

# TRANSFORMATIONAL LEADERSHIP AND DEVELOPMENT OF INTELLECTUAL CAPITAL MANAGEMENT STAGES TOWARDS HOSPITAL PERFORMANCE

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## ABSTRACT

*Malaysia healthcare industry is facing challenges from a rapidly changing operating environment, including spiralling operating costs and expectations on the quality of healthcare. The government is determined to position Malaysia as a hub for healthcare services for the region. High performance in hospitals is achieved through professionals' competencies in application of knowledge, technologies and other intangible resources which is also known as Intellectual Capital (IC). A shortage of skilled workforce is always a real challenge for hospital; a high demand for a skilled worker especially in healthcare sector will give a significant impact toward the IC of an organisation. Thus it affects the performance of a hospital in providing a top notch service if the hospital keeps on losing its skilled workers. By acknowledging this reality; the management of the hospital needs to formulate a sound strategic planning of IC which should be executed by a clear, determine, focus and capable leader. Thus, the role and sustainability of both public and private hospitals within this environment, to a large extent depend on the characteristics of the leaders who can manage their IC wisely. It seems that the awareness of the importance of IC has been created in this industry, but how far have these IC elements been measured and managed systematically? Very little empirical research has been done to evaluate the linkages between leadership styles and the management of Intellectual Capital in healthcare industry especially hospital. Therefore, the objective of this paper is to discuss on how transformational leadership styles affect the development of Intellectual Capital Management (ICM) stages that would in turn affect the performance of private and public hospitals. The aim of this paper is to propose a theoretical model that explains the above issues. In addition, more rigorous research methods are needed in order to test and validate the Upper Echelon Theory which is newly introduced for this IC field.*

**Keywords:** transformational leadership styles; intellectual capital management stages; hospital performance.

## 1.0 INTRODUCTION

The Malaysian healthcare industry is set to be transformed from a social service to a private sector-driven engine for economic growth under the Economic Transformation Plan (ETP) in order to meet the demands of the new middle and high income generations as well as tourists (Choe, 2010). The government is determined to position Malaysia as a hub for healthcare services for the region. Recently, Ministry of Health (MOH) has highlighted multiple issues that threatened the performance and sustainability of Malaysia's health system against the background of rising health expenditures such as healthcare delivery, quality and standards of care, rising cost of care due to inefficiency and wasted resources. With new technologies, capitalisation of expensive hospital facilities and specialisation have increased the cost of medical services (Thomas & Nordin, 2011). Those matters need to be resolved to avoid bad performances to the hospitals. Hospitals performance that is below par or standard would give a negative impact to our economy and the world perception to our Malaysian healthcare industry.

Who are responsible to face all those challenges? Definitely the main task to handle all those challenges depends on their leaders. Leadership is an individual's capability to foresee, visualise, flexible and to think tactically to improve organisation services and product (Anderson, & Kennedy, 2002). How are leaders in hospitals able to formulate a good strategy in order to enhance performance? A sound and good strategic planning together with positive attributions of the leader towards IC elements should enhance the organisation performance. Hospitals need to be enlightened in terms of its IC management (ICM). This is due to the fact that hospitals are highly dependent on people's knowledge, skills, procedures, professional experiences, technology innovativeness and services provided to the stakeholders. The above issues are the elements related with IC elements. All of these elements are part of IC which are now categorised into Human Capital (HC), Relational Capital (RC) and Structural Capital (SC). The term IC is used to cover all of the non-tangible assets and resources of an organisation, including its processes, innovation capacity, patents and the tacit knowledge of its members and their network of collaborators and contacts (Ramirez, Angel, & Agustin, 2014).

Moreover, IC is the term given to the combined intangible assets which enables hospitals to function. Human-centred assets are the qualities which make up people. ICM focuses on building and governing intellectual assets from strategic and enterprise governance perspectives with some focus on tactics. Its function is to take overall care of the enterprise's IC (Wiig, 1997). Humans such as physicians, nurses and others are expensive to hire, train and sustain. Leaders should encourage and motivate their team members including the organisation personnel to embrace and believe that managing important elements of IC can give a positive impact towards hospital performances and success. The performances of an organisation often has a direct relationship with the ability and competency of its leader. It is believed that if the leaders are able to manage IC properly, hospital performance should be at the top or amongst the first tier organisation. Definitely, it is important to manage all those intangible assets in a proper manner specifically to improve accessibility, accountability and quality of services.

There are several empirical studies which discovered a positive relationship between IC and performances. These studies have shown tremendous growth all over many countries and focusing in many industries such as manufacturing, banking, construction and information technology (Firer, & Williams, 2003; Riahi-Belkoui, 2003; Shiu, 2006; Zhang, Zhu, & Kong,

2006; Tan, Plowman, & Hancock., 2008; Kamukama, Ahiauzu, & Ntayi, 2010; Maditinos, Chatzoudes, Tsairidis, & Theriou, 2011; Basuki, & Kusumawardhani, 2012). However, research of ICM in the healthcare industry is found to be dearth and inconclusive. As mentioned by Peng, and Roos (2007), there is a need to further investigate IC and healthcare performances as they expected their study to be a starting point for this research.

Further exploring ICM in healthcare industry, this study tries to measure the level of ICM according to its stage. Dumay (2013) has categorised IC research evolution into four main elements of each stages which are awareness, measurement framework development, application and evaluation of the framework and lastly networking or eco-system. These stages are mainly referring to IC research revolution all over the world. Based on this concept; this study adopts elements of these four stages into ICM stages inside the hospitals. How hospitals revolutionise or manage IC into these stages is also of concern. Leaders are accountable to identify all those stages for hospitals. This study is very important as it examines ICM stages specifically in a context of hospitals. It acts as a starting point for leaders to know which stage of their IC management level they are in now. It is interesting to know whether IC is being emphasized and whether the responsibility in managing IC are clearly stated in hospitals' structure, chart or if there is a specific unit established for it. If hospitals already have their own ICM, it is important to determine which elements of IC (HC, RC and SC) are already set for those stages. It has the potential to create a benchmark for the hospital. It is expected that if ICM stages for hospital are now in the final stage, the outcome should indicate that these hospitals are showing high performance. But for those hospitals which are still in early stages, they should understand the nature of its ICM and a policy is required for growing and maintaining it. Management team needs to ensure that IC resources are in place as and when they are needed and every member of the organisation understands this process and the part he or she plays in its success.

## **2. SCOPE OF STUDY**

The purpose of this study is to ascertain the link between transformational leadership styles and ICM stages and hospitals' performance. Although the scope of ICM is considered wide as it encompasses many processes, this study will only concentrate on the determination of ICM stages development alone. Even so, this approach is taken because it consists of several activities that require in-depth treatment. Thus, emphasizing on a particular ICM stages development would help to generate better understanding on an important area and serve to the development of the entire ICM process.

Apart from that, this particular study will only take into account the relationship between transformational Leadership Style and ICM stages. Furthermore, the research will only look from the perspective of multifactor leadership adopted from Bass, and Avolio (1995). As for types of ownership factor; the study will look into detail of attributes between private and public hospitals in Malaysia.

## **3. LITERATURE REVIEW**

### ***3.1 Underlying Theories***

In any field of study, theories provide clarification of how things work, guide the research and inform practice in line with the relevancy of current needs of construction research. This study

is grounded into two widely applied theoretical frameworks which are the Upper-Echelons Theory (UET) and Resource Based Value (RBV). These theories help in explaining the relationships between the constructs that were used in this current study which are seen to be more relevant and adequate.

UET has been an extremely active stream of research over two-decades and as a counterbalance to the population ecology perspective which has provided evidence to support the position that manages influence outcomes. UET states that organizational outcomes, strategic choices and performance levels are partially predicted by managerial background characteristics (Hambrick, & Mason, 1984). Evidence indicates that the quality of the top management team is crucial to the organisation's position in the market (Hambrick, & Mason, 1984) as demonstrated in the findings of Carmeli (2006) that the managerial skills possessed by the top management team strongly affect firm performance, firm size and age and perceived environmental uncertainty. In particular, skills that are required to manage people (human resource skills) are found to be more important to firm performance than intellectual abilities. However, the strategic role of organization top management team such as leadership style which affects the firm's performance has also inspired researchers for this theory to be applied into this study.

Prior study acknowledges that there is support for the basic premise of UET, that organisations (strategies and performance) are a reflection of their top managers' idiosyncrasies and biases. Therefore, by acknowledging the instrument approach of UET by Hambrick, and Mason (1984); the theory opens the space for opportunities to explore the model in different ways especially for this study not only being concerned with managers' characteristics as independent variables but also the development of ICM as firms strategic planning is considered.

In order to support the main theory of the study, another theory that best suit for this study is Resource Based Value Theory (RBV). It is an efficiency based explanation of performance differences and a firm-level analytical tool (Peteraf, & Barney, 2003). In addition, Barney (1991) asserts that to be a potential source of sustained competitive advantage, a resource must have five attributes: valuable that improves firm efficiency and/or effectiveness, rare that can exploit it to the disadvantage of its competitors, imperfectly mobile, difficult to be imitated to prevent competitors from being able to easily copy the resource and not substitutable. Due to this fact, it is critical to understand the concept of resources which lead to the generation of competitive advantage of the firm. RBV theorist (Barney, 1991; Peteraf, 1993) explained that assets and resources owned by companies may explain the differences in performance. Resources may be tangible or intangible and are harnessed into strengths and weaknesses by companies and in doing so lead to competitive advantage.

Looking at RBV theory from hospital's perspective, it shows that intangible resources are particularly relevant to provide high quality services. Among the most important intangible resources in hospitals are structural knowledge, social competence, staff motivation and patient satisfaction (Zigan, Macfarlane, & Desombre, 2007). It is claimed that high performance in hospitals is achieved through professional competencies in application of knowledge, available technologies and resources. These resources need to be used efficiently with the objective to minimize risks to patients and to increase their satisfaction. An in-depth investigation on how it is developed and managed is required by observing the ICM stages. By knowing as much as possible about resources within the organisation, managers will be able to know which activities

to initiate and what strategic decisions to make in order to improve organizational performance. The organisation's resources will be less utilized if the value of intangibles is not well understood (Peng, & Roos, 2007). Therefore, applying UET and RBV theories will give a comprehensive view on how top management team fully utilise managing their intangible assets as a strategy to enhance organisation's performance. Ultimately determination of ICM stages is needed and beneficial to them.

### 3.2 Defining ICM and Its Stages

IC and knowledge are the most important assets of most enterprises and managers are starting to realize it. In service industry, knowledge is considered one of the most important intangible resources (Emidia, & Chiara, 2015). Khaliq (2015) added that human knowledge and skills have economic value to the organisation and very usable. Specifically, for ICM, it focuses on building and governing intellectual assets from strategic and enterprise governance perspectives with some focus on tactics (Wiig, 1997). Its function is to take overall care of the enterprise's IC. However, Knowledge Management (KM) has tactical and operational perspectives. KM is more detailed and focuses on facilitating and managing knowledge-related activities such as creation, capture, transformation and use. Its function is to plan, implement, operate and monitor all the knowledge related activities and programs required for effective ICM.

In this study the main focus is developing ICM stages in hospitals. ICM focuses on renewing and maximizing the value of the enterprise's intellectual assets. All organisations that pursue ICM emphasize that IC defines the future capabilities of the enterprise. They also indicate that its value (real and potential) typically is greater than that of the financial capital. Nevertheless, the management emphasis and attention given it is usually far less. Organisations perform well and create value when they implement strategies that respond to market opportunities by exploiting their internal resources and capabilities. Therefore, organisations need to understand what resources they possess and how to configure them to deliver value. The increased strategic importance of intellectual capital needs relevant developments in strategic thoughts. Therefore, the outlined framework of the study intends to relate the current practices of healthcare organisations in strategically managing their intellectual capital towards its performance. In the millennium, achieving competitive advantage is obviously an essential and primary goal set by firms, but strategy formulation causes variation among firms on attaining this goal. Researchers have pointed out that organizational strategic factors such as organizational culture, information technology, human capital and leadership are the prerequisites for achieving and sustaining the advantage (Barney, 1991). It should be noted that these factors strongly facilitate firms on creating intellectual capital.

One of the most important strategies is to determine the organizational capabilities in managing their IC. Recently, Dumay (2013) stated that IC research has evolved over the past two decades which involved 4 stages as per table 1.

Table 1: Stages on IC Evolution

Stage	Evolutionary of IC research
One	raising awareness of the importance of IC
Two	creation of IC guideline to make it visible: measuring, managing and reporting IC



Three	implementation stage to build strong organization, analysis of IC, practices in action, devoted to the managerial implications
Four	building strong economic, social and environmental eco-systems

Source: The third stage of IC: Towards a new IC future and beyond (Dumay, 2013)

According to the above stages, IC research among researcher and practitioner has embarked tremendously. From the bigger perspective, this study tries to adapt the process of these stages into a specific organisation namely hospital. The study is interested in exploring the organizational capabilities of managing IC and the level of their stage. ICM stage can be determined by adopting stages of organizational Knowledge Management (KM). This is a process approach which goes beyond the company functions because it works transversally within the firm. Such mechanism can only work with knowledge of the central role that intangible resources play within the industry. In line with the four stages mentioned by Dumay (2013), another researcher, Lee, and Kim (2001) has also already developed four stages (such as initiation, propagation, integration and networking) to organize KM within an organization.

Lee, and Kim (2001) proposed four stages of organization of knowledge management as shown below. The first stage is an initiation stage in which organisations start to recognize the importance of organizational KM. Organisations should clearly specify shared visions and goals of KM and disseminate them over the whole organisation through diverse communication channel. Second stage is the propagation stage where organisations start to invest in building their knowledge infrastructure to facilitate and motivate knowledge activities such as creating/acquiring, sharing, storing and utilizing. Third stage is the integration stage where organizational knowledge activities are institutionalized as daily activities over the whole organisation. Finally, fourth stage which is networking means they share the KM system with other networking system such as suppliers and others.

Table 2: KM stages and object characteristics

	Initiation	Propagation	Integration	Networking
Organisational knowledge	Acquired knowledge	Created knowledge	Integrated knowledge	Networked knowledge
Knowledge worker	Knowledge absorber	Knowledge creator	Expert Internal sharing	Knowledge coordinator
KM process	Acquisition	Creation	Enterprise	Global sharing
IT system	Closed	Isolated		Global

Source: Lee, and Kim (2001)

Systematic KM methods are now recognized as important approaches to improve enterprise performance either through knowledgeable people delivering work more effectively or through other ways of leveraging IC (Lee, & Kim, 2001; Wiig, 1997). KM in part deals with human understanding and mental models and how these are used in work. Meanwhile IC is broad consists of human capital, structural capital and relational capital. These are considered overlapping in the scope of ICM and KM. However, there is a difference between these two items. KM is more detailed and involve plan, implement, operate and monitor all the knowledge related activities and programs required meanwhile ICM focuses on renewing and maximising the value of the enterprise's intellectual assets. Scandia has developed powerful model which defined ICM as a process of managing human capital, structural capital, customer capital,

organisational capital, process capital, innovation capital, intellectual property and intangible assets.

Recently, there have been studies on the relevance of intangibles as the driving force of outstanding performance in health care organizations, mainly hospitals. However, empirical studies are still few in number and more knowledge is required about the role and value of intangible resources in the health care sector. Many researchers also discussed the importance of strategy implementation, the emerging of metrics and framework around it and the role of knowledge management and IC in managing the organizational strategies. Therefore, this study focuses on the development of ICM stages as a main contribution to the accounting knowledge as well as further analyse it as a mediating factor between leadership style and hospital performance. It tries to adopt KM stages as part of managerial actions of each ICM stages to improve the hospital performance.

#### 4. PROPOSED THEORETICAL FRAMEWORK

After doing the comprehensive literature review, the research gap was found and in order to answer the research questions of this paper, we proposed a theoretical model.

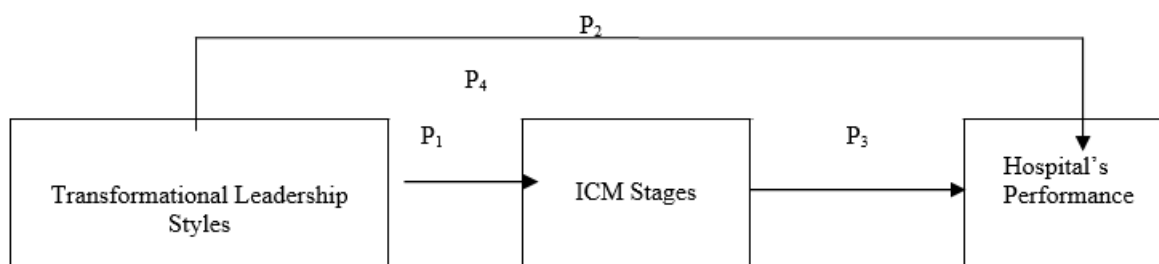


Figure 1: Theoretical Framework

The framework of this research as shown in figure 1 reflects the theoretical view of this study which is developed based on the research framework of Hambrick, and Mason (1984) based on Upper Echelon Theory. This theory consists of three variables top management team as independent variable, strategy as mediating variables and organizational performance as dependent variable. This theory states that organizational outcomes, strategic choices and performance levels are partially predicted by managerial background characteristics. This research expands the independent variables into transformational leadership styles which are predicted to influence organizational performance and mediated by ICM stages as one of the strategies. Thus, the framework of this research consists of three key variables as stated above specifically present in healthcare industry. These variables were explored to identify any relationship among them. Ultimately, the conceptual framework focused on presenting the findings of this exploratory study with emphasis on any impact of the relationships among these variables may have had on organisations and stakeholders.

In order to effectively explore the relationship between transformational leadership styles, intellectual capital development stages and the impact of these variables on organizational performance, it is necessary to review the authoritative writings and research related to the constructs. The following are the development of those propositions.

#### ***4.1 Relationship between Transformational Leadership Styles and ICM Stages***

The transformational leadership style depends on high levels of communication from management to meet goals. Leaders motivate employees and enhance productivity and efficiency through communication and high visibility. This style of leadership requires the involvement of management to meet goals. Leaders express the future prospect of the organization and they express a perspective in order to make new ideas and facilities for the future in times of crisis and alternation and create new strategic dimensions (Berson, & Avolio, 2004). In addition to that, transformational leaders can make decisions about determining the business strategies, designing processes, increasing innovation and creativity, understanding social networks by assessment and evaluation of IC and knowledge management functions of an organisation (Sarлак, Moradgholi, & Ghorbani, 2012). However, Krishnan (2005) argues that transformational leadership style enhances the organisation employees towards achieving more rather than just what they had planned. There are many dimensions of transformational leadership styles from the literatures. However, Ficke, Nikolas, and Lenny (2015) found that the most important dimensions of transformational leadership in SME business leaders in Indonesia consist of two dimensions; individual consideration and inspirations.

Based on the upper echelon characteristics as mentioned above towards transformational leaders, they have an appropriate managerial thinking that affect the management of IC. They create the flexibility of strategy especially developing HC to become an appropriate set of skills in order to answer a dynamic environment. Therefore, in the context of hospitals top management team who have appropriate style of transformational leadership, it is expected that they can increase the merits of staff, skills and education, encourage staff to think about their own actions, encourage workers to work in group and improve the performance of staff.

Thus, the following proposition is formulated to test whether Transformational LS is positively related to ICM stages.

P<sub>1</sub>: Transformational Leadership Styles have positive effect on ICM stages.

#### ***4.2 Relationship between Transformational Leadership Styles and Hospitals Performance***

A good leadership is essential to attain organizational excellent and good performance in order to manage those empowered employees (Kumari, Usmani, & Hussain, 2014). Similar argument is made by Huang (2007) that stated LS are the biggest environmental factor that influences organizational performances, morale and satisfaction irrespective types of industries and sizes. Excellent organisations can only be met and fulfilled through good leadership styles as it is essentially the core and spirit of successful organisations.

In the context of hospitals, there are few studies regarding relationship between LS and HP. Robert (2005) found that the Chief Executive Officer transformational LS and behaviours are significantly related with hospital's performance. Similarly, organizational leader has a powerful and determining role in establishing the culture of an organisation. Leader's ability to communicate a compelling vision, state expectations, articulate and model values and well interaction with stakeholders are strategy to enhance hospitals performance. Therefore, they found strong evidence that an individual's degree of input and ownership regarding decisions that affect his or her work appeared to be directly related to performance outcomes.



Hospitals act in an environment which is characterized not only by limited financial resources but also by being actively involved in educating health care consumers. Hospitals also need to employ and coordinate specialized knowledge, skills and abilities embedded in their employees to deliver quality care to patients (Wiig, 1997). Therefore, Zigan, Macfarlane, & Desombre (2007) explores the views of health care managers on the importance and impact of IC on hospital's performance. The study has been done in five different hospitals from both private and public sectors. They found that hospital's manager realized the importance of intangible resources or IC and it was positively related to hospital's performance.

The following proposition is formulated to test whether TLS is positively related to HP.

P<sub>2</sub>: Transformational Leadership Styles have positive effect on Hospital's Performance

### ***4.3 Relationship between ICM Stages Development and Hospitals Performance***

According to Salina, and Yusoff (2011) IC can enhance organisational Performance (OP) by lowering costs, increasing customer benefits and producing new products and services and that has a direct and indirect impact on OP. The growing interest in the study of relationship between intellectual capital and its relationship with the firms' performance demonstrates that intellectual capital is positively and significantly associated with firms' performance.

IC has its basis in practice, being noted in ideas about understanding the nature and value of non-financial assets in organisations in order to achieve better management of things that generate value (Petty, & Guthrie, 2000) and realize competitive advantage (Brennan, & Connell, 2000). Research on IC and OP has been conducted more on business and commercial sector. Little research has been conducted on IC and hospital performance (HP). A study by Habersam and Piber (2003), started analysing the degree of IC awareness in hospital focusing on the notion and practice of IC in hospitals that need to be revealed in two medium sized hospitals in Italy and Austria. They also analysed the role metrics play in the hospitals. Based on the interview conducted on the administration staff such as administrator, management accountant, quality manager, head of doctors, head of nurses and head of IT services, they found that there is awareness for IC in hospital although technical terms are not commonly familiar to them. The findings are different between these two countries which have different culture approach. Moreover, there has been no investigation on the relationship between the IC development Stages and hospital performance.

A study by Yang, and Lin (2009) found that the three components of intellectual capital namely human capital, relational capital and organizational capital mediate the relationship between Human Resource Management practices and organizational performance. Data from 277 hospitals with a response rate of 56 % confirm the mediation role of intellectual capital in explaining the effect of HRM practices on organizational performance. Furthermore, a study by Gholamhossein, Rajabzadeh, Sadeh, and Rasekh (2012) investigates the relationship between IC components and performance in some Iranian pharmaceuticals firms. They found that there are some correlations between IC components and firm's performance. In addition, a study by Liu and Lin (2007) asserted that in order to remain competitive in the healthcare market, hospitals need to develop customer capital. Their study aimed to provide taxonomy for cultivating market-based organisational learning, leading to accumulation of customer capital and ultimately improved financial performance in the hospital setting. A study by Zigan, Macfarlane, and Desombre (2007) explores the role of intangible resources such as IC in

promoting the performance of services in hospitals. They found that poor Human Resource system and no systematic approach defining and measuring human capital in hospital resulted on dissatisfaction feel from their employees. The respondents commented that they have not enough indicators area to gain meaningful comparators. Another issue arising is the cultural issue which has been identified as one of the factors influencing the performance and leadership style which is very important in managing IC.

This study further investigates the relationship between specific ICM stages and HP. This is because ICM stages would have an impact on hospital performance. This study expects that the more advanced of ICM stages in hospitals it would lead to a better HP. It identifies which stages of ICM that contribute most towards hospital performance. As hospitals are highly dependent on servicing resources and knowledge intensive organisations, determination of ICM stages is important to give direction for the management department on a long term planning. Without knowing which stage of IC development is in our hospitals, we might be left far behind than the developed countries.

Thus the following proposition is formulated to test whether IC development stages is positively related to Hospital Performance or not.

P<sub>3</sub>: ICM Stages have positive effect on Hospital Performance

#### ***4.4 The mediating Effect of ICM Stages Development***

This study tries to adapt this relationship by adding ICM stages as mediating factor that affect performance. ICM stages development can become as mediating factor between transformational leadership styles towards hospital performance. By applying UET and RBV, this mediating factor acts as a strategy that is supposed to be adopted by a manager towards attaining performance. The direct relationship between TLS and firm performance were expected to be significantly positive. Good leadership style will lead to high hospital performance. With reference to Baron and Kenny (1986), a mediator is viewed as a variable that accounts for a significant portion of the relationship between a predictor variable and criterion variable. In this context, ICM development stages were hypothesized as mediating the impact of LS (predictor) on hospital performance (criterion). This present study argues that ICM stages development serve as a specific alternative strategy for implementation of ICM part within the organisation. It is supported by a study done by Hamzah and Ismail (2007) who investigate whether organisations' IC development (Human capital, organizational capital and relational capital) reflects to the distinct requirements of its strategy. A case study approach was employed by 8 organisations of various industries. They found that the development and management of organisation's IC is contingent upon the strategy employed by the organization. Thus, it was approved that there is a link between ICM and organisation's competitive strategy.

The above discussion draws our attention to the need of looking into depth the extent of each activity in hospitals. In this study, the requirement to identify the level of mediation effect of each dimension in ICM stages development is seen to be critical as it is consistent with the theory of RBV whereby a firm could only achieve its competitive advantage through its resources that carry certain characteristics (for instance, valuable and difficult to imitate). Thus, there is a need to attempt to solve such problems by identifying the extent of mediating effect for each of the ICM stages development dimensions.

Therefore, based on the above discussion and support from empirical evidences it seems reasonable to posit the following proposition:

P4: ICM stages mediate the relationship between Transformational Leadership Styles and Hospital Performance

## **5. RESEARCH METHODS**

The study adopts a mixed method approach; qualitative and quantitative data analysis. The study used a developmental process that employs a set of procedures (Peng, & Roos, 2007). This process involves several phases of data collection and sequenced data analysis. The phases and activities include:

Phase 1: This study developed a preliminary checklist with detailed elements of managerial actions for ICM stages. These actions were derived from both the literature and hospital practices. In accordance with Intellectual Capital Research (ICR) evolution stages and KM process stages, managerial actions were categorized as stage one to four by applying IC definitions by Bontis (1999) whereby IC was categorized as human capital, organizational capital and relational capital. Additionally, performance indicators or hospital outcomes were derived from the literature (Abernethy, & Lilis, 2001) as well as from healthcare industry in developed countries.

Phase 2: The preliminary checklist was further refined by expert opinions of which come from public or private hospitals. The expert-refined checklist which is also a preliminary questionnaire, shall include managerial actions involve with of human capital, organizational capital and relational capital categories.

Phase 3: A pilot study will be conducted. The questionnaires need to be sent out via mail to 50 hospital managers or administrators as a pilot sample. This information is useful to detail out the management actions in hospital environment through questionnaire. Finally, the actual questionnaires will be distributed to the whole hospitals.

Phase 4: Proceed with data analysis process using SPSS 16.0 and AMOS 16.0.

The population for this study is the top management team of the hospitals; such as directors, managers, executives and administrators who work in public and private hospitals. Currently, there are 153 public or government hospitals and 131 private hospitals in Malaysia. The sample selection will be based on the stratified random sampling selected from every state in Malaysia. In this study, the hospitals in Selangor area would be chosen as sample for pilot study. The interview will be run to 2 public hospitals and one private hospital in Selangor, Malaysia as a preliminary study field.

## **6. CONCLUSION**

From the theoretical perspective, this study lends a hand to the integration of two theories, specifically the Upper Echelon Theory and Resource Based Theory in the area of ICM. These theories help in explaining the relationship between the variables that were used in this study. It is a great combination as UET reflects the choice of strategy by the leaders that will affect the outcomes of the organisation while RBV is more on organisations' resources that should be

fully utilized by managers in order to enhance competitive advantage. This study shall contribute to the knowledge by detailing the activities involved in the ICM stages of hospital industry instead of testing it in a general setting. Thus, it allows greater understanding of the effect of each activity in the ICM stages development in the hospital industry. In addition, it helps the managers or administrators of the organizations to use it as a strategic tool against competitors and to realize the government's goal to move towards knowledge-based economy. Consequently, this paper has integrated all those issues and variables into a single model and has discussed the role of transformational leadership style in ICM stages development that will lead to hospital performance and sustainable competitive advantage.

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