Vigo, Fortuner, Soluna Vios, Corolla Altis, Camry, Wish and Yaris are Complete Knock-Down. From Thai’s operation, Toyota’s automobiles and components are exported to more than 90 countries worldwide (Toyota, Sustainability Report, 2007).

For the past 40 years TMT has adopted procedures and management techniques from guiding principles introduced by TMC that bring TMT into success and present as number one in Thai’s automotive industry. Until today, TMT has become the production center for product range of Corolla, WISH, Camry, VIOS, Yaris, VIGO and Fortuner in Asia by set up Toyota Motor Asia Pacific Engineering & manufacturing Co., Ltd (TMAP-EM) for products supporting and production development (Toyota, Sustainability Report, 2007).

4.2 Toyota’s Strategies
To achieve the same objective and target, Toyota has set up the global strategies and goals for all Toyota affiliates to be follow as the route map. The global goals placed by Toyota are to maintain its position as market leader in automotive industry, continuous growth and boost profitability and return to shareholder. To accomplish these goals, Toyota has put efforts to further advance its technology, production and marketing through quality control, cost competitive and promote personal training. Technologies are considered to be the key driver for growth at Toyota. Technology together with environmental concerns, Toyota continues to develop and improve their unique hybrid technology that is considered as environmentally friendly product. At global level, the mediums to long-term goals of Toyota are ongoing and sustaining in R&D, manufacturing and social contribution to achieve sustainable business growth as well as environmental protection (Toyota, Form 20-F Report, 2008b).

Another strategy of Toyota is localized global business along with targeted regional strategies. To remain competitive, Toyota considers the localness as an essential criteria for growth and believes that globalization can be reached by satisfying specify needs that are different in each region. Local marketing and sales as well as local manufacturing are essential for sustainable growth. Toyota achieves globalization through locally design and
product of automobiles, parts and components in the local markets in which they are sold. Locally designed, manufactured and sales product enable Toyota to get closer to the customer’s preference in each specific region and take appropriate actions to market changes in time. Also, one of the rationales behind localization of Toyota is to offset the exchange rate risk, trade restriction as well as tariff imposed by the local government (Toyota, Form 20-F Report, 2008b). Toyota undertake to promote key initiatives in the subsidiaries since Toyota believe that it’s essential for sustaining global competitiveness for growth. Firstly, Toyota strives to maintain its leadership in research and development in automotive industry so Toyota put the effort in the research development especially in environmental friendly technologies. Toyota committed to take part of environmental concern by continuous development and improve the hybrid technology (Toyota, Form 20-F Report, 2008b).

Toyota also specifies target strategies for each region to pursue in order to remain in the leading position in each region as the following, the hub of the worldwide operations in Japan, autonomous growth in North America, maintain constant growth in Europe and to establishing leading position in the developing Asian market. In Asia, in response to the potential growth of this region, Toyota constructs operational structure that is efficient, autonomous and also present as leaders in the automotive industry (Toyota, Form 20-F Report, 2008b). With the strategy of promoting technology, enhancing production as well as environmental awareness, Toyota Motor Thailand is in the process of manufacturing the Camry Hybrid in 2009 at the Gateway plant with an estimated initial production capacity of 9000 units. With the success of Toyota Camry in Thailand, TMT will be the first production plant in Asia that launch the manufacturing of Camry Hybrid to support the potential growth of hybrid vehicles forecasted by Toyota (Toyota Nation, 2008).

One of Toyota’s strategies is to produce distinguished products to provide full product lineup to take opportunities in all regions with the idea of “Global Best, Local Best”. The products concerned in this strategy are global models that consist of IMV, Vitz/Yaris, Camry and Corolla/Auris. The strategy involve local engineering and manufacturing as well as distributing these global models that meet regional demand but still using common procedure, core parts and components (Toyota, Form 20-F Report, 2008b). Furthermore, Toyota (Japan) has set a strategy for overseas operation to focus on the successful launch of IMV (International Multipurpose Vehicles) project with the center of attention in the Asian region to support affiliates in the region in manufacturing of key parts and components available for production of pickup truck and IMV (Toyota, 2005).

Each year, Toyota launch annual goals for their subsidiaries, In Thailand, There is an annual plan called “Company Hoshin” as a guideline for the company to follow along throughout the year. To respond company global goal, each department also sets up department goals to support the annual goals or planning from TMC (Interviewee No. 1-4). To achieve and maintain highest performance, employees will be monitored by their manager and some employees have to make work progressive presentation for at least once every two weeks (Interviewee No. 2).

In Thailand, the IMV project started at Samrong plant with the transfer of 200 Japanese engineers from Japan (Amano, 2008). Toyota Motor Thailand had increased the production capacity in response to the growing in demand for IMV vehicles (Hilux and Fortuner) from outside the Asian market. The prior significant investments in Asian market provided Toyota
with the competitive advantage for existing local presence and the relationship developed with local suppliers. Therefore Toyota believes that Toyota can benefit from the growing demand in the emerging Asian market. Toyota continue to enhance its competitiveness by expanding the product line-up offered and increase the local component usage in this region. For instance, in Thailand, Toyota started manufacturing the Vios and Wish in 2002 and 2003 respectively. Moreover, IMV models (Hilux, Fortuner and Innova) also began production in Thailand in 2005 for the domestic market and also for export to Australia and the Middle East (Toyota, Form 20-F Report, 2008b).

4.3 Governance system in Toyota
The new management system introduced by the reorganization of Toyota Motor Corporation in 2003 which differs from the former system in the establishment of the new position of non-board “Managing Officers” and the decrease in the number of Directors. Toyota established streamlined board of directors and created new non-board managing officer position. In 2008 thirty directors were chosen to work as board of directors. Not only participating in management of the board, Senior managing directors also present as highest authority in their areas of responsible and supervise and communicate with non-board managing officers the day to day operation of specific fields or divisions. By this reorganization, Senior managing directors can connect between management and operational units to achieve the problem solving and on the site development (Toyota, Form 20-F Report, 2008b).

With this new governance system, business decision directly connected with actual operations can be reached through integration of front line operation feedback to management policies and reflecting management decisions in operation. In addition, Toyota also has International Advisory Board, which comprise of oversea advisors that aim to have opinions and advices of management issues from global perspective. They also have a diversity of conferences and committee to reflect and monitor both management and corporate activities. Toyota continue in promoting “Toyota Code of Conduct” that apply in the organization as a guideline for employees’ behavior around the world and Toyota also work on corporate ethics through training and education in all levels and departments. (Toyota, Annual Report, 2008c) (See Appendix, Figure 1)

As of March 2008, TMC had 238 overseas subsidiaries with its most important segment is automotive business. Allocation of resources and performance assessment of automotive operations are considered as a single business section on worldwide basis, they do not manage any subset of their business such as overseas or domestic as separate management division. Management of automotive operations is arranged on functional basis with specific management team responsibility for major operation in segment (Toyota, Form 20-F Report, 2008b). In addition, the working rules and regulations as well as the orientation training for new comers are also provided. On the Job Development is another important way to train staffs for developing their performance. Toyota also has Work-Life Plan system to gradually develop staffs based on their position (Interviewee No. 1).

Employees will be evaluated their performance at the end of the year by direct boss and management level. However, in some department, evaluations take place twice a year (Interviewee No. 1). All of them confirmed that the evaluation will affect their salary, bonus or other benefit and promotion as well (Interviewee No. 1-4). Toyota believe that incentive
would enhance the performance of their employee therefore, Toyota offer the incentive to all level of employees in several options including stock options, bonus, and also retirement benefits. The stock options are offered to directors, managing officers and senior managers as well as executives in overseas subsidiaries. Toyota considers incentive as a driving force of motivation and willingness to work that in the end enhance the long-term business performance. (Toyota, 2005)

4.4 Evolution of Toyota in Thailand

Toyota Motor Corporation (TMC) spread out its organization around the world and set up regional headquarters in North America, Europe and Asia. In Asia, the regional headquarters is divided into two headquarters, Singapore and Thailand, which are responsible for different business entities. Singapore based, Toyota Motor Asia Pacific Pte Ltd (TMAP-MS), is in charge of heading regional marketing and sales support in Asia while Thailand base, Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd (TMAP-EM), is responsible for developing and manufacturing for the local market and also providing production support to Toyota production partners in Asia, Oceania and the Middle East (Toyota, 2009b).

After the formation of Toyota Motor Thailand (TMT), TMC continuously expand its business to Thailand that can be seen in several steps. Start with the establishment of Toyota Technical Center Asia Pacific (Thailand) Co. Ltd (TTCAP-TH) in 2003, which two years later after the establishment performs as R&D base in Thailand. TTCAP-TH will use similar function with North America and Europe, by taking platform and base models developed from Japan (Toyota, 2009h). TTCAP-TH was established for the needs of automotive market in this region and plays an important role as R&D base for Asia Pacific region. This R&D center supports TMC in designing and modifying parts that are developed from Japan for the Asian market. Toyota Technical Center Asia Pacific sees important of network platform for exchange knowledge and skills between different functions and with counterparts in Japan.

The further expansion of Toyota in Thailand is the establishment of Toyota Motor Asia Pacific Co., Ltd. (TMAP Thailand) in 2006 to provide production support for Thailand operation as well as other Asian countries in addition of TMAP Singapore that was established in 2001 (Toyota, 2009c). The TMAP Thailand is another step toward the direction of relocating the support division from Japan to Asian region. The TMAP Thailand will provide the production assistance to TMC’s affiliates in the region. Akira Okabe, senior managing director of TMC and chairman of TMAP Thailand stated, “It will gradually take over from Toyota Japan the responsibility for supporting production, purchasing and logistics. We are thus moving our support functions closer to the manufacturing companies” (The nation, 2006). The aim of TMAP Thailand is to speed up the operation process of subsidiaries in distance country by taking TMC’s role of support granting from Japan to Asia in the area of production, purchasing and logistics (The free library, 2006).

In 2007, TMAP-EM was established as the result of the integration of Asia R&D base (TTCAP-TH) with the production support (TMAP Thailand) (Toyota, 2009d). TMC manage their business in Asia through Toyota Motor Asia Pacific (TMAP). The significant growth and increasing importance of the Asia-Pacific region, TMAP restructured its operation by focusing on building a self-sufficient regional operation. In Asia pacific, Thailand as home base for research and development since 2004 expand its role to integrate manufacturing support into TMAP, which later named as TMAP-EM.
In the past, each country had to report directly to Headquarters in Japan. The restructuring to regional headquarters believe that it could allow subsidiaries work more efficiently and regional headquarter can assist to each country in the region in time (World Eye Reports, 2007). The objective of TMAP-EM is to reinforce the operation in Asia and to encourage localization including local procurement, development and production. The close coordination between TMAP-EM and Singapore-based sales support through incorporation of engineering, manufacturing and marketing, facilitate the timely and efficiency response to customers’ demands throughout the region and also providing flexibility in react to market changes (The free library, 2007). TMT is manufacturing subsidiary of TMC. The restructuring of Toyota in Asia with the establishment of Asian regional headquarters in Thailand (TMAP-EM) therefore, TMT represent as main center to provide support for manufacturing and also research and development in Asia-Pacific region and operate under TMAP-EM which is the regional headquarter in engineering and manufacturing (Toyota, 2009e).

*The chart draws upon the information gathered.

**4.5 Organizational Structure**

TMAP-EM’s organizational structure is divided into 3 main categories named as group, division and department. Generally, the structure of TMAP-EM is broken down into 7 main business groups which are administrative, marketing and sales, production and purchasing, manufacturing support, customer service, quality, and technical center. From these 7 business groups, they are separated into 26 divisions and 58 departments. (See Appendix, Figure 4)

According to new management system introduced in 2003, most of members of the board in TMAP-EM are the same persons that are present in the management board of TMC. Specifically, the senior managing director of TMC, Mr. Koichi Ina, is simultaneously present as Chairman of TMAP-EM (Toyota, 2008a). Furthermore, Mr. Ryoichi Sasaki, managing officer in TMC in charge of Asia, Oceania & Middle East Project Division also held a position of the president of TMAP-EM and TMAP-MS, which are the Asia pacific regional
headquarter (The Auto Chanel, 2007). Beside, most of directors of TMAP-EM are concurrently held as managing officer in TMC. (See Appendix, Figure 2, Figure 4)

In group level of TMAP-EM, the executive vice president of each business group held by Japanese expatriate who is simultaneously remain in managerial position of TMAP-MS apart from manufacturing support group and technical center group. The manufacturing support group does not directly deal with TMAP-MS but rather directly coordinate with TMT. However, for Technical Center group, executives are responsible in technical center group only. In the division level, the vice president of each divisions, who mostly are Japanese, function in two managing role, for instance, some of them handle both TMAP-EM and TMAP-MS and some of them hold for TMAP-EM and TMT. In addition, there are several TMT’s management members that present as executive advisor and also executive managing coordinator in many of TMAP-EM’s division. Besides, in department level, Japanese still is the majority of managerial position. Though, there are some departments that managed by Thai managers, there are still Japanese managers also present as coordinators in specified department. For instance, in purchase division that is splitted into three main departments, Japanese is the vice president of the purchase division with Thai general manager but Japanese expatriates also remain as the senior managing coordinator in each of these three departments. (See Appendix, Figure 3, Figure 4)

Likewise, the administrative structure of TMT is also going along with the new system in which the managing officer in TMC will present in each specific division in order to get the real understanding of situation and provide timely decision making. For instance, Ryoichi Sasaki who is concurrently help position of managing officer in TMC and president of Toyota Asia Pacific regional headquarter also is presently the director of TMT (Toyota, 2009f). Recently, TMC announce the newly appoint managing officers one of whom is Mitsuhiro Sonoda who also currently remains in the position as president of TMT (Toyota, 2009g). In the restructuring of Toyota’s organization, the managing officer who are responsible for daily operation in specific arena or division report to senior managing directors. Moreover, as stated earlier that some of the management members of TMAP-EM also responsible in the management team of TMT both executive vice president, and vice president. With this new management system, TMT as well as other affiliates in Asian region can achieve timely decision-making for day-to-day operation. (See Appendix, Figure 3)

After collecting interviews by employees from various departments and positions within Toyota’s subsidiaries, we found that every department has some Japanese staffs working together with Thai staffs mainly in the coordinator role. The coordinator role is an adviser for technical information and making connection network among Toyota group to help communication flow smoothly (Interviewee No. 1-4). Usually some important information from TMC sent directly to Japanese staffs who are coordinator and will be forwarded to Thai people later. Regarding decision making, employees generally have an authority to make a decision for some daily operation with limitation based on their position. However, the decision making with cases beside daily operation, generally in important cases Thai staffs will make consensus with Japanese coordinator and report to top management level, board of management or TMC (Interviewee No. 2). Overall, employees have to deal with other subsidiaries for their work for example they have to contact to the same department in TMC or other subsidiaries for some information and they deal with other departments within their
company also (Interviewee No. 1-4). They are transferred to Japan for working in same department as when they work in Thailand and it is possible for other staffs from other companies to be transferred to their department (Interviewee No. 1, 2). They describe that this is a transfer system for broaden their perspective and improve their skill before being promoted to next higher career path.

As state earlier that the establishment of TMAP-EM as regional headquarters takes place after the institutionalized of TMT, several departments that were previously under TMT were transferred to TMAP-EM, for example production planning, purchasing, logistic, support manufacturing, engineering, marketing and sales and human resource management. The purchase division that firstly underneath TMT and buy component only for Thailand was transformed to be supervised by TMAP-EM and carry out the component buying for other countries in Asian region as well. However, there are still some departments that hold positions concurrently in both TMAP-EM and TMT such as human resource department but the human resource department of TMT account only for Thailand operation but TMAP-EM will responsible for Asian region. Though, TMC has decentralized some functions to TMAP-EM, but TMAP-EM is just institutionalized in 2007 that still not ready to undertake full responsibility as regional headquarter, therefore TMC will continue to provide support to Asian subsidiaries that TMAP-EM is still not well equipped. But in the near future, TMAP will position as regional headquarters that fully support Asian region (Interviewee No. 3).

4.6 Operating philosophies and Production system of Toyota

In addition to the organizational structure present in the previous section, Toyota implement several tools in order to manage subsidiaries around the globe to achieve the same Toyota quality including Toyota Way, Toyota Production System, principle at Toyota as well as Toyota’s code of conduct. Obviously, all of these philosophies and production methods are widely recognized not only by Toyota people but also others since some of them are very successful and many manufacturing companies imitate and follow the Toyota Production System. In the case of Thailand, the manufacturing and also research and development hub of Toyota, all these philosophies and production systems are employed throughout the Global Production Center which is the regional training center in Thailand that will be discussed in the following section.

4.6.1 Global Production Center (GPC)

To reinforce the efficient manufacturing worldwide and encourage the localization of subsidiaries, the Global Production center (GPC) is established for the purpose of Toyota’s global human resource training center. Currently, Toyota worldwide operation comprise of 53 production sites in 27 countries around the globe. In managing worldwide operation, Toyota encounter a diversity of people therefore Toyota consider human resources development as an important mechanism in maintaining it global business. GPC as the training center was established in 2003 at Motomachi plant to convey the Toyota’s culture and values to all employees and make them understand the Toyota way and to provide employees with the skilled needed to carry out the task. Within 5 years, 13000 employees both from Japan and aboard were trained by GPC and distribute knowledge learn to their team members. The GPC was later expanding to the United States, the United Kingdom, and Thailand to further develop workforce worldwide. Moreover, Toyota Institute is set up in 2001 that aim to train potential managers or executive candidates in implementing the Toyota
Way when performing their job. The goal of Toyota Way is enable employees around the world share the same values and cultures (Toyota, Annual Report, 2008c).

In the past, human development was carried out in Japan only. However, the rapid growth in overseas operations leads to the transition of GPC to regional, the significant changes take place to support spread of technical skills from Japanese trainer educate oversea employees to local trainer distribute the skill to local employees and also employees from other countries in the region. The objective of the GPC is to inculcate employees that Toyota’s products regardless of which origin it was produced should bear the same quality (Toyota, Annual Report, 2008c). The GPC aims to provide the local manager the method of Toyota through the training and promote the transfer of knowledge gained by local manager to their subordinates. The training provided by GPC is available to all levels including managers and supervisors, new hires and experienced workers (Toyota, Form 20-F Report, 2008b).

The primary goals of GPC are Human Resources Development and Localization of Model Switchovers, human resources development is implementing by developing supervisors and trainers at overseas bases with assistance from headquarter. Another function of GPC is helping the subsidiary plant to prepare for redesign of production, when newly developed model is launched so that the plant can efficiently switch over to produce them. Visual manual videos are used in GPC for representing the best demonstration while the traditional manuals show only written word or still illustrated. By using visual manual videos, Toyota can reduce time for training staffs. The new model switchover is implemented by gathering member from overseas meet up at GPC, and refines the design drawings and verifies possibility of implementation while traditional system for switch production is sending staffs from Japan to overseas base. All members are assisted by V-Comm system, which is a 3D virtual design system. This system admits needs and individual question from overseas operations to be figured out in advance and reflected schematically design drawing. The preparation for production and redesign different models reduce approximately half man-hours required (Toyota, 2009i).

After establishing of the GPC at Motomachi plant, Asia Pacific global production center (APGPC) in Samutprakarn, Thailand as regional training center was set up in 2005 and used for training TMT’s employees and later also for supporting members from Toyota’s Asian manufacturing affiliates. Ryoichi Sasaki, Toyota Motor Asia Pacific Thailand president, announced at ceremony that Toyota Motor Asia Pacific Co., Ltd. is playing an important role to improve knowledge and ability based on Toyota production system for supporting and maintaining quality in Asian region. AP-GPC is the Asian division of Japan-based Global Production Center (GPC) to enhance knowledge distribution to Toyota members (Toyota, 2009j).

Employee generally have some training program each year vary by their department, some of them has two or three program each year, and some of them has to be trained at least twice per month. Most of training program take place at TMAP or private training center. Instructors for each training program are required to acquire special courses training in order to be the master trainer in specific topics but there are some outsource trainers for instance the ISO course will be instructed by outsource trainer. For Toyota Global Production Center
(GPC training center) it provides only field related in production side and staffs who are able to join this training are staffs who are in the Production Department only (Interviewee No. 4).

4.6.2 Thainization

Toyota Motor Thailand (TMT) launched the localization policy, which is called Thainization that involves promoting the local employees to take part in management level in 20 years (Amano, 2008). Thainization was the philosophy drive for TMT before Toyota way was introduced. Imai Hiroshi who was the executive vice president of TMT initiated the Thainization. At the very beginning of Toyota in Thailand, the management initially followed the guidelines set by Toyota Motor Corporation (TMC), the mother company from Japan. The management of TMT firstly carries on by Japanese who strictly follow tightly the idea and policy of TMC. Thai employees at that time followed the direction given by Japanese. During that time, managerial position is strictly held by Japanese expatriates, without any Thais present as manager for long time. From then on, there were very few Thais positioned as managers until around 1980’s however the final decisions were still made by Japanese expatriates only. As time went by, several divergences between the Japanese and Thais appear to be stronger due to different culture and different way of thinking. Soon after that, TMT recognize the need to combine Thai into management positions instead of only Japanese management. Since 1987, the significant changes in management philosophy emerged, TMT decided to transform the organization from management only by Japanese to only by Thai, which is called Thainization. The former Japanese managers were converted from managers to coordinators and appointed Thais as managers instead. “Thainization has been proceeding concretely to the system of organization for Thais, promotion for Thais and job rotation for Thais” (Imai, 2006, p.2).

Thainization comprises of three steps. It starts initially with the reorganization by appointing Thais to be managers instead of Japanese expatriates. During the initial stage, the difficulties arise since the Japanese managers were reluctant to transfer the authority since they were uncertain about the inappropriate use of authority by Thai managers. At the same time, Thais were hesitant to accept the position as managers and believed that the managerial position belong to the Japanese expatriates since in the very beginning the Japanese never give authority to Thais so the Thais are not at all familiar with management affair. The next step was to set up the promotion system, in the past, Japanese did not know much about what determines the performance of the Thai workers. Later, Promotion Committee was established that only Thai senior managers who carry out performance appraisal without bias and proposed to the Board of Director for the decisive approval. The third step is the job rotation system. The rational behind job rotation is that Toyota believed that working in the same job for long time is not good, people will stick with the old thing and resistant to change therefore the rotation of personal is put into practice if employee has worked in the same department more than 5 years as a way to develop career path and to build up the fresh mind. Toyota decision-making process is collective and horizontal system, allowing the employee get involved from bottom-up procedure with the decision making as consensus. This also applies in foreign operations worldwide at the same time considering cross-cultural way of thinking. For instance, Thainization in Thailand was implemented in response to the necessity of globalization in the world while considering localization (Imai, 2006).
4.6.3 Guiding Principle at Toyota

Ever since Toyota was established, they put the effort to contribute to the sustainable development through their manufacturing, high quality and innovative products and service. Form their attempt, they created a corporate philosophy that has been passed down from generation to generation within company, their philosophy is known as “Guiding Principles at Toyota”, which was issued in 1992 and revised in 1997 (Toyota, 2006) (See Appendix, Figure 5).

Source: (Toyota, 2006, p.4)

Toyota’s code of conduct and Toyota way are tools implementing to assist Toyota realize their goals. Toyota code of conduct was issued in 1998 and revised in 2006 and has been used for providing a basic detailed explanations and examples of actions and issues that one must be aware of when carrying out business activities and living in global society. In the beginning Toyota code of conduct was used for setting out the basic mind-set of employees and emphasizes the principles that employees have to keep in mind, the new code amended in 2006 consists of declaration from employees rather than command from company. The code of conduct is dispersed among management of subsidiaries in Japan and overseas for developing common awareness (Toyota, 2007b)

Toyota way is another tool beside Toyota code of conduct, it was established in 2001 to simplify the values and methods that employees have to carry out to undertake the guiding principle throughout company activities. Toyota way is currently functioning as the core standard of global Toyota organization and also present as philosophy of Toyota management that focuses on long term benefit to the organization. The Toyota way consists of continuous improvements and respect for people which are the two main pillars. The key concept of Toyota Way is actively working and creating new ideas for the best with ongoing process to improve their business, never satisfied where they are, respect all their stakeholders and working with the believe in success by personal effort and good teamwork (Toyota, 2007b).
While working with Toyota, The Toyota way is promoted among staffs and this philosophy is famous and still being used today with others philosophies. Beside, Employees have to be trained both for daily operation and behavioral roles. Instruction and guidebook along with training programs are provided for everyone (Interviewee No. 1-4).

Source: (Toyota, 2007b)

Toyota Way is the combination of five elements; First, Challenge means to have long-term visions and pursue them, for instance, job rotation is also a challenge for superior working life. Next is “Kaizen” that aim for continuously improving the operation. Historically, the employee is not allowed to think and waits for direction and guidance; workers will do nothing without command from manager. “According to Toyota’s management, we make it a rule to think something again and again for new proposal to the boss in the horizontal process. Doing nothing and only waiting is negatively as waste of time.” (Imai, 2006, p.6)

The third is “Genchi-Genbutsu” as the process of finding the fact to formulate correct decisions. “Observe the production floor without preconceptions and with a blank mind. Repeat why five times to every matter” (Imai, 2006, p.6). If the Japanese managers do not understand the Thai way of thinking, it will never work out well with the Thai workers. Therefore, Toyota believes that learning from Thai people, Thailand’s culture and environment could enhance the organizational effectiveness. Subsequently, Respect, meaning the form of respecting and understanding for others’ idea and thinking. Toyota wants all employees to think while they are working and the managers are there as the supporters of the employees’ ideas. In Thailand, employees are encouraged to propose something for a better working environment in the office. Finally, Teamwork that aims to encourage professional growth and capitalize on individual and team performance. Teamwork not only stands for relationship in the working team but also include the smooth relationship between the managers and the workers (Imai, 2006).

Toyota way is noticeably applied in TMT as a core philosophy in the organization, which considered as a building block of Toyota. One of the main elements in Toyota way is mutual respect by promoting safety among employees. In Thailand, it’s implemented by publishing the policy from managements that states, “safety comes first and safety is everyone’s responsibility” and they also put forward the safety to other stakeholders such as dealers,
contractors and affiliated companies. (Toyota, sustainability report, 2007). TMT also promote the Toyota way by providing on the job training to employees in all levels (Amano, 2008).

**4.6.4 Toyota Production System (TPS)***

“Toyota way and Toyota production system (Toyota’s manufacturing method) are the double helix of Toyota’s DNA” (Liker, 2004, p.7). Toyota production system is the manufacturing approach implemented by Toyota which is generally known as lean production. It is the method of production that all parts contribute to the entire system follows Toyota’s principle. The principle within Toyota that is called Toyota way that can be best understood as the principle of Toyota culture that enables TPS to work efficiently (Liker, 2004).

TPS consist of two principle aspects. The first principle is “Just-in-Time”, which enables Toyota to minimize level of inventory through manufacturing and delivering components in the right quantity when they are needed. The second principle is “Jidoka” which stands for automation. Toyota set up the mechanization and links it with computerization so that the production system immediately stops working when a problem arises in the process to avoid defective products. The equipment used by Toyota was designed to discover the defective product and stop the production when the malfunctioning is found. In addition, the machine operators and their team member are authorized to discontinue the production process at any time they have found the fault. With this principle, Toyota can achieve best quality of product delivered to customers while getting rid of the waste through defective detection. Beside the two principle, Toyota emphasis every worker for on-site identification and analyze the problem at the root cause as to solve the problem immediately. In addition, Toyota utilize sophisticated information technology in all plants as to give the visual aids to overseas plants and also facilitate the training and communication that convey technology and knowledge among oversea subsidiaries worldwide (Toyota, Form 20-F Report, 2008b).
5. Analysis

In this phase, the case study of Toyota that was revealed in the previous sections will be used as the information basis for an analysis. The analysis will be presented step by step according to the framework and literature review. Therefore, the analysis will be clustered into 8 groups that follow the conceptual framework respectively.

5.1 Departmentalization

The operation of Toyota in Asia region is governed by TMAP-EM including research and development, manufacturing, purchasing as well as human resource development and training which is consider to be the core activities within the Toyota group. As stated by Solvell and Zander (1995, p.20), home based MNEs carry on a collection of major functions that are considered to be the core function in the organization.

It’s apparent that Toyota institution in Thailand has been divided into more than a few departments. As maintained by Hedlund (2005, p.203), hierarchy is the interconnected relationship of each unit in the organization. Begin with the regional headquarters, TMAP-EM break up the organizational structure according to responsibility from overall function in the business group along the hierarchy into divisions and departments respectively. In TMT, as stated earlier that the main departments were initially administrated under TMT but later after the establishment of TMAP-EM, these core departments were transfer to TMAP-EM while some departments still simultaneously exist in TMT. Even though the organization has become bigger and more complex, the departmentalization coexists in the up-to-date organization at Toyota Thailand. As asserted by Martinez and Jarillo (1989, p.493) that since the late seventies, many researches paid more attention to informal structures; however, the study of formal structure still remains in fashion.

5.2 Centralization/Decentralization of decision making

According to the new management system launched by Toyota in 2003 with the introduction of managing officers, it can be seen that Toyota decentralized the authority to managing office and to monitor and supervise the operation in specific units while they report the situation to the senior managing director that is present as the link between on-site operation and management board. Ghoshal (1987, p.426) asserted that managing large, complex and multinational organization is seen as unclear alternative between centralization and decentralization as to the complex administrative job entails the combination of global and local works. In the case of Thailand, managing officers of TMC serves as the president of both TMAP-EM and TMT to facilitate the decentralization of decision making to the local subsidiary as Toyota believes that the managing officers could support problem solving in a timely manner. However, it is likely that Toyota partially decentralizes authority to the subsidiary while the managing officers have to report the circumstances to the board of directors. As Bartlett and Ghoshal (1989, p.191) stated, MNC can be structured in several ways depending on the independency between headquarters and subsidiaries. They also claim that to remain in a competitive environment, organization needs to be structured distinctively to respond different requirements, transnational approaches or integrated network, all of which are considered the efficiency of production as well as the local conditions (ibid.).
In addition to the new management system, the business expansion of Toyota in Thailand can be seen as another step of decentralization from Japan. Beginning with the establishment of research and development center in 2003 as the research based for the Asian region and the set up of TMAP Thailand as a production support base in Asia until the formation of regional headquarter in Thailand (TMAP-EM). The establishment of TMAP-EM is considered as decentralization since subsidiaries in Asian countries no longer report directly to TMC but rather under the support of TMAP-EM. However, the management team members of TMAP-EM are actually the people from TMC’s management team, which are considered as implicit centralization. As asserted by Martinez & Jarillo (1989, p.500), organization architecture must be very much sophisticated to stay away from centralization-decentralization dichotomy.

Besides, TMAP-EM as an Asian hub in engineering and manufacturing reflects on the home base model of Solvell and Zander (1995, pp.28-29) where the core functions are located in the home base while in some aspects reflect the view of Heterarchy since the dispersion of organization in competency but closely linked through coordination. For instance, some components that are specialized in one country will be procured from that specialized country and exported to Toyota’s affiliates. However, Hennart (2005, p.152) stated that in hierarchy organization the boss gathers information from the employees and performs decision making. In contrast, the information is fully decentralized in price system and subsidiaries can operate as independent units (ibid. p.161). In Thailand, Toyota is organized in hierarchical way rather than price system since Toyota Thailand has act in response to goals and policies launched by Toyota Japan. For example, the IMV project and promoting technological and environmental concerns were launched by Toyota Japan, Thailand represents as main production center and the first country in Asia in manufacturing both IMV and hybrid vehicles. Furthermore, In Toyota, different strategies are proposed to different subsidiaries for example, the self-sufficient growth targeted in North America, stable growth in Europe and endeavor to be the leader in Asian market. The differentiated fit that aim to have structural distinctive among different subsidiaries show a discrepancy involving centralization and decentralization between HQ and each subsidiaries (Nohria and Ghoshal, 1994, p.492). In spite of this, Toyota is not harsh hierarchy since employees are encourage to think for possible new solution and propose them to their management. Thai staffs will suggest the possible solution and make consensus with Japanese coordinators and propose them to the top management level and then board of management or TMC respectively. This is considered to be hierarchy in the way that boss facilitates the decision making but employee gets involved in the decision making as well.

All in all, it appears that both centralization and decentralization are applied in Toyota organization varying in functions and purposes. As argued by Rugman and Verbeke (1992, p.768) the centralization and decentralization aim to point out the locus of decision making. Seeing that as organization expand, to some extent Toyota decentralized the decision making authority to their subsidiary in order to facilitate the work in timely manner. At the same time, there is the hidden centralization in the regional headquarters and also in major subsidiaries in Thailand. It is visible that, the management of regional headquarters is the personal who also work as management of Toyota Japan and the final decisions as well as major business tactics are determined by the headquarters in Japan. Rugman and Verbeke
(2004, p.15) maintain that in order to achieve effective coordination, both participative decentralization and administrative centralization can be applied at once.

5.3 Formalization and standardization
To formalize their business, Toyota use formal written policies that are shared among their subsidiaries and forward to all their employees so that every employee performs to achieving the same goal and facilitate the smooth coordination between headquarter and other subsidiaries. The number of formal written policies and documents can clearly be seen in Toyota, for instance, Toyota Way, Toyota Code of Conduct, Guiding Principal at Toyota and so forth. In addition to the written policies, Toyota production system that generally known as lean production is the standard manufacturing procedure that employed in all Toyota manufacturing plant around the globe. All manufacturing plant will take into practice the concept of “just in time” which means to minimize level of inventory and “Jidoka” that focus on instantaneously halt the production when the malfunctioning is found. According to Martinez & Jarillo (1989), formalization and standardization reflect on structural mechanisms that are still valid in the organization even though there is a tendency of informal communication. The most famous policy is Toyota way, which associated with the 5 elements regarding continuous improvement and respect for people are extensively shared in all Toyota affiliates with some adaptation to local mind set. Toyota realized that it is important to get into the Thai attitude and learn from Thai’s culture and environment so that the organization could work out efficiently. Since, in the past, Thai’ style seem to be follower rather than leader, employee will wait for the command which is not compliance with Toyota Way. As a result, the continuous improvement of Toyota Way can be put into practice with Thai employee by pushing them in thinking for new ideas and solutions as a rule and encourage employees to think. As claimed by Nohria and Ghoshal (1994, p.492) that the formal structure should be customized so that it is a “differentiated fit” with environmental and localness of each subsidiaries. Another important policy is Toyota Code of Conducts that provides basic detailed explanations and examples of actions and issues that one must be aware of when carrying out business activities. Both policies stated earlier are major tools use for supporting Toyota’s corporate philosophy which passes on from generation to generation within the company, their philosophy is known as the “Guiding Principles at Toyota”. By using these policies Toyota can coordinate easily with their subsidiaries since they provide specific way to lead their employees and written policies is easy to understand and perform. Bارتlet and Ghoshal (1989, p.191) maintained that it is vital to remain competitive in the fast changing environment, organization needs to be structured uniquely to respond to several obligations, transnational approach that is considered together with the efficiency of production with the receptive to local conditions. Toyota balance between formalization and localization strategy in order to fit with the local context by using strategies from global operation with targeted regional strategies. The multifaceted management work is the blending of global and local matters (Ghoshal, 1987, p.426). Toyota considers the localness as essential criterion for growth and believes that globalization can be reached by satisfying different needs in each region. Local marketing and sales as well as local manufacturing are essential for sustainable growth. Westney (2005, p.59) claimed that the MNC must react to the global competitive pressure by localizing its product and activities to gain the economic as well as technical benefit of inter organization coordination that in line with “geocentric” in
the aspect that MNC structure must be distinctive from both home and host country that also called transnational, heterarchical and multifocal. Moreover Toyota established TMAP-EM in Thailand as a regional headquarter to support their business and plays a role as headquarter to coordinate more closely with their subsidiaries. Nohria and Ghoshal (1994, p.493) state that the more resource are inherent in subsidiaries, the higher formalization is applied in the subsidiaries to remain in control over the practice of subsidiaries. The formalization is increasing since TMC tried to reduce the distance from headquarter to subsidiaries and this can help them track the performance of subsidiaries along with localization by fitting into local context.

5.4 Planning
Toyota set the goals that are targeted to maintain its position as market leader in automotive industry, continuous growth and boost profitability and return to shareholder. These goals are used as a route map for subsidiaries to perform their role on operation. In addition, Toyota initiates the target goals for each subsidiary to be accomplished. And to respond the target goal, in Thailand, there is the annual plan and so called “Company Hoshin” that set up in response to target goal launched by headquarters. Moreover, each department will develop department goal in order to accomplish the global goal. As classified by Martinez & Jarillo (1989, p.491) goal setting and planning are coordination mechanism that Toyota is using with their subsidiaries. In response to global goal, employees have annual goals or planning that set up for their department. Moreover Toyota evaluates their employees at least once a year by their direct boss and management level and this evaluation affects employees’ salary, bonus and promotion as well. Hennart’s (2005, p.160) price system is align with planning mechanism and Toyota’s evaluation method since he described that employee will be informed in advance the benefit that employees will received from the working performance they have done, for example bonus or others benefit. Besides, goal and rewarded set by Toyota, the Thainization is the policy implements to promote the management by Thai that plan to accomplish in 20 years.

5.5 Output and behavioral control
Controlling the performances and behaviors of employee as well as subsidiaries can be put into action by taking several approaches, output and behavioral controls. The bureaucratic control or indirect control of behavior where the decision-making authority is delegated to lower level, specialized employees, who engage with the operation in the hierarchy while rules, procedures and records of the organization are used as mechanisms limiting actions of employees or subsidiaries (Child, 1973, p.3). Similarly, in Toyota, the authority are delegated to employees in certain level that are necessary to perform their work, employees are left free to carry out their responsibility. However, several rules are widely promoted in the organization for example, Toyota Way and Code of Conduct allows employees behave in the best business practice. Furthermore, Hennart’s price control stated that providing employees freedom to work and reward them by output in the form of bonus, piecework and commission would be more productive than monitoring employee (2005, p.160). Toyota consider output controls (incentives) as an important control that could enhance the performance of company. The employees will be paid based on their performance in the form of bonus, stock options and promotion as well.

On the other hand, centralized strategy of control, direct control, and so-called personal
control, the decision-making authorities remain at senior level in the hierarchy (Child, 1973, p.3). Even though some authority has been delegated to subordinates which are necessary to perform their work while maintaining decision making to be made by senior managers. Moreover, employees’ performance will be monitored by their direct boss. As asserted by Hennart (2005, p.152), behavioral control or personal control involves observing employee’s behavior by their manager. In order to maintain the Toyota standard, Toyota developed Toyota way of working called Toyota way, which is extensively promoted in all Toyota subsidiaries. Toyota way is the mechanism that supervises and guides employees to accomplish the work. As maintain by Hennart’s hierarchical control employees will be told what to perform (ibid.). By applying working guidelines and providing training for employee, Toyota way is considered to be a form of control from headquarters to control and direct its subsidiaries’ practices.

5.6 Lateral or cross-departmental relations

Toyota encourages lateral communication that can be seen in several cases. Firstly, Toyota has an International Advisory Board that combines a number of overseas advisors to give advice of management issues from a global perspective. They also have variety of conferences and committees for deliberation and monitoring of management and corporate activities. According to Martinez and Jarillo (1989, p.492), lateral relations associated with direct exchange of ideas among managers from different units for problem solving or specific purposes. Moreover, in current management system, senior managing directors are represented as a link among management and on-site operations for retaining the problem solving and development on the site. With this system, business decision directly connected with actual operations that incorporate feedback and idea from operation line to management strategy and reflecting management decisions in operation. Nohria and Ghoshal (1994, p.494), stated that building ‘share value’ is to build common organizational values that central focus on open communication between HQ and subsidiaries. In addition, the widespread of Toyota Way that commonly uses to perform the work that focuses on sharing the same Toyota values and cultures. Toyota manages its operation on functional basis and employees have to deal with other subsidiaries or other departments to perform their work. As emphasized by Hedlund (2005, p.201) that MNCs appear to be messy organization that relies on multidimensional coordination, the complex MNCs need to cooperate at the same time among functional and geographical line, which lifts up the importance of lateral communication among different departments and subsidiaries.

In addition, Solvell and Zander (1995, p.29) asserted that the heterarchical organization involve the lateral communication between business units through the collaboration between each geographically specialized division. This can be seen by the establishment of TTCAP-TH as the R&D base for Asia Pacific region by position as a network platform for exchange knowledge and skills between different functions and with counterparts in Japan to support the local needs of automotive market in this region. Another step toward the relocation of support division from Japan to the Asian region is the set up of TMAP Thailand that represents as a network platform to provide production assistance to TMC’s affiliates in the region. Likewise, Ghoshal and Bartlett’s (2005, p.76) also stressed the important of lateral communication that all organizational units are connected throughout the system of resource exchange and the organizational set of MNC in different locations might directly connect or be in contact through the network.
5.7 Informal Communication
It is apparent that informal communication exists in Toyota organization that could be described in a number of steps. Firstly, most of top managements of TMAP-EM as well as TMT are seized by Japanese that bring about the informal exchange of ideas between Toyota Japan and Toyota Thailand. As asserted by Hennart (2005, p.168), socialized subsidiaries manager enhance informal exchange of ideas since the transfer of manager to subsidiaries could put together the subsidiaries’ action or decision support in the same way as decision of headquarters. Moreover, Thanization philosophy, Toyota initiates to promote Thai people to be management instead of Japanese. However, Japanese managers were turn to be coordinators to facilitate the workflow between Japan and Thailand. Nohria and Ghoshal, (1994) argued that socialization meant to encourage open communication and build up share value within the organization. “Extensive socialization and communication also build trust among the managers and creates the foundation for reciprocity and easier negotiation and resolution of potential conflicts” (Nohria and Ghoshal, 1994, p.494). In addition, Toyota made use of job rotation of employee as a tool to develop people since Toyota considered working in the same job for long time could make people stick with the old habits and are resistant to change therefore the rotation of personal is extensively utilized within Toyota to broaden employees’ perspective and improve their skill. The rotation of personal enhance the informal communication as maintained by Solvell and Zander, (1995, p.26) that information is broadly shared in the organization by mean of using the transfer of employee as to spread out the knowledge and information throughout organization.

5.8 Socialization
As Martinez & Jarillo (1989, p.492) asserted that socialized members with philosophies, values, objective and goals can build organization culture and training and transferring employee across the organization are the method for doing so. In Toyota Training programs are extensively provided for employees depending on their department for instance employees from production department may need to be trained by Global Production Center for Toyota’s culture and values and make them understand the Toyota way and to provide employees with the skills needed to carry out the task. And every employee has to be trained when they first join the company, they will have an instruction or guide book for both daily operation and behavioral role. Rotation across the organization has been using within Toyota subsidiaries to build organization culture and train their employees as well. They can accumulate working experience and knowledge from rotation at the same time they transfer their knowledge to departments that they are rotated to. Both departments in rotation process will share their own values for adapting to the same organization culture. Edström and Galbraith also asserted that the frequent transfer of personal enhance the employee learning to face with new environment, the employee get new ideas and attitude which contribute to the organization as a whole (1977, p. 257).

Furthermore socialization is considered to be another organizational control strategy by transferring an expatriate to be a part of top management team. The effect from socialization is to improve coordination between HQ and subsidiaries and allow local greater discretion (ibid, 1977, pp.250-251) as Toyota has Japanese employees working in management level for some departments. Moreover, they maintain that, in developed countries, the transfer of expatriate is to build up the international knowledge and skill before turning to be in the top management (ibid, pp.259, 260)
As stated by Hedlund (2005) organization culture can be built with perspective of heterarchy that objective, knowledge and organization culture are shared across heterarchy organization. Toyota organization can be described as heterarchy also their management become part of every unit since there are Japanese coordinator working together with most departments to reduce distance between headquarters and subsidiaries. In addition Nohria and Ghoshal (1994, p.499) described ‘share values’ as way out to resolve dilemma of control in MNCs by socializing employees to have same corporate values and goals as to minimize the differences and promote mutual interdependence. Toyota way is seriously promoted along with other philosophies that Toyota provides among employees to create share values and annual goals are set for them.

Lastly, the establishment of Global Production Center (GPC) is regarded as embedded behavioral control since the purpose of GPC is to inculcate all employees the Toyota culture, values, and working knowledge so that all Toyota employee hold the same value worldwide. According to Hennart, socialization is implicit control of behavior in which the diversity in organization can be reduced by inculcate the employee with the philosophy of organization (2005, p.159)
6. Conclusion

Due to the fact that there is no single coordination mechanism that is best fit in managing large and complex organization, a number of coordination mechanisms are concurrently put into practice so that the MNC can efficiently achieve localization while remaining competitive in the globalization. To manipulate various subsidiaries among their group between Japan and Thailand Toyota apply a variety of coordination mechanisms within their company. In Thailand, the structural mechanism obviously takes part as the fundamental formation of the organizational structure. Toyota remarkably use of departmentalization as the structure to manage the business entity according to function and responsibility. The critical scrutinize regarding centralization or decentralization of decision making is become blurred since Toyota to some extent delegate the decision authority to its subsidiaries while the final exclusive decision remain at the headquarters. In addition, the formal written policies together with standard production system considerably utilize in Toyota subsidiaries so that its affiliates follow the same principle and maintain the same Toyota standard. To achieve the same goal, planning in the form of the strategic planning, regional target goal as well as reward are used as guideline to accomplish the goal. To control the performance of the company, output control is one of the tools that Toyota use to motivate the performance of their employee as well as subsidiaries. However, the hierarchical or behavioral control is coexisting to ensure the employee act in order to fulfill the best performance. The optimum control is to mix between output and behavioral control so that the finest advantage is achieved.

Likewise, the informal or subtle mechanisms are broadly promoted within the Toyota organization. The lateral or cross department communication visibly seen by the messy organization that employee have to communicate or coordinate with other departments or the same department in the region among functional and geographical line simultaneously to undertake the work. The establishment of regional headquarters in Thailand (TMAP-EM) is one of the cases that put forward lateral communication as the network of exchange in the region required the lateral communication among the concern departments. Besides, the informal communication plays as vital mechanism in the organization. The present of Japanese as employees and also coordinators make possible the informal exchange of idea between Toyota Thailand and Japan that finally facilitate the subsidiaries action and decision in line with those of headquarters. Last but not least, socialization regard as informal control of behavior that extensively exercise in Toyota by mean of socialize employees with philosophies since starting their work with Toyota until personal development through training courses provided so that every employees bearing the same Toyota’s value.

To sum up, there is no particular coordination mechanism that perfectly governs the large and complex multinational corporation. The combination of several well organized methods is efficient approach to manage such a complex organization. In various ways, the eight groups of coordination mechanisms are commonly applied in the organization. The structural as well as informal coordination mechanisms are being used in Toyota organization to facilitate the collaboration between headquarters and distance subsidiaries.
7. Implications

Due to the time constrain, this research focus only on the coordination of Toyota organization between Japan and Thailand operations. However, there is a need to enhance the study of coordination mechanism in broader area for instance, the whole Asian region countries as well as other regions. In addition, the further research on the comparison of coordination mechanisms and organizational structure between each region can be an interesting point of study area. However this study require substantial timing lot to implement the research.
References


Figure 1: New Management system
Source: (Toyota, Annual Report, 2008c, p.55)
Directors and Auditors
As of June 24, 2008

Representative Directors

Chairman of the Board
Fujio Cho

Vice Chairmen of the Board
Katsuhiro Nakagawa
Kazuo Okamoto

President, Member of the Board
Katsuaki Watanabe

Executive Vice Presidents, Members of the Board (Main operational responsibilities)
Kyoji Sasazu
Business Development / Purchasing / Housing

Mitsuo Kinoshita
Global Audit / Corporate Planning / Research / CSR & Environmental Affairs / Government & Public Affairs / General Administration & Human Resources / Accounting / Information Systems

Takeshi Uchiyamada
TQM Promotion / Strategic Production Planning / Production Engineering / Manufacturing

Masatami Takimoto
Quality Group / Research & Development

Akio Toyoda
Figure 2: Toyota Motor Corporation (Japan) Organization Chart
Managing Officers (47 people)
1. Iwao Nihashi 17. Toshiki Hayama 33. Masanobu Kawase
2. Seiichi Sudo 18. Takahiro Iwase 34. Yukio Nishikawa
3. Yasuhiko Ichihashi 19. Akihito Tsuji 35. Hirofumi Muta
5. Takashi Hata 21. Nobuo Kobayashi 37. Shigeki Suzuki*
7. Tatehito Ueda 23. Tatsuya Kaneko 39. Yasushi Kohara*
8. Takashi Shigematsu 24. Takeshi Shirane 40. Shigeru Hayakawa*
10. Takahiko Ijichi 26. Katsunori Itasaka 42. Hiroji Onishi*
11. Toshio Furutani 27. Tokuyuki Takahashi 43. Keiji Masui*
12. Tetsuo Agata 28. Real C. Tanguay 44. Kenji Miura*
13. Senta Morioka 29. Ryoichi Sasaki 45. Kiyotaka Ise*
15. Kazuhiko Takarada 31. Yasuhiro Yokoi 47. Didier Leroy*
16. Masayuki Nakai 32. Takahiro Fujioka


Figure 3: TMT’s organization structure
Source: (Toyota, 2009f)
<table>
<thead>
<tr>
<th><strong>Group</strong></th>
<th><strong>Division</strong></th>
<th><strong>Department</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Administration Group</strong></td>
<td><strong>1. Corporate Planning Division</strong></td>
<td>VP, Mr. Tomokazu Kato**</td>
</tr>
<tr>
<td><strong>2. Accounting Division</strong></td>
<td><strong>2. Accounting Division</strong></td>
<td>VP, Mr. Hidetoshi Hori**</td>
</tr>
<tr>
<td><strong>3. General Affairs Division</strong></td>
<td><strong>3. General Affairs Division</strong></td>
<td>VP, Mr. Takeshi Tanaka**</td>
</tr>
<tr>
<td><strong>4. Toyota Institute Asia Pacific</strong></td>
<td><strong>4. Toyota Institute Asia Pacific</strong></td>
<td>VP, Mr. Hidetoshi Hori**</td>
</tr>
<tr>
<td><strong>5. Human Resources Division</strong></td>
<td><strong>5. Human Resources Division</strong></td>
<td>VP, Ms. Mika Fujita**</td>
</tr>
<tr>
<td><strong>6. Information Systems Division</strong></td>
<td><strong>6. Information Systems Division</strong></td>
<td>VP, Mr. Tetsugoro Hotta**</td>
</tr>
<tr>
<td><strong>7. Marketing and Sales Group</strong></td>
<td><strong>7. Strategic Production Planning Division</strong></td>
<td>VP, Mr. M. Matsuura**</td>
</tr>
<tr>
<td><strong>8. Production and Purchasing Group</strong></td>
<td><strong>8. Strategic Production Planning Division</strong></td>
<td>VP, Mr. M. Matsuura**</td>
</tr>
<tr>
<td><strong>9. Logistics Division</strong></td>
<td><strong>9. Production Control Division</strong></td>
<td>VP, Mr. K. Akihiko**</td>
</tr>
<tr>
<td><strong>10. Purchasing Division</strong></td>
<td><strong>10. Purchasing Division</strong></td>
<td>VP, Mr. T. Morita**</td>
</tr>
<tr>
<td><strong>11. Production Engineering Division</strong></td>
<td><strong>11. Production Engineering Division</strong></td>
<td>VP, Mr. Tomokazu Kato**</td>
</tr>
</tbody>
</table>

**Abbreviation**
- EVP: Executive Vice President
- VP: Vice President
- GM: General Manager
- DGM: Deputy General Manager
- DGM: Deputy General Manager
- EMC: Executive Managing Consultant
- SE: Senior Executive
- DA: Deputy Assistant
- EA: Executive Assistant
- **: Representative

**Executive Information**
- Name: Mr. Kozo Inui
- Position: President
- Title: Mr. Takashi Suzuki
- Role: Mr. Koichi Nakajima
- Name: Mr. Akira Odobe
- Name: Mr. Takao Takahashi
- Name: Mr. Tadashi Hidaka

**Address**
- Toyota Motor Asia Pacific Engineering and Manufacturing Co., Ltd.
- Effective Date as from April 1, 2009

**Department**
- Network and System Engineering Department
- Vehicle Engineering Department
- Industrial Engineering Department
- Manufacturing Engineering Department
- Engineering Planning Department
- Product Design Planning Department
- Manufacturing Planning Department
Figure 4: Toyota Motor Asia Pacific Engineering & manufacturing Co., Ltd.
Organization Chart
Source: TMAP-EM human resource department
Guiding Principles at Toyota consists of 7 elements

1. Honor the language and spirit of the law of every nation and undertake open and fair corporate activities to be a good corporate citizen of the world.
2. Respect the culture and customs of every nation and contribute to economic and social development through corporate activities in the communities.
3. Dedicate ourselves to providing clean and safe products and to enhancing the quality of life everywhere through all our activities.
4. Create and develop advanced technologies and provide outstanding products and services that fulfill the needs of customers worldwide.
5. Foster a corporate culture that enhances individual creativity and teamwork value, while honoring mutual trust and respect between labor and management.
6. Pursue growth in harmony with the global community through innovative management.
7. Work with business partners in research and creation to achieve stable, long-term growth and mutual benefits, while keeping ourselves open to new partnerships.

Figure 5: Guiding Principles at Toyota
Source: (Toyota, Code of Conduct Report, 2006)
Summary of each interview and interview questions

**Interviewee No. 1**

Company: Siam Toyota Manufacturing Ltd. (Unit Plant), Human Resources Department.

Position: Human Resources Officer / HR Specialist

The first interviewee was working for Siam Toyota Manufacturing Ltd but now he is transferred to work in Japan, his position is human resources officer/HR specialist. This interview is conducted under condition of his role when he worked for Toyota Manufacturing Ltd. in Thailand. When he joined Toyota he was trained for working rules and regulation, Toyota also provide instructions both for daily operation and behavioral role. He provides further information about daily operation, when new assignment is assigned staffs will develop system and standard for operation. Training programs are provided at least twice a month in his department. Training usually takes place both in-house and outside (Toyota group & private training center). Instructor for each training program is in-house trainer who acquired special courses in order to be a master trainer in particular topic, all of his training programs are handled by human resource development department. Toyota not only provides fundamental knowledge by training program but also use unique system which called on the job development. He stated that Toyota offer Work-Life plan system to gradually develop employee based on time of service and position of each member.

His department has Japanese staff working as a coordinator for human resource main system and activities. Japanese staff makes a basic approval before getting final decision from top management or board of management. For cases beside general operation top management or board of management are responsible for making a decision. With his position he doesn’t have decision making authority in daily operation. He has to contact with other departments within company for his daily operation and other subsidiaries of Toyota also. All information related to his operation is linked throughout departments and other company in Toyota group.

Toyota way is seriously promoted within Toyota, interviewee also mention about Toyota Code of Conduct which is based on affiliates respective nation’s law and custom. For annual goals or planning, TMC is responsible for announcing priority issues and some from company individual need. In addition his department has department goal in respond to Toyota group’s goal.

Monitoring from management level is aimed to produce highest quality operation and output, his department has an evaluation twice a year by direct boss and finalized again from management level. The evaluation directly affects to his salary, bonus or other benefits and promotion as well.

**Interviewee No. 2**

Company: Toyota Motor Asia Pacific Engineering & Manufacturing Co., Ltd.

Position: Senior Engineer

Second interviewee has been working with Toyota for four years he just came back from Japan at the end of 2008 after working under intra company transfer program for 2.5 years. Now he is working for TMAP-EM in Thailand. When he first joined Toyota he was trained
for general operation practice, after that on the job development is another training method from working in his department. Training programs are provided three times a year in his department most of them take place in TMAP-EP. Instructor for each training program usually comes from HRD group and GPC group but for some cases external instructor is needed for instance ISO course. He never trained by GPC, his reason is staff who will be trained by GPC is the one working in production department. He has got instructions both for daily operation and behavioral role.

Japanese staffs are working in his department for various functions he give an example of EMC (Executive Managing Coordinator), MC (managing Coordinator). Their role in Thailand is coordination between TMC and TMAP-EM for technical information and to make communication flow smoothly among Toyota group, some important information from TMC come directly to Japanese coordinator before distributing them to Thai staffs. He sometimes makes a decision in daily operation with limited authority, for cases beside his authority or daily operation Japanese coordinator will make decision together with Thai staffs before reporting consensus to TMC. His daily operation needs information from other departments and other companies

He mention about Toyota way that it is seriously promoted within his company. Beside Toyota way philosophy his department has annual goals and planning which are launched by TMAP-EM, with goals and planning he has to present his work progressive every two week. Evaluation is given to him at the end of the year by his direct boss and management level with affecting to his salary, bonus or his other benefits.

**Interviewee No. 3**

Company: Toyota Motor Asia Pacific Engineering & Manufacturing Co., Ltd.

Position: Senior Specialist, Purchasing department

Third interviewee is working for TMAP-EM she explained that she is trained when first join the company, instructions for daily operation and behavioral role are provided for her. Generally she joins training program once a year at TMAP-EM, each training program instructor comes from internal department (Toyota Institute Asia Pacific Department). She has got instructions both for daily operation and behavioral role. She has never been rotated to other unit or other company in Toyota group but she mentioned that other people are rotated from other unit or other company in Toyota group.

Japanese staffs in her department are managing directors and executive vice president, she has to contact with them for her daily operation. Final decision will be made from vice president, Thai staffs just propose the decision to him. Contact with other department and other company is needed for her daily operation, she uses information from them as well.

From her responding Toyota way is major philosophy and always using within Toyota. Her department launch goal for responding to Toyota annual goals and planning, which are required by TMAP-EM. Monitoring from management level is available in operation, they follow progress and ask staffs if they need for explanation. Yearly evaluation is affected to her benefit such as salary or bonus.
She explained establishment of TMAP-EM as a regional headquarters, several department of TMT were transferred to TMAP-EM, for example planning, engineering, marketing and sales. The purchase department that she is working with was underneath TMT for buying component only in Thailand but now after transferring to be supervised by TMAP-EM her department carries out the component buying for other countries in Asian region as well. Moreover she gave further information that some departments still concurrently appear both in TMAP-EM and TMT such as human resource department but human resource department in both company serve for different country. The human resource of TMT account only for Thailand operation while TMAP-EM human resource department responsible for Asian region. However TMAP-EM just institutionalized in 2007 and still not ready to undertake full responsibility as regional headquarter, TMC support to Asian subsidiaries that TMAP-EM is not ready for taking responsibility until TMAP-EM ready for fully support such subsidiaries in near future.

**Interviewee No. 4**

Company: Toyota Motor Thailand Co., Ltd.

Position: Chief Engineer, Press production/Samrong plant

Last interviewee has been working in press production department at TMT since he graduated. After joining the company he was trained both by lecturing and on the job training. Instruction for daily operation and behavioral role are provides for him. He mentioned about his training that he joins training programs four or five times each year, every training program takes place at training department in his company, instructor for each training program comes from management level or outsourcing. He stated that every training regarding his operation is provided by Toyota’s Global Production Center (GPC training center), everyone in his department has to be trained by GPC.

For his daily operation he gets information from operation line and meeting with group leader. Information from other department and other company in Toyota group are used for his operation, he gave some example which are Toyota’s affiliate company such as Banpho plant, Gateway plant and steel factory. He also contacts to TMC or Toyota’s subsidiaries for benchmarking. He sometime contact with Japanese staffs in his department their role is coordinator and consultant. He can make decision with limited authority for other cases beside general operation shop manger (Thai) are responsible for making decision. Rotation is available in his department, his managerial level come from TMAP-EM but he has never been rotated to other company in Toyota group.

Toyota way and Toyota’s Code of Conduct are promoted among employees, he mentioned about both of them together. His department has goals for responding with company annual goals that are set up from Japanese top management. He is monitored by his manager to make an effective operation. Evaluation at each year end is given to him from his direct boss and finalize again by his shop manager. The result of evaluation directly affect to his salary, bonus and promotion as well.
Interview questions

For your privacy, your personal information will not be disclosed in this report; the information you provide will be used as our case study and will be written as anonymous. Thank you in advance for your contribution and precious time.

1. Please state name of company and department you are working for.
2. What is your position?
3. Are there any Japanese staffs in your department?
   a. If yes, what is his/her position in your department?
   b. If yes, do you have to work or contact with him/her?
4. How importance does Japanese manager represent in the department? (Does he/she made all final decision/ govern the activities of employee?)
5. Who is responsible for decision making if there are cases beside general operation?
6. Do you have any decision making authority in day to day operation work?
7. Do you have to contact with other departments or other company in Toyota group for your work?
8. Do you also deal with the other subsidiaries of Toyota in your work related? (For example, contact the same department in Toyota Japan or other Toyota’s subsidiaries)
9. Do you use information from other departments or other company in Toyota group for your work?
10. Have you ever rotated to other unit or other company in Toyota group, or are there any people rotate from other unit or other company in Toyota group to your department?
11. How do you get information for your daily operation? (Have you had a training before start working in Toyota)
12. Do you have any instructions or guide book for your daily operation?
13. Do you have any instructions or guide book for behavioral role?
14. Have you ever heard about Thainization philosophy? If yes, does this philosophy still being use or promote within Toyota?
15. Have you ever heard about Toyota Way? If yes, does this philosophy still being use or promote within Toyota?
16. Have you ever seen Toyota’s Code of Conduct? Does it promoted in the organization?
17. Are there any annual goals or planning for your department,
   a. if yes where does it set up? (does it from Toyota Japan?)
   b. Does any department goal in response to Toyota group’s Goal?
18. How often do you have training program each year?
19. Where does training program take place?
20. Who is the instructor for each training program and which department does he/she come from?
21. Have you ever been trained by Toyota Global Production Center (GPC training center)?
   a. If yes, how often?
22. Does every employee have to be trained by Global Production Center (GPC training center)?
23. Do you left free on your work? (Does your manager monitor your work?)
24. Does your department have an evaluation at the end of the year?
   a. If yes, how do you feel (Stress to make productive work)
   a. If yes, who is responsible for evaluating your performance? (Your direct boss or many managers?)

25. Does the result of evaluation affect your salary, bonus or other benefit?