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Knowledge Sharing between Multinational Corporation's Headquarters and Subsidiaries: the Impact of Manager's Role, Compensation System and Cultural Differences

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Abstract: Knowledge sharing is a systematic process for creating, acquiring, synthesizing, learning, sharing and using knowledge to achieve organizational goals. It is also a source of competitive advantage especially for multinational companies. The objective of this paper is to discuss the impact of subsidiary manager's role in knowledge sharing, manager's compensation system, and the level of cultural differences between home and host country on the level of knowledge sharing between the headquarters and subsidiaries of multinational companies. A study has been conducted at a subsidiary of a large manufacturing company in Malaysia. Data were collected via self-administered survey questionnaire. The respondents consist of 100 executives and managers of the company, and all the questionnaires distributed were filled and returned back for data analysis. Findings indicate that all three factors significantly influence the level of knowledge sharing with the manager's compensation system has the strongest impact. MNC therefore should clearly define the manager's role in knowledge sharing and provide attractive rewards and remunerations to encourage knowledge sharing. At the same time, cultural differences should not be considered as a barrier to knowledge sharing as this study indicates that it can be a driver for effective knowledge sharing between headquarters and subsidiaries.

Keywords: *Knowledge sharing, Multinational corporations, International business, Culture, Manufacturing*

1. Introduction

A multinational corporation's (MNCs) competitive advantage these days increasingly depends on the control over intangible resources rather than tangible resources (Hall, 1992). One of the firm's intangible resources is knowledge. The idea of knowledge sharing especially between the headquarters and subsidiaries of MNCs has gained momentum in recent years due to globalization of the economy and rapid growth in information technology (Huysman & Wulf, 2006; Jung-Chi, 2006), increase in knowledge based organisation (Aliei, Ashrafi & Aghayan, 2011) and increase in competitive pressure (Kazmi & Hasiri, 2002). Saturated domestic markets have led firms to seek growth opportunities in foreign markets, particularly in emerging economies with significant economic growth and market potential, such as in China, Brazil, Russia, Eastern Europe and East Asian countries. Furthermore, multinational corporations these days face head-to-head competition with global rivals in these high-potential foreign markets (Buckley & Casson, 1998). MNCs such as Exxon Mobil, BP, Royal Dutch Shell, and Chevron for example are all major players in the oil industry, and they compete intensely in multiple countries (Hansen & Nohria, 2004). These companies realised that their performance should not only depends on the increase in capital investments only, but they have to create some innovative ways to increase the profits especially through global learning. Therefore, sharing of new ideas between multiple subsidiaries in foreign markets and the headquarters may help MNCs develop a new strategy to compete in the global market.

Knowledge sharing is part of a social interaction culture that involves the exchange of employee knowledge, experiences, and skills throughout the whole department or organization (Lin, Lee & Wang, 2009). Knowledge sharing has played very important role inside MNCs since knowledge as an intangible asset differs from tangible assets in the sense that knowledge does not lose its value when 'consumed' or used. For instance, if the headquarters develop a new marketing strategy and shares it with the subsidiaries, the headquarters will still gain full value from its marketing strategy and the subsidiaries will also gain some additional value. Beside strategies, the type of knowledge shared between the headquarters and subsidiaries consists of organizational processes and information, systems, tools, practices, and the related know-how such as technology know-how or management know-how (Fong et al., 2011; Nien-Chi & Min-Shi, 2011; Ooi et al., 2012; Schloetzer, 2012). Knowledge sharing could be practically recognized with inbound and outbound flows which indicates knowledge moves or being transferred from headquarters to subsidiary or conversely, which is the knowledge going from subsidiary to headquarters.

Previous studies have identified many factors that influence the level of knowledge sharing between MNCs and their subsidiaries. Subsidiary manager's role in knowledge sharing compensation system, the level of cultural differences between MNC's home and host country are among the factors identified. How these three factors influence knowledge sharing activities between the subsidiaries of foreign manufacturing company in Malaysia and their headquarters did not gain much attention. Previous studies also did not look at the interaction between these three factors. Therefore, a study was conducted at one of the subsidiary of a large manufacturing company in Malaysia to answer these questions. The objective of this study is to identify the impact of the abovementioned factors on the level of knowledge sharing between headquarters and subsidiaries of MNCs. This study is expected to enhance the body of knowledge on the issues of knowledge sharing especially from the context of multinational firms and their subsidiaries in developing nations such as Malaysia. What the subsidiary manager's expect from the top management at the headquarters might be different among countries. The rationale of this study from practical perspective is that it could increase the awareness among MNC's top management on the necessity to properly define the subsidiary manager's role in knowledge sharing activities and the compensation that they will receive for any important knowledge shared.

Subsidiary and headquarters relationship: A Multinational corporation (MNC) is an enterprise that engages in foreign direct investment (FDI) and owns or controls value-adding activities in more than one country (Dunning, 1993). FDI normally involves long term participation by one company into another nation. MNC has its management headquarters in one country, known as the home country, and operates in several other countries, known as the host countries (Porter, 1990). It usually involves many approaches such as participation in management, joint-venture (JV), transfer of technology and, expertise in delivering products and services globally or in more than one country (Moosa, 2002). To become a market leader in the global market, headquarters has to develop greater understanding of global customers and competitors through its subsidiaries, in order to create new products or services that fulfil their customers' needs and expectations. Moreover, enhanced knowledge of customers in host countries enables the headquarters to design new products or services that satisfy customer needs and increased knowledge of competitors operating in global markets. In other words, it enables the headquarters to offer products that are differentiated from those of its competitors. In addition, increase in knowledge sharing is expected to provide the headquarters with more exposure to diverse knowledge associated with different host markets which leads to creative outcomes. They may also gain diverse knowledge on the customers and competitors.

A good relationship and communication between managers at the headquarters and managers at the subsidiaries contribute towards relational knowledge or information which can create the competitive advantage for the firm. Therefore, it is imperative for managers to understand the role of knowledge sharing between the headquarters and their subsidiaries in achieving competitive advantage (Lee et al., 2008). Managers at the subsidiaries are also considered as agents that deliver the message between the headquarters and the employees. The performance and productivity in subsidiary could affect the performance in headquarters directly (Andersson, Forsgren & Holm, 2002). At the same time, subsidiaries should not only function as a station that receives everything from the headquarters, but may also contribute many innovative and creative ideas that are expected to encourage MNC's performance enhancement. More communications and sharing of knowledge between the headquarters and subsidiaries will help minimize the gaps and differences in order to achieve the optimal MNC's performance.

Significantly, MNC could always come out with new ideas and products that meet the global customers' needs. Previous research indicated that managing knowledge properly leads to higher sales performance and profit (Collins & Smith, 2006; Goll, Johnson & Rasheed, 2007). From resource-based view, firms not only can create the competitive advantage through tangible resources but from intangible resources which is knowledge-based assets such as the business core competency, trust between managers and employees, managerial capabilities, organizational routines (the unique ways people work together), scientific capabilities, the capacity for innovation, brand name, and the firm's reputation (Volberda, Morgan, Reinmoeller, Hitt & Ireland, 2011). Thus, MNC's performance is significantly relying on its ability to create, manipulate, and share knowledge among employees in both the headquarters and subsidiaries. Knowledgeable employees considered as an essential assets for firms to increase the productivity. At the same time, from a strategic point of view, creating inimitable knowledge and the way to share it effectively within the corporation will be considered as an important strategy towards competitive advantage.

2. Hypothesis development and theoretical framework

Top management compensation system: In order to promote knowledge sharing, management of the company should encourage their workers to share their knowledge and get a reward for it. A proper compensation system should be in place to encourage knowledge sharing activities especially to the top management of the subsidiaries. Gagne (2009) studies the factors that influence knowledge sharing and compensation system is identified as one of the drivers that will influence attitudes, need satisfaction, and sharing norms. Top management compensation system refers to the incentive system in place for top management of a company when they achieve a certain level knowledge sharing or when they share useful information that help improves the company's performance. Compensating subsidiary general managers and other top subsidiary managers based on the performance of the MNC as a whole facilitates knowledge transfer (Fey & Furu, 2008). The main purpose to provide incentive system to the local subsidiary top management team is to motivate them in order to generate the optimal performance in MNCs. Headquarters will be responsible to come out with a compensation scheme or incentive system to motivate the subsidiary's management team as previous studies do confirm that the compensation or reward systems have influence on the level of knowledge sharing activities (Batrol & Srivastava, 2002; Lee & Ahn, 2007; Purwanti, Pasaribu & Lumbantobing, 2010). At the same time, the incentive system must be able to fulfil the satisfaction of employees with rewarding them based on their achievements accordingly. Overly generous compensation packages however may have created incentives for managers to manipulate company financial statements in order to drive up stock prices, contributing to the corporate scandals and the current financial crisis (Faulkender et al., 2010). With the expectation that compensation systems for top management is expected to motivate managers to actively participates and contribute towards knowledge sharing, this hypothesis is created for this study:

H1: There is a significant positive relationship between local subsidiary's top management compensation system and knowledge sharing.

Top management's role in knowledge sharing: Subsidiary managers are important to MNC because they provide the linkages between subsidiaries and the headquarters. Subsidiary managers are expected to not only act in the subsidiary's interest, but also in the interest of the MNC in general. Subsidiary managers however are always engage in complex managerial roles involving both the interests of the multinational corporation (MNC) and the subsidiary (Vora, Kostova & Roth, 2007). Clear identification of subsidiary manager's role is expected to improve inter-unit communication and cooperation (Bartlett & Ghoshal, 1998) which in turn will help improves MNC's efficiency, effectiveness and development aspects (Weerakkody & Ediriweera, 2009). Local subsidiary top manager's role practically related to firm's performance as headquarters-subsidiary relationship is considered as principal-agent relationship (Nohria & Ghoshal, 1994). It is the subsidiary manager's role to act as an agent who disseminates the knowledge, information, and assigned message from the principals (headquarters) with other units. Problem might occurs if the agents may not want to accept new knowledge from each other because of the "not-invented-here" syndrome. "Not-invented-here" syndrome refers to unwillingness to adopt or accept an ideas or product from different place (source) due to different background, practices, or working cultures. It is an internal resistance in a company against externally developed knowledge (Katz & Allen, 1982). Previous studies do recognise the role of managers in knowledge sharing. Subsidiaries top management should be given a clear role in promoting knowledge creation and transfer in a learning organization as a clear role which involves problem solving, critical thinking and innovation are important for knowledge creation and transfer (Alipour, Idris & Karimi, 2011). A proper structure, in which managers can share their information and experience, improve and synthesize their knowledge, and also evaluate their ideas, should be created. Based on the above discussions, it is stressed that subsidiary's top management's role in knowledge sharing must be emphasised in order to ensure that they are always in the position to transfer the knowledge, information or procedures from the subsidiary to the headquarters or vice versa. Thus, the second hypothesis of this study is:

H2: There is a significant relationship between local subsidiary top manager's role and knowledge sharing.

National cultural differences and knowledge sharing: Since multinational corporations have foreign subsidiaries scattered around the globe, they must respond to opposing demands for national responsiveness and global integration (Bartlett & Ghoshal, 2002). One of the factors that should be considered when making these strategic decisions is cultural differences. The subsidiary's management might have different cultural background that made up the subsidiary's workplace culture. These differences in national culture can pose huge challenges and barriers to effective knowledge sharing activities (Minbaeva, 2007). The top management team in local subsidiary usually implements some specific organizational cultures that are different from the cultural values at the headquarters, to suit the local needs and to get closer with the employees. Majority of studies concentrate on the relationship between organisational culture and knowledge sharing, with most of them posit a positive relationship between the two (Al-Alawi, Al-Marzooqi & Mohamed, 2007; Jewels & Berger, 2005; De Long & Fahey, 2000). National cultural differences and its impact on knowledge sharing did not receive much attention as majority of previous studies concentrate more in organizational culture. Most MNCs embed their headquarters organizational culture into the subsidiaries to ensure efficiency and effectiveness in operations. It also facilitates knowledge sharing activities as identified by previous studies. The national culture of home and host country might be different and it is impossible for the headquarters to ask both the employees and managers at the subsidiaries to follow the home country's national culture. These national cultural differences or also known as cultural distance between subsidiary and headquarters might be bringing the inequality in producing the desired outcomes. The need for cultural control is often perceived to be greater in the subsidiaries where the national cultural distance is great. Greater cultural differences will result in greater information asymmetry between the headquarters and the subsidiary, reducing knowledge of the given subsidiary's environment, actions and performance (Gong, 2003). Thus, this study assumes that cultural differences will create a barrier in communication between subsidiaries and the headquarters resulting in lack of knowledge sharing between both entities. Therefore, it is hypothesised that cultural differences will have a negative effect on knowledge sharing and this hypothesis was developed:

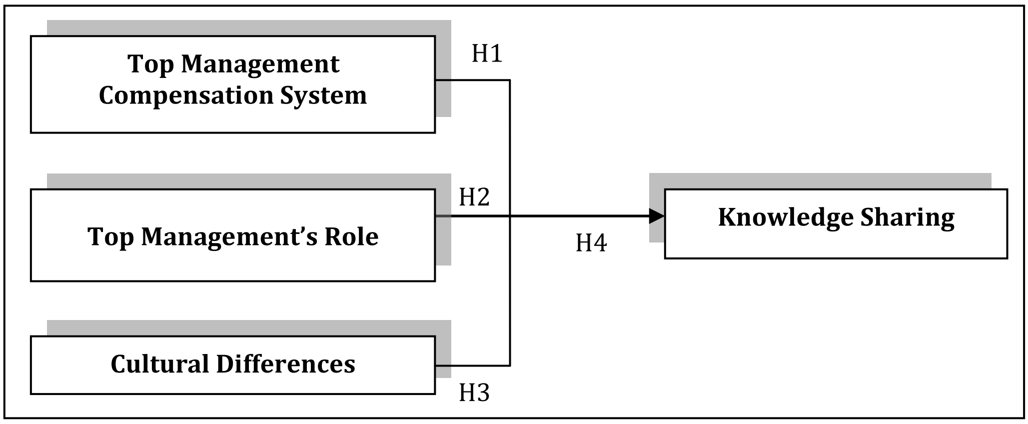
H3: There is significant negative relationship between cultural difference and knowledge sharing.

The final hypothesis is to look at the impact of all the three factors on the knowledge sharing activities among MNC's subsidiary and the headquarters.

H4: There is a significant relationship between local subsidiary's top management compensation system, top management's role and cultural differences with knowledge sharing.

Based on the objective of the study and the literature reviews, the proposed theoretical framework of this study is shown in Figure 1:

Figure 1: Theoretical framework of the study



3. Methodology

This study was conducted at a subsidiary of large MNC operating in the state of Penang, Malaysia. The company is a major producer of computers and the headquarters is located in the United States of America. The company's name was not highlighted in this paper as the management of the company has requested that the company's name should not be disclosed. The relationship between independent and dependent variables in this study were measured using survey questionnaire with 5 point Likert Scales of strongly disagree to strongly agree. The questionnaire was developed based on the scale used in previous related studies. To ensure the reliability of the questionnaire, a pilot study was conducted among 30 randomly chosen employees at the company and the Cronbach Alpha coefficient for each variables are as shown in table 1. All variables have a Cronbach Alpha value of more than 0.7, which is the minimum value required to confirm the reliability of the survey questionnaire (Cavana, Delahaye & Sekaran, 2001). The population of this study consists of all executives and managers working at the company. Only executives and managers were chosen because they are the one who usually communicate with the headquarters and involve in knowledge sharing activities. In total, there are 333 executives and managerial level employees working at the subsidiary and based on the sampling numbers as suggested by Krejcie and Morgan (1970), the number of samples needed are about 181. However, only 100 questionnaires were distributed based on a random sampling basis as the time allowed by the management of the company for data collection is limited and too short. Furthermore, not all executives and managers are working at the same time as they will only be working during the next shift. All 100 questionnaires distributed were filled and returned back for data analysis. Upon early screening, all 100 questionnaires are usable and therefore, the questionnaire return rate is 100%.

Table 1: Cronbach Alpha value of each variable

Variables	Cronbach's Alpha
Knowledge Sharing	.818
Top management's incentive	.801
Top manager's role	.913
Cultural differences	.836

4. Findings

The demographic profiles of the respondents are shown in Table 2. In terms of gender, there are more male respondent with 58 people (58%) compared to female 42 (42%). Majority of them are in the age of 26 to 30 years old with 62 people (62%), followed by 20 to 25 years of age with 24 people (24%). 78% of the respondents or 78 people are from the sales and marketing department, while 14 from management and 4 each is in finance and technical support department. For education level, majority respondents hold a bachelor degree (76) while both with the diploma and masters degree consist of 12 people (12% each).

Table 2: Demographic profile of the respondents

		Frequency	Percent
Gender	Male	58	58.0
	Female	42	42.0
Age	20 -25	24	24.0
	26 -30	62	62.0
	31-35	8	8.0
	More than 35	6	6.0
Department	Sales & Marketing	78	78.0
	Management	14	14.0
	Finance	4	4.0
	Technical Support	4	4.0
Education	Diploma or below	12	12.0
	Degree	76	76.0
	Master	12	12.0

Table 3 summarises the Pearson's Correlation coefficient between the three independent variables and knowledge sharing. According to the Pearson's correlation Coefficients, top management compensation system and top management's role have a significant ($p < 0.01$) and positive relationship ($r = .845$ and $r = .468$) with knowledge sharing. Both results are as hypothesised and therefore, hypothesis 1 and 2 are accepted. Cultural differences meanwhile shows a significant correlation ($p < 0.01$) but the direction of the relationship is positive and not negative as hypothesised ($r = .772$). Hypothesis 3 is therefore rejected.

Table 3: Pearson's Correlation Result

	Compensation	Role	Culture
Knowledge Sharing	.845**	.468**	.772**

Note: Correlation is significant at 0.01 levels

The last hypothesis that looks at multiple correlations between the variables was tested using multiple regression analysis. The results of the multiple regressions analysis are shown in table 4 and 5. The analysis shows that the adjusted R square value for this model is 0.733 and is significant ($p < 0.05$). It means that the model accounts for 73.3 % of the variance in knowledge sharing. Top management's compensation appears to have the highest influence on knowledge sharing (Beta = 0.648, $t = 7.150$, $p < 0.005$), followed by culture differences (Beta = 0.273, $t = 3.149$, $p < 0.005$). On the other hand, top manager's role was not identified as a significant predictor in this multiple regression model. Based on the multiple regression findings, hypothesis 4 is rejected as not all three factors studied significantly influence the level of knowledge sharing when considered together.

Table 4: Model summary and ANNOVA

R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**F**	**Sig.**
.861[a]	.741	.733	.17202	91.737	.000

Table 5: Multiple Regression Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.669	.371		1.804	.074
	compensation	.554	.077	.648	7.150	.000
	role	-.043	.078	-.035	-.558	.578
	culture	.355	.113	.273	3.149	.002

5. Discussion and Conclusion

According to the Pearson's Correlation analysis, it was found that local subsidiary top management compensation system has a very important influence on MNC's knowledge sharing level because it motivates the management of the subsidiary to put more efforts in organizing, transferring, and sharing the knowledge or information with the headquarter or other subsidiaries. Based on the data analysis, top management's incentive system has a very strong correlation (0.845) towards knowledge sharing. It clearly indicates that MNCs should have a special incentive in place for managers that share important knowledge, information or business strategy as it can help firms improve its global competitiveness. Consequently, MNC's performance will be increased due to the effectiveness and efficiency in manipulating new knowledge which is an intangible resource for MNCs. This finding is similar with other studies (Fey & Furu, 2008; Purwanti et al., 2010) that also identify the same positive relationship between compensation and knowledge sharing. In terms of cultural differences, this study found out that, cultural differences also have a strong positive relationship with knowledge sharing. Although the hypothesis is rejected, the fact that national culture also is expected to encourage knowledge sharing as identified in this study worth a closer look. Gong (2003) previously said that greater cultural differences will result in greater information asymmetry between the headquarters and the subsidiary, hence reducing knowledge sharing. The finding of this study however shows that culture differences might encourage more knowledge sharing among the headquarters and subsidiaries in Malaysia. One possible explanation for this result is that the bigger the gap between both cultures, the higher is the need to communicate and share information between both parties in order to close the gap. Therefore, more knowledge sharing between the headquarters and subsidiaries will happen when they communicate with one another.

Base on this outcome, national culture seems to have a similar effect with organisational culture, which previous research on the effect of organisational culture and knowledge sharing has produced the same positive findings (Al-Adaileh, 2011; Syed, Zaini, Noormala & Zahariah, 2009). There is also positive but moderate level of relationship between local subsidiary's top management role and knowledge sharing. Local subsidiary top manager's role is essential in MNC as they are the one responsible in coordinating the matters between headquarters and subsidiaries. In this context, headquarters should define a local subsidiary top manager with a very obvious and clear role which includes transferring and sharing all the information or new knowledge gained with the headquarters and other subsidiaries. Therefore, local subsidiary top manager needs to be persuaded to be functioning as a middle-man that coordinate or align the communication between the headquarters and subsidiaries in order to facilitate the transfer of knowledge between them. The multiple regression analysis shows that local subsidiary's top management compensation, and the differences in culture significantly and jointly explain the variance in the level of knowledge sharing between MNC's headquarters and subsidiaries. Top management's role however is not a major contributor towards knowledge sharing as compared to compensation system and cultural differences. Even the correlation analysis result before indicates a moderate relationship between top management's role and knowledge sharing.

As a conclusion, this study has shown that all three factors namely top management compensation system, cultural differences and top management's role in knowledge sharing do influence the level of knowledge sharing between subsidiaries and the headquarters. Top management compensation and cultural differences are identified as having the strongest correlation with knowledge sharing. The findings indicate that it is important for MNCs to provide an attractive reward such as promotion, bonus and higher salary for subsidiary managers that share crucial information or business knowledge that can help improve the firm's performance and competitiveness. At the same time, cultural differences should not be considered as a barrier to knowledge sharing as this study has shown that it can be a driver for effective knowledge sharing between the headquarters and subsidiaries. Findings of this study hopefully will help MNC managers in determining the best strategy to encourage the sharing of knowledge between parent company and the subsidiaries. At the same time, it enriches the literature on knowledge sharing by looking at the influencing factors from the perspective of subsidiary of foreign multinational companies in Malaysia. This study has some limitations that future study may address. First, the questionnaires were distributed at one MNC only and the respondent consists of both the executive and managers at the company. Future study may consider involving more companies as it can further validate the findings if the study involves firms from various manufacturing industry, size and country of origin. Furthermore, targeting top management of the company that have experience in knowledge sharing will enhance the research finding. Second, this study was conducted at a subsidiary of a US based MNC. The effect of compensation, manager's role and culture might be different if the study is conducted in MNC from other countries. Therefore, further research that involves MNCs from other countries such as Japan, Germany or UK would be useful. Finally, the scope of this study covers only three factors, namely top management compensation, top management role and cultural differences. There are many other factors that influence knowledge sharing that may either directly or indirectly influence the level of knowledge sharing and they are not highlighted in this study. It includes factors such as MNC's country of origin, type of product, labour relations, technology, demographic, organisational culture etc. Further research should be conducted to identify the effects of these factors on knowledge sharing activities between the MNC's headquarters and subsidiaries.

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