UNDERSTANDING SOCIAL INTEGRATION PROCESSES IN THE USE OF ENTERPRISE SYSTEMS (ES): A SOCIAL CAPITAL PERSPECTIVE

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Abstract

Among recent enterprise systems (ES) researches, many have examined ES implementation issues, but very few have explored issues related to ES use. The insufficient research at post-ES implementation has become the new research concern. Expending from this inadequacy, this thesis examines post-ES implementation issues, in particular, the use of ES in supporting organizational daily operations from a social capital (SC) perspective. The research interest is to understand the concept of social integration (SI) through exploring the use of ES in supporting daily operations of the organizations. To better understand the relationship of ES users' interests, behavior and attitudes in the social and organizational context, an interpretive case study was conducted with Talam Corporation. Talam has a ten-year experience in managing and using ES to facilitate its daily operations and business dealings. Discussions data were compiled following five periodical visits spread across March 2004 to May 2005 with ES users from all levels. A coherent conceptual social integration (SI) framework is derived from data collected. Six SI processes formed from three SI dimensions, which have linked the three SC dimensions, were found to analyze the activities taking place among employees from a systematic perspective and explaining the interrelationship of dynamic social capital in an organization. Thus deliberate investment in SI could be the foundation for potential organizational advantage. Based on this premise, it is critical for ES practitioners to focus on these five main areas: (1) understanding organization's external and internal environment status so as to continue planning for ES enhancement, (2) applying a suitable management style to better manage and connect ES users according to the organizational ES structure, (3) providing the flexibility in using multiple communication channels to transfer messages, information and

knowledge among the ES users, (4) allowing ES users to expand and formulate their networks without much interference, and (5) paying appropriate attention to identify, manage and facilitate social relation in ES use which would bring value to organizations, as they become strategic capital and a source of competitive advantage.

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Chapter 1: Introduction

In today's fast changing environment, all organizations face the challenge of achieving sustained profitable growth. To sustain competency and competitiveness, organizations have made significant investment in information technologies (IT). IT is recognized as a viable method to enhance organizational competitiveness (Markus and Banjamin, 1997). Despite the fact that IT has significantly supported daily business organizational operations, this stand-alone system or fragmented system is soon found to be incapable of supporting organizations to compete in the increased competitiveness in the business environment. This insufficiency has sparked off the need for integrated systems in organizations. Eventually in the 1990s, enterprise system (ES), an integrated system was developed (Markus and Tanis, 2000).

ES is known as a comprehensive system that links software across departments, business functions and geographical boundaries for information to flow seamlessly (Davenport, 2000a). Specifically, this system mainly integrates all enterprise processes together, namely: sales and order management, purchasing, financial and accounting, and human resource management (Kumar and Hillegersberg, 2000). Such a system is known as the most important invention in the corporate use of IT (Davenport, 2000a). It is the first ever information integrated system (Davenport, 2000b) that serves managers with organizations' most strategic computing platform (Hong and Kim, 2002).

In today's fast-changing and highly competitive environments, this groundbreaking ES is designed not only to solve information fragmentation (Davenport and Prusak, 1998) but also to improve organizations standard to achieve profitable growth.

Organizational performances are improved through streamlining work flow to increase productivity, reduce expenses, and improve decision-making quality and resource control (Howcroft, et al., 2004). Besides, this system could offer the most effective ways for the organization to conduct information tracing activity (Rizzi and Zamboni, 1999); provide companies with direct real-time information access with a few clicks of the mouse (Davenport and Prusak, 1998; Brown and Vessey, 2003). Therefore, Davenport and Prusak (1998) claimed that ES could possibly assist the organization to both gain in productivity and speed and also improve intra-organizational performance relationships which leads to inter-organizational transformation and subsequently empire business alliances in the near future (Davenport, 2000b).

In view of its strengths, ideally, a successful ES implementation can save millions of dollars in organizational expenses in the long-term. This is because it can reduce cost, improve production cycles, generate more accurate demand forecasts, and enhance customer services (Umble, et al., 2003). To ensure organizational competency and competitiveness, organizations are making significant investments in ES, in the belief that ES can save millions of dollars in organizational expenses. Due to the irresistible benefits offered by ES, many organizations have jumped onto the ES bandwagon without proper planning and considerations. Such an action has resulted in as high as 90% of organizations failing to implement ES efficiently (Martin, 1998). This study finds that it is most important for organizations to critically consider, understand and plan before implementing ES. Besides knowing ES benefits, organizations must also consider ES technical and business challenges (Davenport, 2000b). The technical challenge of ES as a standard package has complicated its business challenge. The

rigid technical software package not only limits the flexibility of the organizations (Umble, et al., 2003), but it can even jeopardize core operations (Hong and Kim, 2002), and at worst, force companies to change business practices such as company strategy, and culture (Kawalek and Wood-Harper, 2002; Yakovlev, 2002; Umble, et al., 2003) to align with the new system (Yakovlev, 2002). The complex nature of ES emphasizing system integration across departments has indirectly stirred up tension between intra and inter-department employees as Soh, et al.'s (2000) claimed. Thus, Volkoff (1999) pointed out that implementing ES will cause disruptive organizational change and lead to organizations losing their competitive edge (Davenport and Prusak, 1998). In view of this, it is advisable for organizations to think twice before investing in ES (Umble, et al., 2003), as so far, only 10 % of the organizations with proper planning have succeeded in ES implementation (Martin, 1998) but they are yet to enjoy the benefits of ES. Learning through experience, practitioners and academics have come to realize that obtaining ES benefits is not as straightforward as they initially believed it to be (Howcroft, et al., 2004).

Many previous researches have looked at the ES implementation process, but very few have actually studied post-ES implementation. To be specific, most previous studies focused on the development of stage model which illustrated that sequential implementation activities are useful for the planning of future actions but neglected to explore the inter-related issues that have contributed to process effectiveness. In addition, previous studies also suggested that the quality of post-ES implementation would heavily depend on the quality of the implementation process (Nicolaou, 2004). Such review has clearly shown that insufficient research at post-ES implementation has become the new research concern (Lorenzo, 2001). Though there is study done by

Nicolaou (2004) to examine the process of system review during the post-ES implementation and it identifies key elements that contribute to the high-quality of post implementation, there is still fairly little research that explored the key elements influencing the use of ES.

To explore the key elements influencing the use of ES, this study begins its research anchored in the existing ES implementation literature. This is because the impact and outcome of an ES depend upon the unique context of implementation (Scott, 2000). In reviewing the existing literature of ES implementation, human-related issues have been identified as one of the main reasons causing the failure of ES implementation and this issue has persisted until today (e.g. Lorenzo, 2001; Ragowsky and Somer, 2002; Newell, et al., 2002). This organizational mode of behaviour can vary from stakeholders seeing the ES as a rational system that will maximize the efficiency and effectiveness of the organization through to stakeholders seeing the ES from a private self-interested perspective (Watt, et al., 2005). In one recent finding, Ragowsky and Somers (2002) suggested that the benefits of ES are dependent on problems related to people and culture, and not on technically related ones. Considering these reviews, this study argues that human or social issue would continue to be a challenge even in the use of ES after implementation (post implementation).

To compete in today's highly competitive markets, organizations do not only need to rely on useful and suitable technologies, but more importantly, they must be able to manage their social issues well. Every organization is founded from a social community where individuals are hired and gathered to transform their knowledge and expertise into economically useful products and services (Kogut and Zander,

1992). To maximize its advantage, an organization would depend highly on the network of relationships possessed by individuals to create and share knowledge (Nahapiet and Ghoshal, 1998). The strategic use of social networks and relationships by individuals to make sense of the new organizational processes through overcoming the challenge of ES's complex nature (e.g. the tension between the intra and inter-department employees) (Soh, et al., 2000) is known as drawing upon individuals' collective social capital (SC).

One of the earliest SC studies can be traced back to 1965 (Jacobs, 1965). This SC study was then discussed in the work of economist Loury (1997, 1981), and in contemporary sociological discourse (Bourdieu, 1985). Loury (1977, 1981) and Bourdieu's (1985) works paved the way for further studies leading to Coleman's (1988) more-refined SC analysis (Portes, 1998). However, the rather vague SC definition (Portes, 1998) has opened the door for more subsequent research. Hence, a number of theoretical analyses of social capital (e.g. Baker, 1990; Schiff, M., 1992; Burt, 1992; et al.) have been published in the realms of political science, sociology, and economic developments (Lesser, 2000) and SC terminology has been widely used by different researchers (Hirsh and Levin, 1999).

Study acknowledges that social capital may not be the only key to achieving success in an organization (Cohen and Prusak, 2001), but it has a significant impact on creating and sharing knowledge (Tsai and Ghoshal, 1998) on top of intellectual capital (Nahapiet and Ghoshal, 1998). It can also facilitate inter-unit resource exchange contributing to product innovations (Hansen, 1999; Tsai and Ghoshal, 1998) as well as cross-functional team effectiveness (Rosenthal, 1996). Thus, deliberate

investment in social capital can help organizations firstly, to identify and elaborate the significance of knowledge processes as the foundation of organizational advantage (Nahapiet and Ghoshal, 1998) and, secondly, to encounter challenges and even turn them to advantages (Cohen and Prusak, 2001).

SC is widely used by many researchers but among previous studies, there is a lack of consensus on a precise definition of social capital (Nahapiet and Ghoshal, 1998). In order to better understand the social interactions between ES users, Nahapiet and Ghoshal's (1998) definition of social capital is adopted in this research. This is because Nahapiet and Ghoshal's (1998) definition has taken into account both the network and the resources (assets) that may be mobilized through that network (Bourdieu, 1985; Burt, 1992), and the researchers believe that it can provide a clearer and more extensive explanation on the use of ES in achieving organizational advantage. SC is therefore, defined as "*the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or a social unit*" (Nahapiet and Ghoshal, 1998, p. 243). With this definition they further developed a useful framework for understanding social capital by dividing the concept into three dimensions: structural, cognitive and relational. However, notwithstanding their substantial insights of social capital, Nahapiet and Ghoshal (1998) claimed that the SC framework still lacks a coherent theory to integrate the interrelationships among the three social capital dimensions, and this is an important focus for this research.

Many studies of SC did implicitly explain the interrelationships between the SC factors but very little research has explicitly studied the interrelationships of SC. In

view of this rather incoherent theory of SC, in particular on SC integration, this study will draw on Nahapiet and Ghoshal's (1998) SC as a guide to understand social integration issues with regards to social concerns in the application of ES. Since social issues have been highlighted as critical in comparison with technical issues in ES (e.g. Lorenzo, 2001; Ragowsky and Somers, 2002), the research believes that by studying social integration (SI) - the processes that bring about the integration of the three social capital dimensions (structural, relational and cognitive) as stated by Nahapiet and Ghoshal (1998), can provide a better understanding and explanation of the challenges faced by the ES users. In a nutshell, the purpose of this research is to understand social integration in ES use by exploring its dimensions and processes. **The research question is: what and how are the social integration processes and dimensions inter-related in the use of ES?**

The contributions of this study are discovering and explaining the influence of SI processes and dimensions as well as providing a better understanding of SI in ES usage for practitioners. Specifically, the result of the social integration conceptual framework successfully presented a coherent, systematic view and illustrated the interrelationships of dynamic social capital. In the process, the six SI processes formed from the three SI dimensions were found to analyze the activities taking place among employees from a systematic perspective and explaining the interrelationship of dynamic social capital in an organization. Accordingly deliberate investment in SI could be the foundation for potential organizational advantage. Based on this premise, it is critical for ES practitioners to focus on these five main areas: (1) understanding organization's external and internal environment status so as to continue planning for ES enhancement, (2) applying a suitable management style to better manage and

connect ES users according to the organizational ES structure, (3) providing the flexibility in using multiple communication channels to transfer messages, information and knowledge among the ES users, (4) allowing ES users to expand and formulate their networks without much interference, and (5) paying appropriate attention to identify, manage and facilitate social relation in ES use which would bring value to organizations, as they become strategic capital and a source of competitive advantage.

The thesis is organized as follows. After the introduction, Chapter 2 begins with a literature review of ES phenomenon and SC theory. Chapter 3 presents the methodology used in examining and exploring the research interest of this thesis. While Chapter 4 illustrates and describes the case study- Talam, Chapter 5 highlights the findings from the case study, and conceptualizes the social integration framework with the collected data. Chapter 6 confers the theoretical and managerial implications and conclusions of this research.

Chapter 2: Literature Review

This section is aimed at having an in-depth review of existing enterprise systems and social capital literature in order to highlight issues and challenges in the chosen areas of investigation. The main body of literature review is organized as follows: evolution of ES, its benefits, criticisms, ES-induced change, ES implementation approaches and ES life-cycles. Next, a thorough review of SC is carried out before the major components of the theory are outlined and research questions delineated.

The rational in dividing the literature review into this structure is to be familiar with ES by going through its evolution, benefits, criticisms and the issues brought along by the ES-induced changes. The study then proceeds to review ES implementation issues, approaches and life-cycles in order to have a thorough knowledge of the ES phenomena. A comprehensive review of the understanding of SC will be done before drafting the major components of the theory which this study is aiming to explore.

2.1 Evolution of Enterprise Systems

Prior to the existence of ES, the information technology-induced change in organizations has been an ongoing issue in the information systems literature for more than half a century (Robey and Boudreau, 1999). At that juncture, IT was recognized as a viable method to enhance organizational competitiveness; however, the often-touted benefits from ES are not as straight-forward as vendors suggested (Wagner, et al., 2005); therefore, its business value still remains unclear (Markus and Benjamin, 1997; Rockart and Short, 1989; Robey and Boudreau, 1999).

Today, the claims that ES offer attractive benefits for organizations are again doubtful to most researchers and practitioners. According to a recent research, Hitt, et al., (2002) claimed that based on their collected short-term post implementation data, they find that ES organizations tend to show higher performance across a wide variety of financial matrices but there is a slowdown sign in business performance and productivity after the implementation. Nonetheless, even with the slow performance after the ES implementation, financial markets still have confidence with these ES organizations and consistently reward those ES adopters with higher market valuation (Hitt, et al., 2002). Thus, until now the utilization of ES among organizational members often remains at a perfunctory level (Lim, et al., 2005). The actual long-term business values that are supposed to be delivered by the ES are yet to be explored (Hitt, et al., 2002). To appreciate the ES phenomena, it is essential to establish a sufficient spectrum of knowledge regarding this phenomenon.

In the past, although organizations had fulfilled their information needs by adopting IT through developing disparate systems, those systems were loosely integrated throughout IT departments. Recognizing the weaknesses in the fragmented systems together with the increased competitiveness in the business environment, organizations were prone to consider IT-enabled integration (Rockart and Sbort, 1989). Finally in the 1990s, an integrated software package, Enterprise Resource Planning (ERP) system, was developed (Markus and Tanis, 2000). This process of evolution started from the internal standard inventory control (IC) packages, material requirements planning I and II (MRP I and II) to other enterprise processes such as sales and order management, purchasing, financial and accounting, and human resource management (Kumar and Hillegersberg, 2000). Being variously called ERP,

enterprise systems (ES) or enterprise-wide systems (Ragowsky and Somers, 2002), ES is integrated sets of software modules (Markus and Tanis, 2000) linked to a common database in which it is able to handle basic corporate functions like finance, human resources, materials management (Kumar and Hillegersberg, 2000; Slater, 1998), as well as a facilitator of other ES initiatives (Pan and Tan, 2005) such as material requirement planning with a Just In Time (JIT) material management procedure at the assembly lines (Boersma and Kingma, 2005).

2.1.1 Benefits of Enterprise Systems

Nowadays, ES are viewed as the most important development in the corporate use of IT (Davenport and Prusak, 1998). For the first time, this is the first system that possessed the character to integrate all information flow seamlessly across business functions, units, and geographical boundaries (Davenport, 2000b). These systems do not only solve the information fragmentation problem (Davenport and Prusak, 1998), but can also be considered as one of the most effective ways for organizations to conduct information tracing activity (Rizzi and Zamboni, 1999). More importantly, a successful ES project can save a company millions of dollars in the long run as it can reduce operating costs, improve production cycles, generate more accurate demand forecasts, and greatly enhance customer service (Umble, Haft, and Umble, 2003).

Another benefit of ES is that it provides organizations with direct access to a wealth of real-time operating information (Davenport and Prusak, 1998, Brown and Vessey, 2003). Now, all transactions including every piece of company operations and performance information are performed with just a few clicks of the mouse (Davenport, 2000b, Brown and Vessey, 2003). This has contributed to more efficient

relationships of intra-organization performance and is also projected to lead the inter-organization transformation and empires of business alliances in the near future (Davenport, 2000b).

These benefits can be translated into dramatic gains in productivity and speed for organizations (Davenport and Prusak, 1998). Thus, potential business benefits, in terms of economic, technical and social may indeed be significant once an organization completes its renewal of enterprise IT infrastructure (Markus and Tanis, 2000). Unfortunately, in reality, only a few organizations are able to enjoy the potential benefits of ES (Parr and Shanks, 2000). For this reason, a better understanding of the ES is important. But, prior to that, let's look at some of the user-application criticisms of ES.

2.1.2 Criticisms of Enterprise Systems

In general, the notion of best practices is illusory (Swan, et al., 2000). ES can have an impact on the organization's business processes, structure, culture and enterprise level performance, as well as individual employees' motivation, job specification and performance (Markus, 2004) that may influence the degree of "fit" between particular design philosophies and prevailing organizational contexts in different countries (Swan, et al., 2000). However, the most commonly known ES downsides are the technical and business perspectives (Davenport, 2000b). In terms of technical perspective, ES have changed the conventional style of IT from an artifact that may be tailored to different needs, to a standard package. Consequently, conventional IT problems, such as, up-front requirements, design activity, political and socio-technical requirements have also changed (Kawalek and Wood-Haper, 2002).

ES are designed to fit the needs and interests of organizations (Davenport and Prusak, 1998; Markus and Tanis, 2000). According to researchers, ES or the so called "best practices" are built to support generic business processes that may differ quite substantially from the way any particular organization does business (Markus and Tanis, 2000). Unfortunately, this standard package or "best practices" is too rigid (Davenport, 2000b); its proprietary systems are opposed to open system architectures where they limit the flexibility of the enterprise; (Umble, et al., 2003) thus, forcing companies to change their existing business practices, namely, company strategy and culture (Kawalek and Wood-Harper, 2002; Yakovlev, 2002; Umble, et al., 2003) in order to fit into the new systems (Yakovlev, 2002). Such requirement is described as disruptive organization changes by Volkoff (1999) and has caused many organizations to lose their competitive advantages after the change (Davenport and Prusak, 1998).

Research claims that most ES implementation periods have to be extended, considering the high implementation cost ranging from USD$300,000 to several hundred million dollars, depending on the size of the organization (Heizer and Render, 2003). Most of the extended time is found wasted on the changing business processes rather than the system installation (Davenport, 2000b). Besides, issue such as misalignments between system and organization is commonly identified late in implementation (Soh and Sia, 2005). In spite of the fact that many ES vendors still argue that these "best practices" suit most organizations (Bailey, 1999), such system should be viewed as mandatory technology (Chae and Poole, 2005). Despite that, studies have also found that organizations would have to spend a high cost to secure the benefits of ES (Stein, 1999). Considering these setbacks, it is important for

organizations to think twice about the actual needs of the organization (Umble, et al., 2003) before jumping onto the ES bandwagon.

To better understand the ES phenomena, the study of ES can be separated into two different studies: (1) the macro-level analysis focuses on higher level of investigation such as, the use of ES in organizations and how it is linked with complex sets of market and power relations (Howcroft and Truex, 2001); (2) the micro-level analysis examines closely on issues such as, user participation during the ES implementation, the effect of ES towards organizational control and power distribution, and software selection and requirements analysis process (Howcroft and Truex, 2002). The subsequent section provides a brief overview of ES's macro-level analysis by showing the use of ES in organizations and the changes made in them before pursuing the micro-level analysis examination which is the focus of this research.

2.2 Enterprise Systems-induced Change

This integrated systems-ES have tremendously changed the organizational business orientation. The following table briefly introduces the usefulness of ES in the highly competitive environment and also points out the differences between IT- and ES-oriented businesses.

Core Organization Factors		Information Technology oriented Business (19th Century)	Enterprise Systems oriented Business (20th to 21st Century)
People	Purpose	Business Centric	Strategic Centric
		Long-term Focus	Short and Long-term Focus
	Structure	"Any Actual Place"	"Virtual Place"
		Holistic Approach	Organic Approach
	Process	Cross-functional Boundaries	Boundaryless
		Cross-level Communication	Cross-level Communication

Table 2. 1: Enterprise systems based business conduct (Adopted from Daniels, 1993)

The arrival of knowledge economy is driven by the rapid technological advancement (Cowey, 2000). This emergence of knowledge-based economy places great importance on the diffusion and use of information, knowledge and creation rather than IT in the previous global economy. Pressures from the external environments force organizations to change their organizational purpose from *business* to *strategic centric*. To survive in the hypercompetitive business environments, nowadays, organizations are continually engaged in a process of renewing their market strategies and production lines (Dougherty, 1992; Teece, et al., 1997). Those companies that are weak in strategic planning usually are unable to control and coordinate their worldwide operations (Hanseth, et al., 2000). Therefore, being *strategic centric* is critical as it emphasizes focus of the organization's ambitious goals, and requires analysis on the company's resources to identify its strengths and weaknesses (Hill and Jones, 2001). With the integrated applications and databases, process and supply-chain integration, ES have added capability to the businesses for "stretching" the competitive and strategic agenda (Al-Mashari, et al., 2003). In other words, ES enable organizations to perform *strategic centric* with better *short and long-term focuses*.

Nowadays, organizations function like a living organism than a machine; therefore, the *organic approach* enforces more flexible structures that are more malleable to changing external conditions (Robey, 1991) rather than employing the *holistic approach* that adopts a totally opposite concept (Daniels, 1993). In addition, with the integrated ES, now, managers may access information needed at any place and time (Devanport, 2000 b). In other words, managers from different parts of the world may gather and meet at any "*virtual place*", which enables the making of more timely decisions rather than require meeting at "any actual place" which requires high

traveling cost for representatives of organizations. This system also changes the *cross-functional boundaries* to *borderless* communication between departments and company outlets across the globe; hence, the process of *cross-level communication* is even more achievable. This shows the macro-level changes brought about by ES to organizations in the 21 century.

The above Table 2.1 has briefly discussed the macro-level analysis of ES business orientation. In the following paragraphs, this study will focus on micro-level analysis that comprises various angles including the choices of ES implementation, ES implementation cycle, post-ES implementation and the other potential issues in ES phenomenon.

2.3 Enterprise Systems Implementation

In pursuing a deeper understanding of ES, this study begins with an overall review of the ES implementation approaches before going through the ES life-cycles and examining the implementation issues that might occur at each stage. According to Davenport (2000b), choosing the right strategy for ES implementation plan is the most difficult part in the ES project. There are many different ways of implementing ES, and it is critical for organizations to develop a strategy to ensure the success of the ES implementation (Mandal and Gunasekaran, 2003). In fact, a study shows that as high as 90% of the companies, which do not have the implementation strategy plan in place, have failed in their ES implementation (Cooke and Peterson, 1998). Therefore, it is crucial to have well-planned procedures for the successful ES implementation (Davenport, 2000b; Mabert, et al., 2003).

2.3.1 Enterprise Systems Implementation Approaches

The ES implementation approaches are compiled and categorized into two main dimensions (Davenport, 2000b). The first dimension refers to the time (*speed*) it takes to implement, and the amount of business change, while the values (*focus)* to which a company aspired are referred to in the second dimension. See Figure 2.1 below for details.

		Technical	Strategic
Speed	Fast	Quick Relief	Quick Advantage
	Slow	Poor Implementation	Long-Term Competitiveness

Focus

Figure 2. 1: Alternative implementation approaches (Davenport, 2000b, p. 14)

The *speed* of the ES implementation approach depends on an organization's preferences and planning. As for the *focus*, it can be separated into technical and strategic spheres. Basically, a technical-oriented implementation focuses on core information systems functionality within an organization. On the other hand, a strategy-oriented implementation aims to maximize positive business change and business value (Davenport, 2000b). According to Davenport (2000b), strategic ES implementation approach is more favorable because it is more important for organizations to strive for business value rather than technical purposes only.

In certain circumstances, some companies may choose to adopt technical implementation approach to solve technical problems or inadequate legacy systems. This approach is similar to the piecemeal approach proposed by Robey, et al., (2002). The piecemeal approach is considered as a safer approach (Markus, et al., 2000b)

because it allows an organization to replace legacy systems gradually with new business processes (Robey, et al., 2002).

However, in certain cases, the concerted approach for ES adoption would be more appropriate owing to its simultaneous impact on the business processes and software implementation (Robey, et al., 2002). Although the concerted approach is prone to acquire more risks (Markus, et al., 2000), it still brings higher benefits to an organization (Robey, et al., 2002; Markus, et al., 2000). In summary, this research acknowledges that all implementation approaches do consist of risks that may hinder the success of ES implementation (Robey, et al., 2002).

2.3.2 Enterprise Systems Life-Cycle

Various ES life-cycles are being proposed by researchers, for example, there have been two models comprising five stages of ES transition (Bancroft, et al., 1998; Ross and Vitale, 2000), and another consisting of four stages (Markus and Tanis, 2000) which were introduced. In general, most ES projects share several common elements in these process models (Robey, et al., 2002) and the only distinction between these ES life-cycles is the different implementation steps that are sub-divided by researchers.

Among the various ES cycles, the model proposed by Markus and Tanis (2000) (See Figure 2.2) is chosen. This is because aside from providing firms with a planning stage to make critical decisions for ES implementation (e.g. Bancroft, et al., 1998; Ross and Vitale, 2000), Markus and Tanis (2000) has further explored reasons and means for ES success (Markus and Tanis, 2000). The proposed phase framework

provides a clear picture of the entire implementation process that allows evaluator to better evaluate the ES implementation from ideas to impacts and finally impacts on the organizational performance (Markus and Tanis, 2000). Such clear steps could reveal the crucial implications that occur at each stage of the implementation cycle, so that problems can be mitigated or resolved before they are spilt over to the next level. In return, this contributes to optimal outcomes and leads to the successful completion of the project. Markus and Tanis (2000) have identified the following four phases in an ES life-cycle:

Ideas to dollars	Dollars to assets	Assets to Impacts	Impacts to performance
Phase I Project Chartering	**Phase II** The Project (Configure & rollout)	**Phase III** Shakedown	**Phase IV** Onward And Upward
Decisions defining the business case and solution constraints	Getting system and end-users "up and running"	Stabilizing and eliminating "bugs" to normal operations	Maintaining system, supporting users, getting results, and upgrading

Figure 2. 2: Enterprise system experience cycle (Markus and Tanis, 2000, p. 189)

The paragraphs below summarize the findings of Markus and Tanis (2000) and also acknowledge ES issues which are highlighted by other researchers in every phase of the implementation. The main idea is to have a comprehensive understanding of the potential issues and challenges in each ES implementation stage. This is important as in most previous studies, researchers assumed that the quality of post-ES implementation would heavily be dependent on the quality of the implementation

process (Nicolaou, 2004). Paragraphs below discuss the ES implementation activities concentrated on social-related issues.

Phase I: Chartering Phase

In this phase, an organization will have to define its business case and solution constraints well before deciding to fund for ES implementation project. The key players involved are vendors, consultants, company executives and IT specialists. At this initial stage, it is important for these key players to clearly define and cooperate well in the following main categories: goals, plans, execution and responses to unforeseen problems (Markus and Tanis, 2000). In order to carry out this plan smoothly, the support from top management is critical (Holland and Light, 1991; Ross and Vitale, 2000; Somers and Nelson, 2001). For example, one of the major successes of ES implementation at Tektronix Inc. is due to the careful planning from the CFO of the company (Austin, et al., 1999).

This is a critical stage which needs proper planning and stable groundwork so as to avoid future mistakes. Issues such as, the need for specific information at the operational and managerial levels for various functional areas, the ability of this ES system to integrate with the existing information systems, and schedule for adaptation of the new system (Mandal and Gunasekaran, 2003), are to be taken into consideration during the planning stage. Clear business objective, comprehension of the nature of changes and understanding of the project risk are known as the three basic requirements for successful ES implementation (Wagle, 1998). Thus, sufficient time should be allocated to collect diverse information pertaining to decision projects of such magnanimity (Davenport, 2000b). If issues are not well taken care of, many

problems and challenges may occur and deteriorate over time. The unsolved problems may thus possibly spill over to the subsequent stages (Markus and Tanis, 2000).

Phase II: Project Phase

At this period, companies will have to get systems and end users ready up for running. The key issues at this stage include systems configuration, integration, testing, data conversion, training and rollout. The key participants-in-charge are the project manager, project team, internal IT specialists, vendors and consultants (Markus and Tanis, 2000).

In this stage, social issues and business conditions are the two major challenges. The two main social issues are (1) the appropriate mix of project team members (Teram, 1999) and (2) the acceptance of the organizational change by the implementers and users (Robey and Sahay, 1996; D' Adderio, 2001). Firstly, the appropriate mix of knowledge, skills and expertise is important as the completion of these project activities will depend on the selection of project team members (Teram, 1999). Otherwise, problems such as lack of requisite knowledge and skills are likely to occur at this phase (Markus and Tanis, 2000). Secondly, the acceptance of implementers (Robey and Sahay, 1996) and people from different departments are also crucial (D' Adderio, 2001) as it would reduce insufficient knowledge or skills transferred at this stage (Markus and Tanis, 2000). In other words, implementers and all employees must be ready and willing to cooperate (Van de Ven and Poole, 1995), or else once the system becomes fully operational, the users may find it difficult to change their attitudes and views towards them (Abdinnour-Helm, et al., 2003). Therefore, issues such as internal social interactions (e.g. management and users) are claimed as local

knowledge (Pozzebon and Pinsonneault, 2005). External social interactions (e.g. vendors and consultants), that involve knowledge transfer, sharing and integration (Van de Ven and Poole, 1995) are known as global knowledge (Pozzebon and Pinsonneault, 2005). All these issues are critical for the ES systems implementation.

There are two main business-condition related issues at this phase and they are (1) the customization issue, and (2) the systems misfit. In the first issue, customization of ES package can be done but so far, only five percent of organizations among Fortune 1000 companies have purchased and customized ES with their business processes (Lee and Lee, 2000). Most organizations are forced to modify their current business processes due to the highly integrated and complex nature of ES as it is difficult, if not impossible to modify ES substantially to support an existing set of company-specific processes (Boudreau and Robey, 1999). As a result, after the installation of ES, most companies would still need to adopt or even completely rework their processes to fit the ES requirements (Summer, 1999).

The second issue regarding systems misfit (Soh, et al., 2000) refers to the mismatch of the ES and the organization's needs. Despite the increase in delivering the appropriate "industry specific" ES version by the vendors, many organizations still suffer from the system misfit problem (Markus, et al., 2000). The misfit issue has gone from bad to worse in Asia, as the business models created are mainly based on European or U.S industry practices. Thus, when it is applied in Asian organizations, the misfit gap may be wider as they are likely to differ from cultural, economic to regulatory contexts (Soh, et al., 2000). A study has found that changes in business processes in conformation to the ES package features may not be a wise solution as many

organizations have found that the software package cannot fully support the organization well even after changes were made in the business processes (Markus, et al., 2000). Therefore, each organization should try to select and implement a system that accentuates its unique competitive strengths and overcomes competitive weaknesses; after all, the ultimate goal of this implementation is rather to improve the overall business performance and not to implement software per se (Umble, et al., 2003).

Phase III: Shakedown Phase

At the shakedown phase, also known as the end of implementation, an organization is expected to achieve its normal operations. During this stage the project team may either continue its involvement or pass the control to its operational managers and end-users. Activities involved are mainly focused at the fine-tuning of the systems such as, bug fixing and rework (Markus and Tanis, 2000; Koh, et al., 2000).

Human factor issue is again identified as the major challenge at this phase. For example, the incidences of over-reliance on knowledgeable project team members and neglect of building up the ES knowledge and skills in all relevant operational personnel may occur at this phase (Markus and Tanis, 2000). Besides, there are also cases of inability to adapt to the newly drawn-up systems, business procedures and rules by employees (Lee and Lee, 2000; Rodecker and Hess, 2001). The high complexity of ES have resulted in enormous learning curves and behavioral changes for the users of the newly implemented systems (Kelly, et al., 1999), which has led to resistance to change, namely, at individual jobs, general business processes, company culture and politics (Ross and Vitale, 2000). The knock-on effects arising at this stage

may cause significant damage if they are not appropriately handled (Markus and Tanis, 2000).

Phase IV: The Onward and Upward Phase

This phase will continue during the normal operation until the system is replaced with an upgrade or a different system. This is the stage for an organization to know the level of acceptance (adoption) of the new systems (Mandal and Gunasekaran, 2003), in which the organization is assumed to be capable of quantifying the benefits (if any) of its investment. Operational mangers, end users and IT support personnel (Internal and External) are the key participants at this phase. Conventionally, these key participants have to ensure that perpetual business improvement, additional user-skills building and post implementation benefits assessment are properly implemented (Markus and Tanis, 2000).

At this phase, the adopting organizations may encounter problems such as maintenance and upgrading, knowledge retention, and continued management attention during the post implementation stage (Ross and Vitale, 2000). Organizations are advised to evaluate this pos timplementation effectiveness (Mandal and Gunasekaran, 2003; Nicolaou, 2004) before taking a step further in integrating additional modules with its suppliers and customers (Mandal and Gunasekaran, 2003). After adaptations are made to the system, organizations might venture a step further by integrating their ES with their suppliers, customers, complementary partners to redesign the organization's business network. At this juncture, organizations are more likely to implement additional modules, such as supply chain management (SCM) and customer relationship management (CRM) which would help them integrate with

their partners in the business network. To achieve this stage of integration among all the modules and knowledge leverage across organizations, top-management engagement in the project does play a critical success role in the ES implementation project (Brown and Vessey, 2003).

Many other prior researches stopped after examining the initial implementation process without extensively exploring into the post-ES implementation phase, thus Lorenzo (2001) claims that the post-ES implementation emerged as a new concern. With regards to Markus and Tanis's (2000) ES cycle, this study discovers that they have neglected to consider the use of ES in the last ES phase – "Onward and Upward". This neglected section is rather important and interesting as after the ES are set in place, the most frequently asked question by companies is whether they are realizing the investment value (Lorenzo, 2001). Hence, this research is interested in exploring the social challenges faced by ES users in their daily interaction with an ES.

2.3.3 The Impact of Social Issues

Throughout the review of the four stages of ES implementation cycle, humans play an important influencing role in ES implementation and use. In fact, social issues rather than technical issues have been known as the reason causing the failure of MRP implementation since late 1970s' (Belt, 1979). Social issues are ubiquitous in the ES implementation even until today (e.g. Lorenzo, 2001; Newell, et al., 2002; Ragowsky and Somers, 2002). Recent studies have suggested that the benefits of ES are dependent on the nature of the organization and most benefits derived from ES application vary from organization to organization. Many issues that occurred during and after implementation are found to be people and culture centric as opposed to being technical (Ragowsky and Somers, 2002; Newman and Westrup, 2005). In other

words, the impact and outcome of an ES depends upon the unique context of implementation: features of the individuals and groups involved as well as features of the organization and its institutional context (e.g. Scott, 2000; Newman and Westrup, 2005, etc.). Looking at such problems, the author believes that social issues would continue to be a challenge in the use of ES even after the implementation.

Social issues would continue to be an organization's challenge in ES use because "an organization is a social community where individual and social expertise is transformed into economically useful products and services" (Kogut and Zander, 1992, p. 384). The creation of new intellectual capital and the organizational advantage are derived from social capital (Nahapiet and Ghoshal, 1998). Thus, a firm's asset is mainly derived from the social structure of relations (Coleman, 1988). With such findings in literature, objectively, an individual with better networks (connections) would enjoy higher returns (Burt, 2000) and wealth (or benefit) through his or her social relationship (Lesser, 2000). So, if individuals of an organization can strategically and wisely use their social networks and relationships to make sense of the newly changed organizational processes, then the challenge of the nature of the ES complex (for example the tension between the intra and inter-departmental employees) as Soh, et al., (2000) mentioned earlier can be overcome. In doing this, the employees would be drawing upon their collective social capital. Hence, social capital will, therefore, appear to have the fundamental importance to the use of ES.

2.4 Social Capital

During recent years, the concept of social capital has evolved from the most popular daily-used sociological theory (Portes, 1998) to one of the most important theories

that receives a great deal of attention from the academic and business media (Lesser, 2000). Although social capital has been in organizations for a long time without being identified as such, no explicit attention was paid to what the concept means (Cohen and Prusak, 2001). Thus such inadequacy in research provides reason for this thesis to explore this area as this recent interest is driven by today's volatile business environment. The two primary issues in today's business environment are (1) the rise of the knowledge-based organization and (2) the growth of strategic alliances and joint ventures (Lesser, 2000). In the past, things could be taken for granted and sometimes even downplayed, but now they can no longer be ignored or left to chance due to today's highly competitive markets. Organizations are required not only to rely on useful and suitable technologies, but more importantly, they must be able to manage ES and its users.

Information systems literature tends to overemphasize the contribution of technical solutions and downplays the role of social aspects. Recently, researchers highlighted the urge and need to pay more attention to and focus on understanding the relationships between social ties (e.g. Kotlarsky and Oshri, 2005). Such migration in research attention is because ES is recognized as a system with a combination of social and physical artifacts (Kawalek and Wood-Harper, 2002). Thus, ES users play a vital role in affecting ES implementation (Scheer and Habermann, 2002) and ES use (Kawalek and Wood-Harper, 2002). In this paper, we are particularly interested in understanding the social artifacts embedded in the use of an ES. These social artifacts, if managed or facilitated properly, will bring value to organizations, as they become strategic capital and a source of competitive advantage.

The concept of social capital originated from sociology before is being widely incorporated into the current social science phenomenon (Astone, et al., 1999). According to reviews, the earliest SC research appeared in community studies back in 1916 by Jacobs (Cohen and Prusak, 2001); later it was discussed in the economist work (Loury, 1977, 1981) and found in contemporary sociological discourse by Bourdieu (1985). Loury (1977, 1981) and Bourdieu's (1985) works have paved the way for further studies leading to Coleman's (1988) more-refined SC analysis (Portes, 1998). However, the rather vague SC definition (Portes, 1998) has opened the door for more subsequent research. Hence, a number of theoretical analyses of social capital (e.g. Baker, 1990; Schiff, 1992; Burt, 1992) have been published in the realms of political science, sociology, and economic developments (Lesser, 2000) and SC terminology is widely used by different researchers (Hirsh and Levin, 1999). Based on Lin's literature review (1999), the principle behind the concept of social capital is rather simple and straightforward; a general definition of social capital is known as "*an investment in social relations with expected returns*" (Lin, 1999, p. 30). This review compilation is an attempt to address the application of social capital in various contexts of the leading philosophies from researchers.

2.4.1 Social Capital Advantages

As mentioned before, social capital exists in every organization (Cohen and Prusak) to transform human knowledge and expertise into economically useful products and services (Kogut and Zander, 1992). In other words, to realize the benefits (assets) created through joint efforts, organizations would highly depend on the network of relationships possessed by individuals to create and share knowledge (Nahapiet and Ghoshal, 1998) as social capital (SC) bridges the gap between people, and this kind of

connection encourages commitment and collaboration, so that access to knowledge and talent could be equipped (Cohen and Prusak, 2001). In order to make sense of the newly changed organizational processes and to meet the challenge of the complex nature of ES, (e.g. the tension between the intra and inter-department employees) (Soh, et al., 2000), organizations are now drawing upon the strategic use of social networks and relationships by individuals' collective SC.

Studies acknowledge that social capital may not be the only key to organizations' success (Cohen and Prusak, 2001), but it has a significant impact on the creation and sharing of knowledge (Tsai and Ghoshal, 1998) and intellectual capital (Nahapiet and Ghoshal, 1998). It is the less tangible elements such as network of relationships among people in the organization, the human need for membership, identification, recognition, and the pleasure of giving as well as getting help (Cohen and Prusak, 2001) that facilitate inter-unit resource exchange (Hansen 1999; Tsai and Ghoshal 1998) through group cohesion (Yang and Tang, 2004) that contribute to product innovations (Hansen, 1999; Tsai and Ghoshal, 1998) and enhance cross-functional team effectiveness (Rosenthal, 1996) by good group structure (Yang and Tang, 2004). All these are positively related to an organization's overall performance (Yang and Tang, 2004). Leaving out the essential connections among people without purposeful cooperative work, research showed that organizations with talented people, sensible and efficient process and the best technology can still perform poorly because people working at cross purposes were hobbled by suspicion, rivalry, incoherence (Seemann and Cohen, 1998).

Based on review, there are three fundamental benefits of SC: (1) information (Burt, 1992; Sandefur and Laumann, 1998; Alder and Kwon, 2000); (2) power and influence (Alder and Kwon, 2000); and (3) solidarity (Sandefur and Laumann, 1998; Adler and Kwon, 2000). Information is the first direct benefit derived from social capital in which it facilitates broader sources of information and improves quality, relevance and timeliness of information (Adler and Kwon, 2000). The access to information is gained from network ties between actors (Burt, 1992) through daily interactions with colleagues (Coleman, 1988). Power and influence are the second benefit (Adler and Kwon, 2000). An influential individual is able to execute his or her power to get things done and achieve the goal (Burt, 1992; Coleman, 1988). Solidarity is the third benefit; it exists with the degree of mutual trust, strong social norms and beliefs, associated with a high degree of closure of the social network which encourages compliance with local rules and customs, subsequently reducing the need for formal controls (Sandefur and Laumann, 1998; Adler and Kwon, 2000). Through this review, investment in SC is like other forms of capital that requires accumulating before it is able to be used productively (Fountain, 1998).

Nevertheless, the value and power of SC is somewhat difficult to discuss systematically as the elements of SC depend on cause and effect, its underlying conditions, indicators and its chief benefits (Cohen and Prusak, 2001). A more comprehensive benefit of SC is suggested by Cohen and Prusak (2001) as referred to in Table 2.2 below:

Benefits of Social Capital
1. Better knowledge sharing, due to established trust relationships, common frames of reference, and shared goals.
2. Lower transaction costs, due to a high level of trust and a cooperative spirit (both within the organization and between the organization and its customers and partners).
3. Low turnover rates, reducing severance costs and hiring and training expenses, avoiding discontinuities associated with frequent personnel changes, and maintaining valuable organizational knowledge.
4. Great coherence of action due to organizational stability and shared understanding.

Table 2. 2: A brief summary of social capital benefits (Prusak and Cohen, 2001, p. 10)

Looking at the value, power and benefits of SC summarized above, it is somewhat difficult to discuss systematically as the elements of SC depend on cause and effect, its underlying conditions, indicators and its chief benefits (Cohen and Prusak, 2001). However, in a nutshell, the bottom line of SC benefits is that it could help organizations in two ways: first, to identify and elaborate the significance of knowledge processes as the foundation of such organizational advantage (Nahapiet and Ghoshal, 1998) and, second, to encounter challenges and even turn them to advantages.

2.4.2 Social Capital Disadvantages

It is an undeniable fact that social capital could directly affect the combine-and-exchange process and initiate access to network resources (Nahapiet and Ghoshal, 1998). Nevertheless, social capital sometimes can be profoundly dysfunctional and counter-productive (Adler and Kwon, 2000) just like a double-edged sword that can be a resource in facilitating development of organizations and a burden that undermines the rationality of decision makers (Chou, Chen and Pan, 2005) with a cost (Alder and Kwon, 2000; McFadyen and Cannella, 2004), which requires time and effort to create and maintain it (McFadyen and Cannella, 2004).

As Nahapiet and Ghoshal (1998) mentioned, interaction between individuals require time to develop. Once it is developed it could create strong norms and mutual identification among actors. Such development could restrict and limit actors' openness to new information and diverse view, and block access to new information (Alder and Kwon, 2000). In other words, higher shared experiences (McFadyen and Cannella, 2004), and strong bonds between actors may damage the prospects of business and impede IT colleagues' identifying of each other's capabilities (Hatzakis, et al., 2005), thus causing constraints on the knowledge creation process (McFadyen and Cannella, 2004).

In addition, recent research has identified that once strong ties and bonds are built between actors, it would lead to four disadvantages of social capital: exclusion of outsiders, control of individual freedoms, over protecting own group members (free–riding problems, hindering entrepreneurship, and slowing down the accumulation of capital), and downward leveling norms (Portes, 1998). For example, having too much trust may be as bad as too little because it would exert pressure and negative effects on the rationality of decisions made by actors (Jeffries and Reed, 2000). Besides, too much trust may also be slow to seek out and adopt more novel ideas (Portes, 1998). Thus, it is wise to cultivate and manage a balance and positive social capital in organizations. The sections 2.4.1 and 2.4.2 have outlined the key advantages and disadvantages of social capital so as to provide a general notion to facilitate data analysis.

2.5 Relationship of Social Capital and Social Integration

Some previous studies of social capital did briefly demonstrate the interrelationships between the SC factors but very little research has had focused on the interrelationships of SC. For that reason more attention is needed to understand the relationships between social ties because information systems literature tends to overemphasize the contribution of technical solution and in some cases downplays the role of social aspects (Kotlarsky and Oshri, 2005). In view of the inadequate study, we decided to explore social integration perspective in this paper, and plan to study the dimensions and processes of SI.

En route to searching for social capital's classical roots, a theory of social integration was found in Durkheim's ([1893] 1984) research. Based on study, social integration could be viewed as part of the evolution of social capital research because social integration theory focused on the orderly or conflict relationships between the actors in the context of a social system. Such social integration was known as the only way to relate to the occurrence of conflict phenomena in a functional entity (Zollchan and Hirsch, 1968). Social integration theory builds on trust prevalent in society because obligations are enforceable, not by law or violence enforcement, but through the community power (Durkheim, [1893] 1984). So when social integration theory suggested overcoming the conflict phenomena, several attributes of social capital were brought out; viz. norms, power, and control. Such social capital attributes are the most general form to manage conflicts occurring within the scarce resource situation. This social integration theory, however, looks into the societal phenomenon rather than its organization. Thus, this study chooses to examine social integration in the context of the organization.

2.5.1 Social Integration Conceptualization

To study social integration, this study chooses Nahapiet and Ghoshal's (1998) social capital theory. The choice of such theory selection is based on Walsham's (2005) suggestion- choose a theory based on its diversity and used at different stages of research. Since social capital theory offered by Nahapiet and Ghoshal (1998) is widely recognized and used at different types of social capital related studies and research, it is adopted by this study. Such wide use and acceptance of Nahapiet and Ghoshal's (1998) research has not only confirmed its quality foundation but also its reliability and generalizability in social capital research.

Aside from the fact of the wide acceptance and popularity of Nahapiet and Ghoshal's (1998) research in the social capital arena, their work is selected because their research philosophy is relevant to this study in that they emphasize the causes and consequences of creating and sharing of knowledge between individuals rather than concentrating on the sources and conditions of organizational advantage. Such a research principle could be used to examine and explore the causes and consequences of social integration that influence the ES use.

Nahapiet and Ghoshal's (1998) research accounts for both the network and the resources (assets) that may be mobilized through the network (Bourdieu, 1985; Burt, 1992). Here, SC is considered as "*the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or a social unit*" (Nahapiet and Ghoshal, 1998, p. 243). This study believes that by examining the human networks and interactions involved in ES use, many possible resources (assets) involved in ES use could be identified.

Nahapiet and Ghoshal's (1998) research also offers clear categorization of social capital dimensions. They understood SC from three dimensions: structural, cognitive and relational. These three social capital dimensions could best facilitate in-depth and detailed study to discover the conceptualization of social integration.

Despite the insights of social capital study, Nahapiet and Ghoshal (1998) acknowledged that their framework lacks a coherent theory that integrates the interrelationships among the three dimensions. It is this gap that the author seeks to shed some light into by introducing the concept of **social integration- a process that brings about the integration of the three social capital dimensions.**

2.5.1 Structural Dimension

First, *structural dimension* is referred to as the primary and overall pattern of connections between actors in the development of intellectual capital (Nahapiet and Ghoshal, 1998). The focal point of this dimension includes *network ties*, *configuration* and an *appropriable organization* (Nahapiet and Ghoshal, 1998). At this dimension, the *network ties* provide access to resources (Nahapiet and Ghoshal, 1998) and connection between members of an organization (Bolino, et al., 2002), while the *configuration* ties offer the right channel for information transmission, and finally, the appropriable *organization* refers to norms and trust that may influence patterns of social exchange (Nahapiet and Ghoshal, 1998).

Network Ties

In research, *network ties* have gained much attention in the social capital study mainly owing to their significant influence on information transfer, organizational learning

and execution of organizational activities (Bolino, et al., 2002). Based on literature, information flow through networks would lead quickly to established norms of cooperation (Walker, et al., 1997). Such claims on network effects are influenced by three pairs of *social network ties* which have been identified, and they are (1) the direct and indirect network ties (Hansen, 2002), (2) the internal and external network ties (Burt, 1997; Adler and Kwon, 2002), and (3) the strong and weak network ties (Hansen, 1999). These *social network ties* may affect the resource accessibility and exchange among the ES users to accomplish their tasks. This study would consider all possibilities of *social network ties* in influencing social interactions between actors and affecting ES use. Table 2.3 summarizes the main functions of the three pairs of *social network ties'*.

Types of Social Network Ties	Main Function
Direct and Indirect	Search and access to quality information and reduce the information distortion possibility.
External and Internal	Indicate span of the information search
Strong and Weak	Facilitate sharing, searching and transferring of quality information.

Table 2. 3: Main concepts of different social network ties

Basically, the *direct and indirect network ties* are known as the two forms of knowledge network relations that are being used to search for and access knowledge residing in other business units. They can assist and provide proper understanding of the effectiveness of inter-unit knowledge by sharing and explaining the reasons why some business units are able to benefit from the knowledge residing in other parts of the company while others are unable to do so (Hansen, 2002). The choice of using these *direct and indirect network ties* will allow researchers to understand the style and pattern of ES users in seeking and accessing knowledge residing in intra and

inter-business units. The right use of such network ties would facilitate actors to make decisions with rich information unlike before (Soh, et al., 2002).

Different types of knowledge networks will bring different variable effects and impact the ES users. *Direct network ties* refer to two business units that are established directly without any intermediary business units. Thus, knowledge distortions are not an issue here as there isn't any intermediaries' involvement. These *direct network ties* are not only able to provide direct access to other business units, but are also helpful in solving knowledge transfer issue through the use of non-codified method (Szulanski, 1996). Non-codified knowledge is defined as knowledge that is difficult to adequately articulate in writing (Zander and Kogut 1995). The benefits of *direct network ties* will be jeopardized when the knowledge to be transferred is codified, as this attributes to high maintenance costs in maintaining the direct inter-unit network ties among members of the focal team (Hansen, 2002). However, it is still important to promote more direct network ties and encourage extensive communications between different subunits so that knowledge sharing will be uninhibited (Hansen, 1999).

On the other hand, for *indirect relations*, the connections between two business units are done through intermediaries. Intermediaries with short-path lengths (fewer intermediary units) may lead to shorter information transmission time as compared to long-path lengths (more intermediary units). This is because long-path length may require extra time spent on verifying the relevance of information received (Hansen, 2002).

Knowing the source coupled with the ability to access better quality information, *external and internal network ties* would be an influencing factor. *External ties* give an actor the opportunity to leverage his or her contact's resources, while the *internal ties* will create the opportunity for actors to act together. Such network ties are equally important in social capital because once an actor has established extensive network ties either with colleagues or friends through external network ties, he or she would be able to find out the source of information, as well as gather reliable and better quality information (Adler and Kwon, 2002).

The ability to share, search and transfer useful knowledge among departments is based on the strengths of network ties, either *strong or weak* (Hansen, 1999). Such *network ties* have their strengths and weaknesses respectively in facilitating search and transfer of useful knowledge and information across organization subunits. Basically, even though knowledge is highly complex, strong inter-unit ties provide the least negative effect on completion time, while weak inter-unit ties present a contrasting outcome (Hansen, 1999).

Network Configuration

Conventionally, the *network configuration* ties should offer the channels for information transmission, but clearly the overall arrangement of these ties also constitutes an important component of social capital that may impact the development of intellectual capital as claimed by Nahapiet and Ghoshal (1998). In this aspect, Nahapiet and Ghoshal (1998) had taken a wide consideration from the social capital literature which is summarized into three main categories.

Firstly, they had recognized the influences of these three properties of network structure, such as density, connectivity, and hierarchy (Ibarra, 1992; Krackhardt, 1989) on the information exchange through different levels of contact or provided network. Secondly, they acknowledged that actors with richer, spare and diversified networks could enjoy the benefit of having more access for information transmission. Certainly, trust and trustworthiness is another influencing factor in the choice of contacts which should be taken into serious consideration. Finally, the possible influences and impact that are brought by different *network ties* (See Table 2.2) could also influence the information transmission. In summary, they have important influence on the information resources accessibility in the *structural dimension* of social capital (Nahapiet and Ghoshal, 1998).

Appropriable Organization

Nahapiet and Ghoshal (1998) suggested that ties, norms and trust are developed in one context which can often be transferred from one social setting to another to influence social exchange patterns. This suggests that organizations created for one purpose may also well be used as a valuable resource for others or to serve different purposes (Putnam, 1993, 1995). This study believes that the *appropriable organization* could probably be cultivated by the top-management and transferred to the lower management and employees. By doing so, the management could indirectly manipulate ES users' search for information and knowledge, the style of exchanging ideas and even the common practice of the organizations.

Overall, the *structural dimension* of social capital provides a clear picture of the network ties that could (1) explore, search, and access information, (2) indicate the

span of the information search and (3) facilitate sharing, searching and transferring quality information throughout the organization. These are the important areas that are to be examined in detail as they may provide organizations with better understanding on how to find, share, retain and transfer knowledge and information among ES users.

2.5.2 Relational Dimension

Secondly, *relational dimension* refers to assets that are created and leveraged through relationships that include attributes such as: *trust, norms, obligations and expectations and identification* (Nahapiet and Ghoshal, 1998). This dimension deals with the anticipation, motivation and cooperation between parties to exchanging and combining their knowledge with each other.

Trust

Trust is the key coordinating dimension in exchanging and combining knowledge in organizations (Chun and Bontis, 2002), and the debate of trust and cooperation among actors has always related back to social networks and ties (Cohen and Fields, 1999). Trust is a necessary pre-condition in successful network relations (Granovetter, 1985) and is known as the essential lubricant to any and all social activities as social capital thrives on authenticity (Cohen and Prusak, 2001). Hence, "it is clear that social capital often generates trusting relationships, and more importantly the trust generated will in turn regenerate social capital," claimed Adler and Kwon (2000, p. 100).

According to research, if an individual does not trust the knowledge of others, it is unlikely that the knowledge would be used (Lesser, 2000). Thus, it is important to understand the true nature of trust (Cohen and Prusak, 2001). A comprehensive

analysis of trust is stated in Table 2.4, and it will be used as a guide in analyzing the role of trust in this study.

Dimensions	Components
Source	-Familiarity through repeated interactions -Calculation based on interests -Norms that create predictability and trustworthiness
Mechanism	-Direct interpersonal contact -Reputation -Institutional context
Object	-Individuals -Systems -Collectivities
Basis	-Consistency, contractual trust -Competency -Benevolence, loyalty, concern, goodwill, fiduciary trust -Honesty, integrity -Openness

Table 2. 4: Dimensions and components of trust (Chun and Bontis, 2002, p. 27)

Table 2.4 is drawn up based on the understanding of *trust* by Chun and Bontis (2002). The thoughts flow from the origin of trust (*Sources Dimension*), generation of trust (*Mechanisms Dimension*), items of trust (*Object Dimension*) down to the fundamental basis of trust (*Basis Dimension*). Apart from this, it is also important to note that *trust* can be quite fragile and volatile. One dishonest action can cause measurable harm to an organization's social capital (Cohen and Prusak, 2001). Besides, embedded trust in organizations would influence decision-making to engage in misconduct. In other words, trust articulates general procedural norms which have the inherent opportunities and temptations for abuse (Arnold and Kay, 1995). Therefore, organizations should carefully encourage and take reasonable steps to cultivate *trust* among their employees (Cohen and Prusak, 2001).

Once a high level of trust is achieved, actors will be more willing to take risk in knowledge exchange (Nahapiet, 1996; Ring and Van de Ven, 1992). This means, the

willingness of actors in combining different sorts of information would increase. As trust can increase the potential of a system for coping with complicity, the development of new intellectual capital is made possible. The establishment of trust would result in greater openness to the potential for value creation through information and knowledge exchange and combination (Nahapiet and Ghoshal, 1998). Such exchange and combination of information and knowledge represent a two-way interaction between trust and cooperation: trust lubricates cooperation and cooperation itself breeds trust according to Nahapiet and Ghoshal's (1998) findings. Over time, such two-way interaction functions as the network of relations in generating trust (Arnold and Kay, 1995) which eventually develop to generalize norms of cooperation and coordination in organizations (Kramer, Brewer and Hanna, 1996).

In this respect, *trust* built may eventually be embedded in the social fabric and become the *norm*, giving rise to "this is the way things are done around here" (Cohen and Prusak, 2001, p. 43). This serves to transform people with little sense of *obligation* on others as members of a community with shared interests and a sense of common good (Adler and Kwon, 2000). Based on this logic, this study assumes that an individual who is assigned to a specific task would have attained a certain level of willingness in sharing and contributing his or her knowledge in order to accomplish his or her assigned task.

Norms

Norms constitutes a powerful effect and is known as a key source of social capital (Putnam 1993; Portes, 1998) which has control over situations in the social system

(Coleman, 1988; Adler and Kwon, 2002). It further provides benefits of social capital's cohesiveness within an organization or community (Coleman, 1988; Adler and Kwon, 2002) as the norms of generalized reciprocity is able to resolve problems of collective action and bind communities (Alder and Kwon, 2000) through the scarification of one's self-interest and acting in the interests of the collectivity (Coleman, 1988).

Coleman (1988) proposed that the formation of norms in organizations is based on the two network structures notably closure and open network. For the norms in a closure-network, an individual in a group does not have any control over the situation that he or she may be affected as a result of the actions of others. Situations may be worse in the case of a high-closure-network structure, because it may create groupthink, in which team members do not question decisions made by the team. On the other hand, an open-network structure may bring the opposite effect to a group, where consensus is hard to achieve by the group. Thus, an open-network structure will lessen the cohesiveness in an organization and weaken the social capital effect (Adler and Kwon, 2002). All these positive and negative effects of norms are important factors that may facilitate or hinder the ES users' performance when exchanging information and knowledge among themselves.

Obligation, Expectation and Identification

Obligation, expectation and *identification* are known as the supporting factors for knowledge to be exchanged between the source and recipient (Nahapiet and Ghoshal, 1998; Coleman, 1998). According to Coleman (1998), there exists a certain level of expectation in the social structure whereby "people are always doing things for each

other" (Coleman, 1988, p. 102). This expectation factor is built on the *norm* and *trust* that is already established in the social environment. For example, to a certain extent, ES users within the same department are ready and are willing to cooperate and exchange information and knowledge among themselves. The reason can be that they hold the similar *obligations and expectations* from their management and are expected to accomplish tasks with the aid of ES within a given timeframe. However, the depth of knowledge shared and integrated among ES users is still yet to be explored here.

In summary, the relational aspect of social capital may be important in infusing the connection among employees with affective components. To strengthen the success of this dimension, it is important for management to cultivate and provide good opportunities in encouraging ES users to work with each other. Social interactions among ES users should be encouraged so that cohesiveness can be created among them. The recruitment, engagement and retaining of skilled and dedicated knowledgeable employees may contribute to better ES usage and organization advantage for the institution.

2.5.3 Cognitive Dimension

Finally, *cognitive dimension* represents shared understanding, interpretations, and systems of meanings among parties achieved through *shared language, code and narratives* (Nahapiet and Ghoshal, 1998).

Shared Language and Codes

According to Nahapiet and Ghoshal (1998), *shared language and codes* may influence the conditions for information of knowledge combination and exchange. Besides, the languages that are commonly used, such as English, Japanese, shared language will also include acronyms, subtleties and other underlying assumptions that are used in day-to-day interactions (Lesser, 2000).

According to Nahapiet and Ghoshal (1998), there are three ways in which a shared language is able to influence the conditions for combination and exchange of information and knowledge. First, *shared language* enables organizational members to communicate more effectively (Boisot, 1995), because it enables the enhancement of the combination capability (Nahapiet and Ghoshal, 1998). In contrast, people who use different languages and codes will be kept apart and suffer from restricted access (Nahapiet and Ghoshal, 1998) and have difficulties reaping the benefits associated with the building of social capital (Lesser, 2000).

Second, shared languages and codes are found to provide a common perception for evaluating the likely benefits of exchange and combination (Nahapiet and Ghoshal, 1998). This statement is supported by a few other researchers, such as Berger and Luckman (1966) and Pondy and Mitroff (1979), who claimed that the use of languages will influence people's perception of others. Likewise, shared codes organize data into perceptual categories and provide a frame of reference for observing and interpreting the environment (Nahapiet and Ghoshal, 1998).

Shared Narratives

In addition to shared languages and codes, *shared narratives* are, according to Clark (1972) and Nisbet (1969), another powerful means in communities for creating, exchanging, and preserving rich sets of meanings. *Shared narratives* comprise myths, stories and metaphors which also play an important influencing factor to create, exchange and preserve rich sets of meaning in an organization (Nahapiet and Ghoshal, 1998). According to Cohen and Prusak (2001), *narratives* may simply bring people together through story telling and myths that provide opportunities for conversation and also create friendly environment that makes it an essential contribution for social capital.

Cognitive social capital did play an influencing role in the ES project because, according to previous researches, it is difficult to achieve common knowledge in ES implementation. Often, there are gaps among the three parties (end-users, IS department personnel, and the ES vendor) throughout the entire ES cycle (Soh, et al., 2000). So, it is important for ES project team members to establish cognitive social capital among each other, in order to overcome issues like insufficient mutual understanding and the challenge of knowledge boundaries. The examination on this issue may provide researchers the opportunities to disclose the challenges and enablers encountered by ES users.

2.6 Summary

To sum, study posits that there is an urgent need to understand ES implementation and use particularly in the context of post-implementation. Few have attempted to understand the challenges and issues faced by the ES users in their daily use of ES. To

examine ES users' social interactions and integration related issues and challenges, this study has adopted Nahapiet and Ghoshal's (1998) framework to understand the social integration issues among the three dimensions of social capital. To accomplish this research objective, this will try to understand the collected interview data obtained from Talam to shed some light into the ES phenomenon by examining the concept and practice of social integration in ES use. With the help of an in-depth case study, a better understanding and explanation of the social challenges faced by ES users in their daily interaction with an ES could be unveiled.

Chapter 3: Research Methodology

The primary objective of this section is to resolve the use of technology- enterprise systems- from a socially related perspective in a systematic way to increase human knowledge (Jankowicz, 1995). For that purpose, the use of proper research methodology is vital to the success of this research. The flow of this chapter begins with the discussion of research philosophies, approaches, strategies, time horizons and then data collection methods. Finally, a review on the mode of analysis is done before the conclusion of the methodology chapter.

3.1 Research Philosophy

In general there are various ways of classifying research methods; however, the most common distinction in this current research philosophy could be separated into two main streams: they are qualitative and quantitative research methods (Myers, 1997). Qualitative research produces findings from other means of quantifications such as individuals' lives, behaviors, emotions and feelings, organizational functioning, and social movements. In contrast, quantitative research generally generates data from statistical procedures (Strauss and Corbin, 1998). These two main streams of research methods generally comprise many different research strategies such as experiment, survey, case study, grounded theory, ethnography, action research, cross-sectional and longitudinal studies, exploratory, descriptive, and explanatory studies (Saunders et al., 2000).

Given such wide varieties of research methods, the qualitative research method is adopted because of the nature of this research. Based on the research topic, it is important to understand the influence of organization's social activities towards the

use of ES. For this reason, it is more appropriate to use qualitative research because it is designed and tailored to assist research to understand and explore the cultural context of people and society (Myer, 1997) as compared to the quantitative approach. On the other hand, the use of the qualitative approach to study people and society related phenomenon would affect the quality of the social and institutional context (Kaplan and Maxwell, 1994). More importantly, such research method emphasizes processes and meanings that are not easily quantified and stresses on how social experiences are created and given meaning to (Denzin and Lincoln, 1994). Besides, such method also prevents the loss of the social context that would occur if the social phenomenon were quantified (Kaplan and Maxwell, 1994). To further explain the choice of this method, the researcher delves into the background of philosophical thoughts to understand the root of the methodology philosophy before providing deeper explanations and elaborations on the choice of qualitative research methodology in the following section.

3.1.1 Philosophical Thoughts: Qualitative Research

From the review of qualitative research, the most commonly mentioned philosophy of qualitative research comprised three different types of underlying epistemology, they are: positivist, interpretive, and critical (Myers, 1997) (See Figure 3.1).
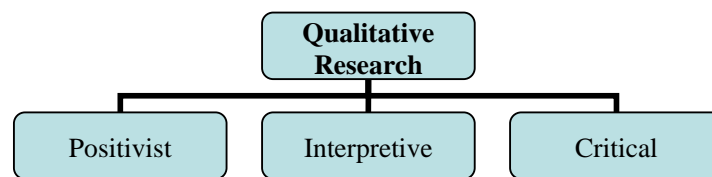
Figure 3. 1: Underlying philosophical assumptions (Myers, 1997)

Such categorization of qualitative research was agreed upon by many researchers such as Orlikowski and Baroudi, 1991, and Myers, 1997 besides Lee (1991). Lee (1991)

insists on integrating the positivist and interpretive approaches to examine the organizational research. However, such idea is hard to be accepted as the philosophical concept because positivist and interpretive approaches are totally contradictory to one another. In fact, it is still rather difficult to understand how these two approaches can complement each other (Orlikowski and Baroudi, 1991). Thus, the author chooses the interpretive research methodology. The general and basic reason is that among these three underlying philosophical assumptions, the chosen interpretive research has the potential to construct deep insights in relation to IS, management of IS and IS development by providing IS researchers with better understanding of human thought, action and organizational context (Klein and Myers, 1999). After selecting the particular philosophical approach, this research shall proceed to explain the enables, importance and benefits of adopting interpretive case study.

3.1.2 Interpretive Case Study

The interpretive approach is the most frequently used methodology in the IS research area (Klein and Myers, 1999). More importantly it has managed to emerge as an important stand in IS research (Walsham, 1995, 2005), as it enables IS researchers to better understand the relation of human thought and action in the social and organizational contexts and the meanings that are embedded in social life which could explain the behavior of people (Gibbons, 1987). Such method is important to this study, where the social interactions of people and their behavior can be analyzed to understand their influence on ES use; thus such approach is suitable for complex research questions and the nature of the phenomenon (Orlikowski and Baroudi, 1991). The complexity of social issues in ES use and its implementation is a known and

unresolved fact in research. Therefore, the use of interpretive research can best assist the author to understand human thoughts and actions in complex organizational context especially in ES phenomenon (Soh, et al., 2000). Such approach has the potential to produce deep insights into IS phenomena including the IS management and development (Klein and Myers, 1999; Lee, 1991; Orlikowski and Baroudi 1991; Walsham, 1995). More importantly it can also provide a higher degree of openness towards the field data that leads to richer analysis and identification of new issues (Walsham, 1995).

3.2 Research Strategy: Case study

The case study method is used mainly in this study because it is appropriate for the research question which is exploratory in nature. It explores the processes underlying social integration (SI) and focuses on the examination of a contemporary occurrence during ES use that is truly beyond the control of the investigator (Yin, 1994). In addition to this, nowadays, this research method has increasingly gained respect in the IS discipline (Orlikowskil and Baroudi, 1991; Yin, 1994; Markus, 1997; Klein and Myers, 1999; Markus and Lee, 1999) especially so now that it is accepted as a valid research strategy in the IS research community (Klein and Myers, 1999). The researcher finds that the use of statistical tests may not be suitable for this research phenomenon and area as it could be misleading for IS discipline because this particular discipline involves the tests and explorations of the social sciences in business (Galliers and Land, 1987) and the role of IT in how ES users and organization manage, exchange, share, transfer, access and use data, information, knowledge as well as intellectual capital, organizational memory, group knowledge, and document bases (Markus and Lee, 1999). These factors mentioned are not

suitable to be tested by using the statistical method. In addition, the need to limit the number of factors in this area of study may lead to misleading conclusions or bias findings (Galliers and Land, 1987). For that reason, the case study method is extensively used in various IS phenomena, mainly, in system development and implementation (e.g. Markus, 1983; Sarker and Lee, 2003; Robey and Newman, 1996). Such an approach enables the researcher to examine how the implementation and use of ES might have long term impact on the social environment of the organization. Hence, these are the strategies and issues that were being considered prior to adopting this case study method.

Basically, there are major advantages of conducting case study research. In terms of advantages, the first is flexibility (Welch, 1981; Yin, 1994) in comparison with the scientific research (Welch, 1981) as it enables the researcher to adopt multiple data collection methods to enhance the richness of research findings (Yin, 1994). Secondly, it emphasizes the context (Daillak and Alkin, 1982) or what is known as the "insider's view" (Yin, 1994) where it specializes in generating insightful stories or giving research results a more human touch. With such advantages, it could facilitate the researcher to examine the use of ES from human daily interactions so as to collect more in-depth stories and issues occurring during the use of ES. This emphasis can help to bridge the gap between abstract and concrete practices by allowing the researchers to compare their firsthand observations with the quantitative results obtained through other methods of research (Daillak and Alkin, 1982). By doing so, the researcher could have an in-depth view or holistic picture of the studied phenomenon (Yin, 1994), where it captures the human interactions between numerous

variables undergoing changes in highly dynamic processes (Daillak and Alkin, 1982) that might have influenced the social integration in the context of ES usage.

3.2.1 Single Case Study

This research is done based on a single case study; thus, it is not meant for generalization. Although Herriott and Firestone (1983) suggest that a multiple case study could provide more compelling, comprehensive and robust data, this study believes that one should be more opportunistic even if one has to settle for a single case study (Keil, 1995), particularly where quality and in-dept data are difficult to obtain, as in this study. Besides, single case study is adopted here because it is more suitable for theory building (Eisenhard, 1989).

3.2.2 Case Study Selection and Access: Talam Corporation Sdn. Bhd.

Since October 2003, the author has been trying hard to search for potential companies in Malaysia and Singapore which would allow her to conduct her research related to Enterprise Systems implementation and use. After enormous amount of effort, paperwork and phone calls (See the total attempts and failures recorded in Appendix 1 and 2), through a personal contact, the author was finally introduced to the son of the owner of Talam Corporation Sdn. Bhd. After several conversations through telephone, a few submissions of the formal proposal (See Appendix 3 for the formal proposal) on this research, and also with the help of the Executive Chairman's son, the executive chairman was convinced and agreed to participate in this study.

This company was being targeted for the research study primarily owing to its ability to successfully sustain as the top player in this industry coupled with its strongly integrated housing developer systems. The institution has critically integrated all its

organization's information flow internally (between its departments) and externally (among the nine other subsidiaries located all over Malaysia) more than five years ago. The details of the case description are provided in Chapter 4.

3.3 Data Collection

This section discusses the use of multiple data collection method, interview approaches and also several interesting issues based on the collected data.

Field Visits

Given that this is the author's first attempt at conducting the case study research method, a prior visit to the field was conducted before the commencement of the actual interview. In the first visit, the author spent nearly two hours explaining the purposes and contributions of this research needed to build a general understanding of the organization before ending with the proposed interview schedule to the Vice President of Talam Corporation This visit opened up the researcher's perception of the organizational environment, communication style and dress code in facilitating the researcher to blend into the organizational culture in the forthcoming interview sessions.

Interview Questions

A set of interview questions was drawn up before the commencement of the 1st interview which was mostly based on theories coupled with the work from the previous researchers (See Appendix 4: The list of interview questions prior to interview). These interview questions were used as the guidelines for the interviews. In addition, summary is written up after the interview. An agenda is also used to assist

informants about issues that will be covered in the upcoming meeting (See Appendix 6: Example of an agenda). This approach worked well as interviewees seemed to prefer knowing what to expect during the interview.

Archival Records and Examination of Documentations

A review was done on the archival records such as organizational mission, vision, goal, chart, history and future developments, which are taken as part of sources of data collection (See Appendix 7: Organization's history, future development, mission and goal). The researcher was provided with the documents related to the post-implementation events (See Table 4.4, p. 118), project processes and outcomes. Some other secondary documents such as current project plans, annual reports, company internal planning on future development and progress were also provided (See Appendix 8A & 8B: Samples of annual reports). All these documents and archival records function as the background information to facilitate the author in preparing more relevant interview questions.

Face-to-Face Interviews

Interviews (see Appendix 5: Sample of interview questions) are scheduled and carried out timely with the ES users from different departments including IT staff, managers and top-management, ES vendor, and Talam's bankers, along with a few direct observations (See Table 3.4). The perspectives of staff from different levels in the Talam Corporation provide a conceptual understanding of the whole system, while the perspectives from ES vendor provide the 3rd party viewpoint on the Talam's ES performance, usage and development. Besides, informal conversation with Talam's bankers have provided outsider stance on the Talam Corporation's employees' social

interactions in completing their assigned tasks. (See Appendix 9: List of interviewees' background and role)

A total of six periodical visits were conducted by the author throughout the months of March 2004 to May 2005 to the target organization. On an average, each visit lasted two weeks (See Appendix 10: Files and data collected from each visit). Together, the visits yielded 40 face-to-face interviews (with about 582,917 kb recorded file's size and 15,180kb data transcribe size (*about 225 pages*)) along with eight informal conversations; the shortest interview lasted 30 minutes and the longest lasted three hours. The informants of this study were ES users ranging from the top management, the middle management, different ES user departments, the IT department, as well as the IT vendor (Refers to Table 3.2, pg. 59). In addition, a compilation of secondary data (about 19.7MB) was obtained from all departments that was related to provide customer-centric ES implementation and use, such as sales and marketing, credit control, finance, customer service action centers (CSAC), and IT department. Secondary data such as press releases (See Appendix 11), email, publicity leaflets (Refers to Appendix 12), ES informational brochures (See Appendix 13), organizational charts, policies (See Appendix 14) and annual reports (See Appendix 8A & 8B) were also included. These multiple sources of data provided the research with the condition for data triangulation which fostered additional rigor to this study (Klein and Myers, 1999; Stake, 1994).

ES Users	Interviews
Top management	11
Middle Management	9
Other user department staff	8
IT staff	10
IT vendor	2
Total	**40**

Table 3. 1: List of interviews

Role	Number of Observations	Total Average Time for Observation
IFCA Vendor	1	10 min
Talam Corp	2 (Marketing Depart)	30 min
	2 (CSCA Depart)	30 min
	3 (IT Depart)	25 min
	3 (Foyer)	40 min
	1 (Branch Sales Office)	25 min
Talam Corporation's Banker	1	15 min
Total no:	**13**	**175 min**

Table 3. 2: Total number of other interviews and observations

All the interviews were done in accordance with the need for better understanding of the ES users; four out of the 15 interviewees are IT staff members who also provide ES support to the users, while another two are the ES consultants who provide the service and support to Talam. The outcomes of interviews done with top-management were to provide a macro-perspective of this entire organization's operation, business progress, top-management goal, future plan and more importantly the top-management perspective of its current ES operation. The managers tend to provide detailed business operation procedures with the use, management and operations of ES, while the staff is inclined to provide the researcher with another perspective of ES operation, usage, problems, difficulties and benefits encountered by them.

Performing Direct Observations

Direct observations by the researcher on the interviewees were done throughout the interviews and even through lunch sessions with the Talam employees. In addition, direct observations were also given due attention in all the visiting sessions to the company including watching employees leaving for lunch and tea breaks, as well as during their office operating hours (See Table 3.3). A total of 11 direct observations (total of 175 minutes) were carried out at the customer payment and complaint counters, sales office, IT department during their office operating hours, as well as watching employees leaving for lunch.

Use of Multiple Languages and Dialogues

The use of language is very critical in the interview process of Malaysian organizations. In order to make interviewees comfortable and approachable, the researcher would have to adopt and adapt to the levels of interviewees' languages and dialogues. This includes the use of English, Malay, Mandarin and Chinese dialects such as Cantonese, Hokkien. This issue does not take into account the education level of the interviewees, but it is rather to follow the organizational style of communication per se.

3.4 Mode of Analysis

The hermeneutics analysis is chosen because it suggests a practical way of understanding textual data (Myers, 1997). It offers the fundamental ontological insights into human interpretation and provides an understanding including the various forms of social action found in organizations (Butler, 1998). In addition, this mode of analysis is also known as a valid interpretive approach for research on the IS

development phenomenon (Boland, 1985) and it is the most commonly used approach. More importantly, the use of this analysis mode will enable the author to defend her work by engaging in principles that are firmly grounded in at least one major direction of interpretive philosophy (Klein and Myers, 1999).

To ensure the quality of this research, hermeneutics analysis is adopted as it was known as the most commonly used approach for research on information systems phenomena (Alder and Kwon, 2002). Hermeneutics helps researchers on fieldwork to study the philosophical foundations and to design their investigations more systematically. In addition, the collected data were organized according to themes so as to facilitate the researcher to identify the key elements from this case (See Appendix 18). Together with the use of hermeneutics analysis to make sense of the interviewees' world, the researcher is able to understand the meanings expressed and used by the informants in their language (Hirschheim, et al., 1991) as well as to discover or better understand a significant part of the case contributing to an understanding of the field study as a whole (Klein and Myers, 1999).

Hermeneutics analysis also provides a practical way of understanding textual data by allowing researchers to discover the core case information that is necessary for comprehending the case study as a whole (Klein and Myers, 1999). Such analysis is one of the most frequently used methods for interpretive studies; it consists of seven principles (Klein and Myers, 1999) (See Table 3.4). Such principles provide guidance in fieldwork, research for the philosophical foundations and design of systematic investigations. By using such principles it may then facilitate the discovering or better

understanding of a significant part of the case contributing to an understanding of the

field study as a whole (Klein and Myers, 1999).

Principles of Interpretive Studies	Applications
1. The principle of hermeneutic circle - human view is achieved through the preconceptions about their meanings and interrelationships.	In this study, SI processes in the post-ES implementation were studied through the interactions of users across departments, IT staff and management.
2. The principle of contextualization - original subject matters are to be well detained so that the intended audience can have a more complete view on the emergence of situations.	The case studies' primary and secondary data were collected dated back to 1994 till present at the site so that the researcher could trace the system progress according to chronological order and at the same time gather up-to-date information to understand and identify the complex phenomenon.
3. The principle of interaction between the researchers and the subjects - requires a strong interaction between the researcher and the subjects (research materials or data).	Close interactions with informants had helped the author to better understand the actual case situation. In which it has enabled the author to be more sensitive and alert towards the case phenomenon and question more appropriately instead of following the pre-set questions.
4. The principle of abstraction and generalization - proposes the use of a theory that is to be viewed in certain ways	By using the collected data, it had assisted the research to understand the general phenomenon of the data by relating to the relevant theory. In this case, social factors were the general issue of the phenomenon. Hence a general concept- social capital theory was adopted to guide the research to view the phenomenon from a certain perspective.
5. The principle of dialogical reasoning - requires the researcher to confront his or her preconceptions (prejudices) guiding the original research design	In the exploration of the phenomenon, the researcher confronted her preconceptions through logical reasoning with data triangulation method to unveil the dynamics and insights of the need to formulate a new conceptual model- social integration based on the existing social integration theory.
6. The principle of multiple interpretations - recommends viewing the same case critically. Researcher must be sensitive towards the different interpretations from the respondents.	The researcher has to consider multiple perspectives interpretation on a particular issue. For confirmation and reassurance, follow-up interviews, observations and examination of documents were done on the same issue to validate the accuracy of the analysis.
7. The principle of suspicion - suggests the need to be sensitive in order to avoid possible biases during the data collections from the participants	Given the dynamics of relationships between multiple parties in the project, the possibility of biases is high, thus, serious and careful due attention were given to this matter.

Table 3. 3: Seven principles of interpretive studies (Adapted from Klein and Myers, 1999)

In order to produce a deeper interpretation of the phenomenon, the ten methodological principles (See Table 3.5) for the interpretive process were used as reference in this research.

Ten Methodological Principles for the Interpretive Process

Ten methodological principles for the interpretive process	
Coherence	The interpretation of a text or phenomenon/ actor's "thought" must present a unified picture and not be contradictory
Comprehensiveness	Interpreting a text or an actor's perspective on an issue must take note of the author's/social actor's "thoughts" as a whole, and not ignore other relevant thoughts'.
Penetration	A good interpretation should be "penetrating" in that it brings out a guiding and underlying intention in an author's/actor's actions and statements: this is indicative of a teleological dimension to the hermeneutic method.
Thoroughness	A good interpretation must attempt to answer or deal with all the questions it poses to the interpreted phenomenon, or those that the phenomenon/social actor poses to researcher.
Appropriateness	To be considered a good interpretation, the questions the interpretation deals with must be ones that the text/phenomenon itself rises.
Contextuality	The text/phenomenon/actor's thoughts must not be read out of context, i.e. without due regard to its historical and cultural context.
Agreement (1)	An interpretation must agree with what the text/actor actually says, that is one must not, or normally not, say that the 'real' meaning of what an text/actor says is something quite other than what it/he actually says.
Agreement (2)	A given interpretation should normally be in agreement with the traditional and accredited interpretations of a text/phenomenon.
Suggestiveness	A good understanding will be "suggestive" or fertile in that it raises questions that stimulate further research and interpretation.
Potential	A given interpretation can be judged to be "true" if, in addition to meeting the above requirements, it is capable of being extended and if the process by which it is reached, and implications it contains unfold them harmoniously.

Table 3. 4: Ten methodological principles for the interpretive principles of the hermeneutic (Butler, 1998, p. 292)

These ten principles (See Table 3.4) the key of hermeneutics research through the combination of the central role of the dialectic and the hermeneutic thoughts- 'circle of understanding' (Butler, 1998). The following Table 3.6 shows the circle of understanding and usage of hermeneutic thoughts in assisting the researcher to better understand the Talam Corp's case phenomenon.

The Circle of Understanding

Circle	Researcher's Horizon	Phenomenon's Horizon	
		Whole	**Parts**
A	The researcher builds a historical consciousness/ prejudice on the ES implementation process through literature review.	The human interactions was claimed to be the main problem of ES use in the most recent literature	Theories, concepts, themes, findings, that are related to the major streams of the ES literature- e.g. different types and cycles of ES implementation, and social capital issues in ES use.
B	The researcher obtains a deeper horizon of understanding from the previous horizon A	A field visit to Talam followed by a few telephone calls were done to help the researcher understand the company better	The preliminary field visits and interviews helped to find out the current and future of ES events, in terms of human and technology development related issues.
C	The researcher's horizon is constituted by a combination of theoretical/conceptual/ empirical perspectives in the literature coupled with the horizon offered by the phenomenon empirical study	Empirical study of the three SC dimensions on the ES used issues.	Interviews were first conducted from the top-management, IT staff, down to users across departments that use the ES in the company. Interviews were tape-recorded, while other additional insights come from documentary evidence, observations, and other informal outings.
D	The researcher's horizon now consists of cumulative perspectives resulting in 'fusion of horizons' produced in C	Accumulated research artifacts on the phenomenon and its environment may describe and give definition, direction and process to the SI.	Interview transcriptions, secondary data, write-up of information conversations, etc, would be used for data triangulation. Inductive analysis would be done to reveal the underlying perspectives of the activities of the social actors involved in the ES used- thus, the parts emerged from the analysis.
E	The researcher's horizon encompasses the cumulative fusion of horizons as represented by her understanding of the post-ES implementation/ ES used process resulting from D	The explanation provided by the researcher's text.	The themes, descriptions, arguments, graphical mechanisms, tables, descriptive matrices will be used to explain the complexity of the SI process that has been taken place during the use of ES. Researcher will also take note of the salient SI process related to the individual interactions among ES users and describe them in extended narratives. Finally, a discussion and conclusion will be done to summarize the phenomenon in detailed.

Table 3. 5: The circle of understanding as applied in the case (Adapted from Butler, 1998, p. 296)

The circle of understanding that is proposed by Butler (1998) has clearly guided research to understand the Talam case study. A detailed description of data which has been collected is presented in the following Chapter 4.

Chapter 4: Case Study

4.1 Case Background

As one of the biggest and fastest growing public listed housing developers in Malaysia, Talam realized a decade ago the need for an integrated system to streamline its daily operations. At that time, the ES concept was fairly new and packed with uncertainty. Nevertheless, after serious considerations, the company decided to seize the first mover advantage in adopting ES in 1995. It saw ES adoption as its new business strategy to better manage and integrate the tedious and complicated documentations in relation to its business dealings in order to provide a better service to its customers. The departments that were integrated are directly related to customers' welfare, such as marketing, credit control, finance and customer service action centers (CSAC). These departments are dealing with documentations covering sales and purchase contracts, bank loans and government-related paperwork, etc. Their functions are critical to the survival of the corporation as information is not only private and confidential but also related to monetary matters involving, in most cases, the transactions of a few hundred thousand Ringgit Malaysia (RM) per customer. With this ES implementation, Talam hopes to further derive its future business values through greater productivity and efficiency in terms of reducing manpower cost, and providing better after-sales services for customers to nurture good will, confidence and reputation along with other 'industry best practices' to ensure greater accountability and transparency in the housing developing industry.

Organization Management Styles

The company has developed into a multi-billion-dollar business enterprise under the leadership of its current President, who is the most powerful and influential person in

the organization, as he is the major share-holder of the company. Aside from this, the President, as claimed by his top-management, is a charismatic leader with rich working experience, knowledge, good management skills and business contacts in this field. In this organization, he imparts his subordinates with his beliefs in cultivating good organizational norms such as *being goal-oriented, hardworking, honest, diligent, being respectful and polite*. As part of the process of ensuring the company is in compliance with the above culture, the President has structured the organization to fit his ideals through top-down management, command and control, like a spider web claimed the Vice President (VP). Even though the President practiced management by objective (MBO), he is still highly respected by his fellow managers at all levels. His VP commented:

> "He started the company from humble beginning and developed it into a multi-billion-dollar business enterprise. He could not be wrong in this respect. A successful leader must be able to dictate and take risks. A company with too much democracy tends to lose out in the highly competitive market which requires quick decisions and firm directions."

According to his management style, *hierarchy-oriented structure* is formed whereby the President and the managing director (the spouse of the President) represent the supreme authority that decides the organization's directions, goals, mission and vision. With the use of ES, the President is provided with up-to-date and accurate information from all departments to help him in his daily decision-making. This information is generated from the daily executive summaries obtainable via the system. Once a decision is made, it is the President's common practice to empower

top managers to carry out the respective tasks in their own preferred management styles. The President strongly believes in giving the top management- all Head of Departments (HoDs) a free rein in fulfilling their objectives once a goal is set. This belief has been deeply rooted after more than ten years of working together through ups-and-downs in which trust is fostered. For that reason, the top management employs the philosophy of management by objective (MBO) along with an open management style to manage their immediate subordinates- managers. This is because top management believes that each manager would have his or her unique style of completing the tasks. Besides, top management also believes that the open management style could stimulate managers' critical thinking to operationalize the assigned plans creatively, productively and efficiently. Managers of this organization apply either the democratic or autocratic management styles according to specific employees' job nature. This will be further elaborated in the subsequent paragraphs. See Table 4.1 for the different levels of management styles applied in Talam.

Management Level	Management Style
President and Top management	Management by objective (MBO)
Top management to Management	Management by objective and/ or Open management
Management to operatives/ staff	Democratic or Autocratic

Table 4. 1 Different levels of management styles

Organization Physical Layout

The President also believes in cultivating honesty and cohesiveness among employees. To support such belief, Talam's 22 floor offices layout are designed and arranged according to Figure 4.1., except the 23 floor which is the office for the President and the managing director.
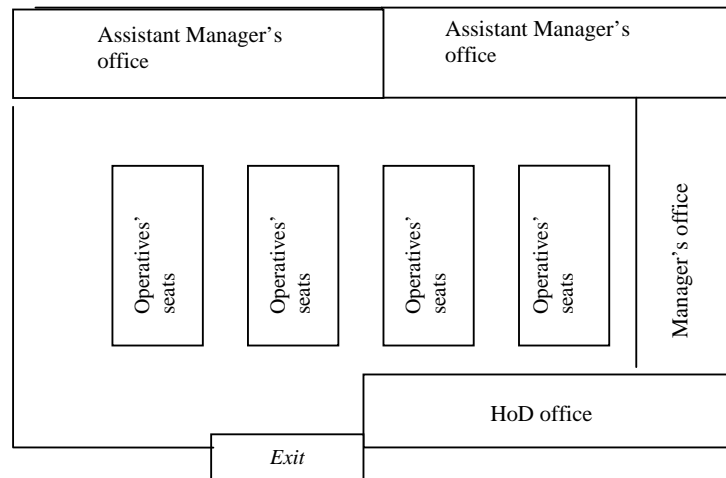
Figure 4. 1: Floor plan for all departments

Operatives/staff are seated in the middle of the department surrounded by the offices of the Head of Department (HoD) and managers. Office doors are always open and windows are not covered by blinds. As for the staff, they are not separated by any partitions between them. The IT executive remarked:

> "This office setup is good. The open environment in the office makes us transparent to each other, as no one can hide behind partitions or blinds and isolate himself or herself. This is a pre-requisite to foster a highly conducive working environment where cooperation is highly priced. Therefore, I find that this office layout has provided us the condition and opportunity to reach out to our colleagues, unlike the previous company that I worked in before."

Senior managers were expected to influence and act as the role models for their subordinates to adapt to a new or preferable norm in the organization. For an example, to cultivate and encourage honesty and straightforwardness among colleagues, the IT HoD and other departmental managers play the role of moral agents through their words and deeds. By doing so, they become the catalyst of change in promoting good

ethical conducts and at the same time trying their best to reduce misunderstanding and unnecessary office politics which might affect the morale of the entire organization and operation. The IT HoD said:

> "I always try my best to make sure that my subordinates get fair evaluation and job dissemination. Practicing good ethical values is the least I can do to reduce politicking in my IT department."

Transforming and fine-tuning employees' mindset through unity-building is crucial in ensuring that organizational goals can be attained, as unity is power. Trust is built over time through applying fair and transparent policies along with consistency in management practice and style.

IT Philosophy

The vision of this organization is to be in complete control of its administration and IT systems without much reliance on external consultants. The consensus reached by the top management was that they believed that it is important for them to have full control on its ES system so that they could develop and customize the system according to its business nature and gain the competitive advantage from customized business processes by fulfilling customers' needs. An example given by the Senior VP II:

> "Customers do not like to waste their time to complete the sales-and-purchase (SNP) contract. In the past, purchasers had to queue up to acquire SNP forms, before visiting several government-linked offices and banks to apply for the withdrawals of Employees Provident Fund (EPF) and bank loan. The whole process would take a few weeks before purchasers could proceed to our office to clear the SNP

agreements with us. But now, after customizing and streamlining our business processes, Talam is able to get all the transactions done in a single day through the one-stop-station service. More importantly when the need arises, Talam has the capacity to get 200-300 housing contracts and all related documents done in just one day. In addition, the present computerization system has cut down all possible errors in going through the tedious form fillings, etc."

In addition, the top-management also believes in providing practical and relevant IT system for Talam's operations as they think that unpractical and ambitious system design may bring more harm than benefit to the company. A story is shared by the IT HoD:

"My friend who is the IT HoD of a company sent his company into critical financial crisis after spending millions of dollars in implementing an unpractical ES package by believing the ES vendor's over-promising outcome."

To implement the right system, the company had not only carefully selected the most famous vendor, Information For Competitive Advantage (IFCA) Sdn. Bhd that offers the specific ES to property industry dated back in 1990s', but also chosen the UNIX operating system based on their staff IT capability and the system's performance and security requirements. The IT HoD claimed:

"UNIX has lower risk in attracting virus attack as compared to other operating systems, therefore we favor it."

In addition, the company obtained support from IBM machinery and signed a disaster recovery contract with IBM in providing extra security for its company data. Moreover, the ACCELL programming language was used as it was claimed to be the most famous programming language at that point of time due to its simple programming command. An example given by the IT HoD:

> "With ACCELL, you just need to key in a simple command to create
> the main platform needed before you add in the details as you go
> along."

All these were the efforts put in by Talam to go in alignment with its IT philosophy.

Enterprise System Implementation

The hiring of the new IT HoD and the implementing of the new system require structural reformation within the organization to make sure that decisions are made on time and conflicts of interest among different departments are minimized. At the same time, Talam's top management believes in management by objective (MBO), thus an internal audit committee is set up to restructure the departmental objectives of the organization and employees' tasks allocation for the implementation and use of ES. The two main tasks of the internal audit committee are (1) to define lines of responsibilities and the delegation of authorities whereby a process of hierarchical reporting was established to provide a documented and auditable trail of accountability, and (2) to compile and update Standing Instructions and Standard Operating Procedures (SOP) for key processes in all departments.

> "Such pattern of network structure procedures has better connected
> employees and speeded up the decision-making process. For example,
> these two procedures provide a clear set of tasks in uniting and

coordinating IT team members so that they could fulfill their obligation

in time," explained the VP.

In addition, the SOP outlines the employees' responsibilities, including their routine tasks which help employees to focus on their main objectives, job functions and obligations. The SI and SOP also formally bind the different departments together. Operatives and managers from different departments were expected to cooperate and support each other in fulfilling their assigned tasks according to the SI and SOP. These clearly defined structural arrangements have added authority and greatly assisted the new IT HoD in carrying out his aims during and after the ES implementation. In addition, the good interpersonal skill possessed by the IT HoD was an additional advantage that enabled him to gain respect and speed-up the process of cooperation between Talam IT team members and users. According to the user-credit control manager:

"During that time, I was one of the selected users' representatives to

participate in that implementation project. We were told to use the

system and express our views to the implementation team. We just

played a very small role in the initial stage, as our company was not in

the position to formulate customization processes yet. Prior to the

beginning of the project, we were told that this newly recruited IT

HoD, who was hired from the vendor to help our organization to

implement the system, was very knowledgeable, and it was our

responsibility to assist him in completing this mission. Initially, since

this was top management's directive, we just followed the instruction.

But after working with the IT HoD for some time, we slowly got to

know him as a friendly, humble and easy-going person without any bossy attitude hated fiercely by the majority of us in this organization."

An IT executive also added on his personal working experience with the IT HoD, by claiming that:

"Our IT HoD will ask courteously, 'Can you please help me to do this?' He is not only polite and diplomatic but also respects us unlike the IT manager who always instructs us to work for him without much respect. Therefore most of us do not quite get on well with him. In fact, at times, just to keep his mouth shut and to express our dissatisfaction, we simply work for him, just to keep his mouth shut."

Since this is a big-bang ES implementation, conflicts between the vendor and the client are minimal because at this stage, the client just accepts what is being provided by the vendor because Talam had purchased the ES source code and would only go for customization after the system was stabilized and deeply evaluated by the ES team. Thus, with cooperation obtained from the Talam ES team, along with the establishment of good rapport with the IT Vendor (the IT HoD's ex-colleagues) ES implementation went on smoothly. According to the IT vendor:

"Talam Corp took only three months to implement the system and our consultant team stayed only for an additional month to make sure things were up and running. It was a quick and easy implementation for Talam as the management was very cooperative and supportive towards this implementation. In addition, the acquiring of the right person with critical knowledge on top of the given structured networks

guidance and status had empowered the IT HoD to accomplish ES

implementation successfully."

After the ES implementation, another two key consultants from the vendor company joined the Talam IT team, and this strengthened the team capability. Together they spent almost a year studying and familiarizing themselves with Talam's organizational setup, business operations processes and customer needs before post-ES modification was carried out from 1996 until now (See Figure 4.2) because the bought-from-the-shelf system did not provide sufficient functions and supports for Talam's housing and development business operations. It also did not provide customer-centric services to distinguish Talam from its competitors. Therefore, system modification and alteration (customization) were a necessary on-going task for the Talam IT department besides system maintenance.
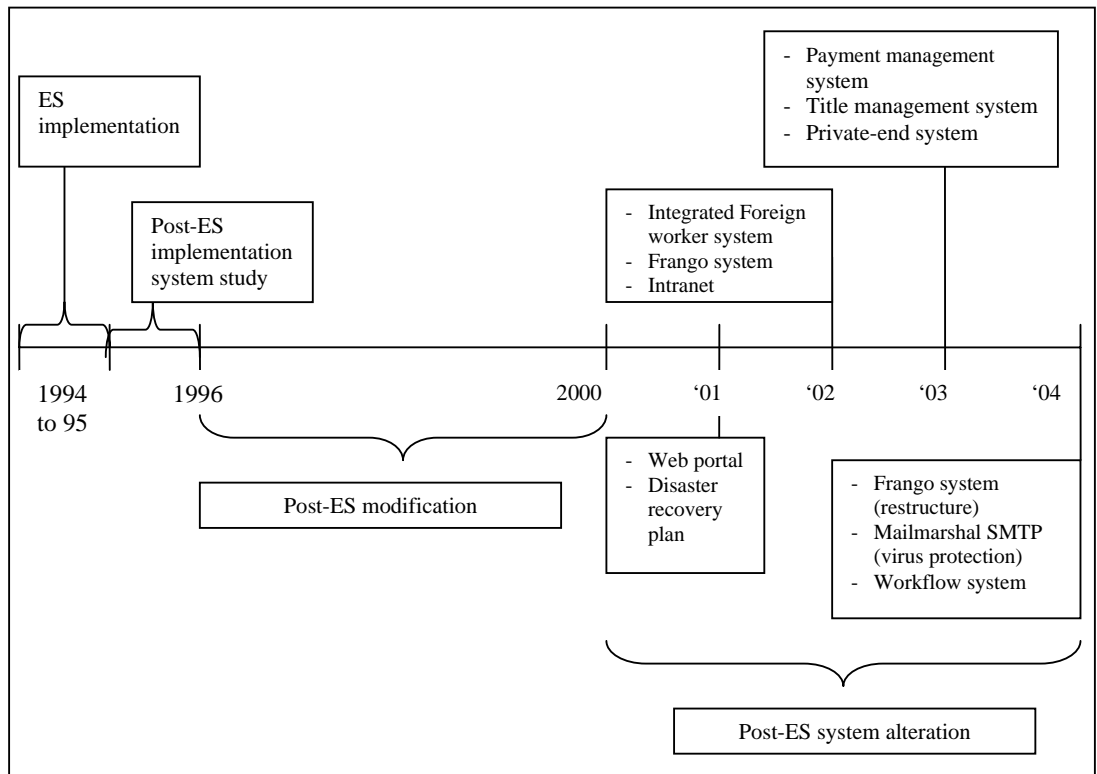
Figure 4. 2: The chronology ES development in Talam
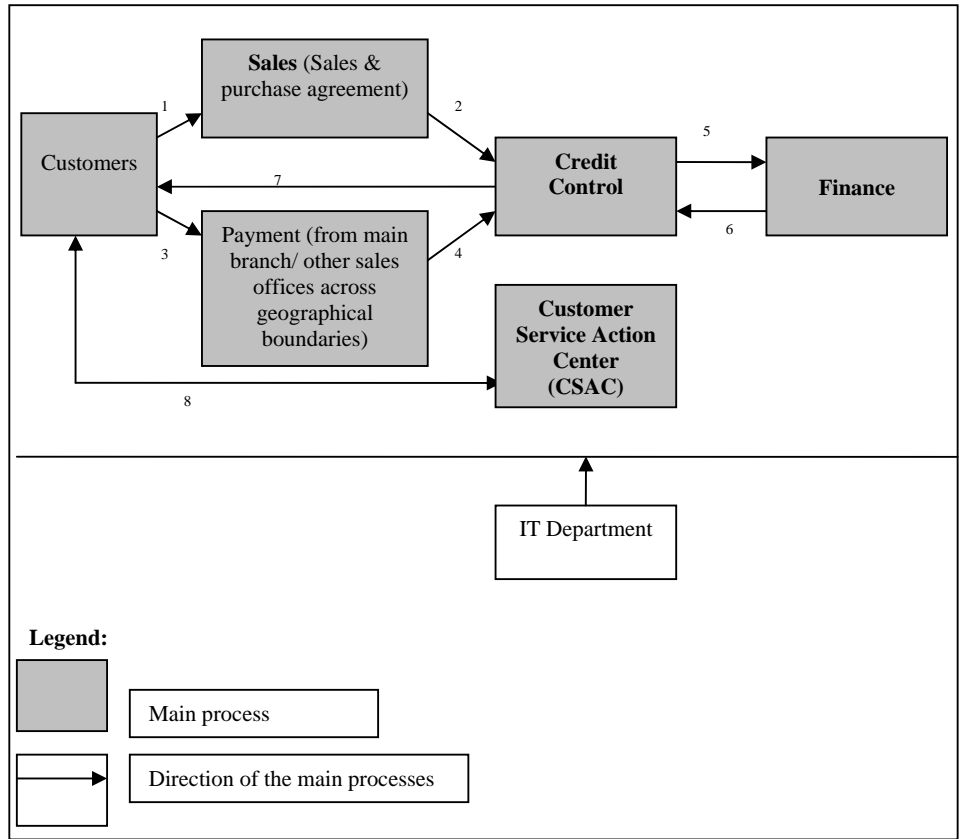
Figure 4. 3: Use of ES in Talam's daily operations

Figure 4.3 shows the entire property processing workflow throughout the departments at Talam – from the purchase of a unit of property till the end of after-sales services. For a simple explanation, a summary of eight key processes is provided before an in-depth illustration of the application of ES in all departments. The IT department, as shown in Figure 4.3, provides consistent technical support for the system. The IT HoD summarized the core function of the department:

> "Normally, our main tasks are to maintain, improve and design better
> functions to improve business processes based on users' requests, and
> more importantly, to suit the changes and amendments in the Housing
> and Developing Act (HDA)."

The use of the ES begins when a purchaser agrees to sign the sales-and-purchase agreement with the company. First, the sales staff logs on to the property sales module system to create a profile for the new purchaser. In this new profile, the sales personnel has to fill in the purchaser's particulars, including the payment settlement details. Then, the system generates three copies of the sales-and-purchase contract: for the purchaser, the lawyer and the bank.

Second, once the new profile is created, the person in charge of credit control in the housing project sees a new account in the property sales module system. Together, the credit control and sales personnel keep in touch with the purchaser to make sure that the purchaser makes the first 10% down payment for the house. The system allows users from different departments to update each other on a purchaser's status. A finance department staff explained:

> We are able to access the same customer's profile. So, if any of us were to make a call to a particular customer, we would make notes on the purchaser's response, the calling time, and the date, using the MEMO function. In this way, we keep each other informed of the purchaser's status.

Third, purchasers may choose to make payment at the nearest sales outlet or Talam branch office. When a receipt is issued by the cashier to the purchaser, its number is entered into the system. Since this is a nationwide integrated system, main branch personnel can see the information when they log in to the purchaser's profile. Cheques and cash collected daily are banked in by the dispatch clerk.

Fourth, at 5 pm daily, the dispatch clerk returns with the bank statements. The credit control manager explained what happens next:

> A duty roster is drawn up by the manager so that staff takes turns to stay back every day to key in the bank statement numbers into the system.

By the next day, everyone can view the updated information on the system.

Fifth, the data provided by the credit control department is used by the finance department. A finance department ES user explained:

> We need the data from the credit control department to update our financial module's account receivable and cashbook sub-modules before they consolidate the daily cash/cheque inflow and outflow.

Sixth, finance department personnel closely monitor the daily monetary inflow and outflow. One of them explained:

> I must keep close contact with the credit control department to ensure the accounts are balanced by the end of the working day. Otherwise, it will be my responsibility to solve the problem. Therefore, a good relationship with the credit control department is essential for me.

The finance department also has to take care of all the payments made to contractors and other organizations. The ES financial module is their tool in monitoring, operating and consolidating all transactions. A finance department ES user emphasized the importance of the task:

"This is an essential task for us as the President needs to be updated with the financial statements in the executive summary module every morning. Therefore, our department is always tied down by deadlines."

A daily financial report covering the company's business strategy, investment and progress must be presented to the President.

Seventh, the credit control module generates weekly reports by summarizing all the due and outstanding payments for the credit controller. According to the system's list, the credit controller sends reminders and makes calls to the relevant banks, lawyers and purchasers to request for payments. The progress statuses of all the requests are updated in the MEMO function, so that all staff are provided with the most current information to help them better serve the customers. The credit control manager explained:

"By checking the coding status in the property management module, we and the finance department staff would know when and which housing project is ready for collection."

Based on the information shown in the system, letters of notification are generated by the system and sent to purchasers. Before obtaining the house key, purchasers must make their final payment and collect the system generated receipt and letter. Purchasers can obtain their house keys at the site office by showing the site officer the receipt and letter obtained from the main office. Any verification can be done by the site officer through the system.

Eighth, purchasers are given 18 months of warranty against defects in the house. After inspection, purchasers have the rights to file complaints to the Customer Service Action Center (CSAC) department. The CSAC department will then log in to the purchaser's profile, file the defects complaints accordingly, and inform the project department to commence work within 14 days of complaints being lodged. A CSAC executive commented:

> Where necessary, our department – the CSAC department – can contact all other departments for any clarifications and verifications. Since the MD has given the directive to all employees to provide full cooperation and support to CSAC in order to ensure customers' needs are satisfied and enhanced, it is easier for us to get help from other departments.

Once the project department has completed the task, CSAC will be notified and a computer generated letter will be sent to the purchaser to request the purchaser for a second inspection. The case can only be closed after receiving the purchaser's satisfaction and acceptance agreement in black and white. These are the procedures of the ES in Talam. The following paragraphs will further illustrate in detail on the use of ES and human interactions within each of the department. The following paragraphs will look into the use of ES in each department according to the ES workflow as shown in the figure 1.3 above.

Use of ES: Sales and Marketing Module

The sales and marketing module supports the complete set of business information required. All information about housing packages, daily sales updates, and available housing slots are always handy and under the control of the marketing staff. In other

words, the marketing staff is provided with up-to-date and accurate information at all times to provide customers with the required information.

In achieving excellent system performance, a spirit of close cooperation and coordination among employees is the necessary factor. For the system to kick-start the new housing project information, the sales and marketing department would require cooperation from the planning department to provide the plans (e.g. layout, building plans) and the authority department to get the necessary approvals regarding the advertising permit, developer license and the like from the relevant government authorities. The sales and marketing manager said:

> "We don't have to worry about not being able to obtain necessary information on time because we (all departments) are given the same order that we must get things ready before the housing launch…they (other departments staff) will provide us with information before we request it of them".

Then the sales and marketing staff would have to work closely together so that all necessary information could be uploaded into the system on schedule. For example, before the launching of every new housing scheme, the sales and marketing staff would need to load the sales chart information into the system. According to a senior marketing executive:

> "Cooperation among staff will ensure the smooth running of the system. The tedious tasks, such as the loading of sales chart, would require more than a day's hard work for a single staff to complete. In order to get work done in time we expect help from our colleagues."

In addition, the system is also required to be loaded with the full package of sales-and-purchase (SNP) agreements, related government and bankers' documentations together with normal procedures so that sales staff are able to provide accurate and appropriate documentation for purchasers at all times, especially during the launch. In the past, purchasers had to queue up, visit several offices and wait for a few days for the clearing of their sales-and-purchase agreements, bank loans, etc. Now, with the fully automated and computerized system, the amount of paperwork and mistakes are significantly reduced. Many forms are now redundant and staff can now key in the purchaser's particulars and allow the system to generate the necessary documentations.

This system is able to pre-arrange the necessary documentations to better assist the sales and marketing staff, however, the staff must also possess the necessary knowledge and skills to access the system and provide the appropriate assistance to purchasers, claimed the IT vendor. In serving the different needs and doubts of purchasers, especially regarding their housing loans, employees will have to be well-versed in all related procedures to provide suitable advice and guidance, be able to access and prepare the appropriate documentations from the system before sending the purchasers to the corporate lawyers. In the training of high quality employees, the marketing manager will arrange a meeting after work every Thursday to assist his subordinates in familiarizing themselves with the products which are then followed by a motivation briefing and the sharing of his experiences with them. After the briefing, the marketing manager encourages them to share and exchange ideas in the chatting session:

"I always encourage them to share with me problems that they faced so that I could share my eight years of sales and marketing experiences and skills with them. Consequently, such open discussion between us has strengthened our inter-departmental bond in achieving our shared goal."

Usually most meetings which are conducted between 5 to 6pm last an hour and any necessary follow-ups will surface the following Tuesday. It is the department's common practice to have a tea-break after meeting but before going home. A sales executive added:

"Sometimes after meeting we will go for dinner followed by drinking in a pub. We normally invite everyone in the department as well as those we know from other departments. The married female staff, who have to take care of their families, would normally join us for dinner only."

In this company, there is always time for leisure and work. When it is time for work, besides attending to walk-in customers, the sales personnel would also have to entertain customers' queries through phone or email. When the sales person encounters uncertainties and doubts, he or she can easily seek help and guidance by just tapping on their colleague's shoulder. Besides, another style of clarification and assistance for more serious matters, the sales personnel can approach their immediate boss- the senior sales or marketing manager, according to the network structure. As pointed out by the marketing executive:

"We can just ask our colleagues for help. In this department, we believe in 'you do me a favor and I will do you one in return', leaving aside the structural network issue. Instruction such as SOP is simply a list of rules to provide guidance and guard the employees' job descriptions by reducing conflict of interests and goal between staff. Ultimately, it is still human effort in ensuring seamless cooperation between members. For example, our boss is always very helpful and ready to assist us. In fact, he even proactively talks to us, consults us and tries to help us if we do not perform well (e.g. below our individual monthly sales target). And if we are affected by personal matters, he always respects it and gives us time and space to recover."

In responding to the marketing executive remarks, the marketing manager explained that:

"We, as their management, must try to understand the needs and problems of our subordinates. Human life is bound to have ups and downs. When they perform well, we praise them and if they don't manage to do well, we will try to understand why and give them time to adjust themselves. This is our working style in this department."

Cooperation is highly required among sales and marketing staff, claimed the senior sales and marketing manager:

"I remind them to cooperate starting from the day they join this department. Without cooperation, we could lose customers easily. For example, it would imprint a bad image when customers walk in and

fail to get assistance simply because the sales person who he/she previously liaise with is away."

It is true that each sales and marketing staff is competing with each other to achieve individual monthly sales target; however, the departmental goal must also be fulfilled- the staff have to cooperate so that the department could achieve the monthly sales target set by the HoD of sales and marketing department. Under such circumstances, the sales and marketing executive explained their common agreement of cooperation among themselves like this:

> "We will have to help each other, for example, when my client comes to change the name of the house ownership while I'm away, my colleague will assist me, so in return I will help him/her when he/she is away. Likewise when I introduce a client to my colleagues, it is our common understanding and mutual respect that they will have to introduce me a client in return. Alternatively, we will have to make a deal among ourselves to share the sales commission under certain conditions"

Aside from cooperation issues between sales and marketing staff, problems may also arise at the branch sales offices. It is the branch manager's responsibility to handle issues arising within his/her area of control. Assistance from the headquarter's (HQ) managers is always accessible if the branch manager is incapable of resolving the problems. Normally problems are settled through telephone calls if the customer refuses to go to the HQ. The use of telephone calls have managed to resolve most of

the issues as direct conversation through phone is the most efficient and cost-effective method for the company and the customers.

During a new housing launch, all sales people, including credit control department staff will be appointed to participate in assisting the launch. Aside from the launch, every credit controller will be assigned for weekend housing sales according to duty-roaster. Such cross department assignment is guided with a set of consistent and clearly set off tasks from the management. In this way, the management is able to fully utilize its manpower and promote opportunities for the employees of both departments to get to know each other better. By working together on a set of objectives, targets and tasks, the employees eventually develop and share a commonly preferred working environment. A sales and marketing executive claimed:

> "We prefer to work in a happy and relaxing environment. Hence, whenever there are no purchasers around, we always share our experiences, jokes and problems dealing with the nature of our work. By doing so, not only can we kill our time, but it also enables us to understand our colleagues better through their styles of handling issues."

Since Talam is crowned as the market leader in terms of sales volume in Malaysia's housing property development, the management has strategically assigned clear and consistent task for sales and credit controller staff to reduce errors made during the peak hours of a new launch as Talam may have to prepare more than one hundred contracts within a few hours. "This means that besides the support from the system, manpower is also highly required to convey, convince, and manage the crowd at that

point of time," asserted the senior sales and marketing manager. "Therefore, cooperation between sales and credit controllers is critical to provide efficient services to Talam's customers," claimed the senior sales and marketing manager.

Once the sales and purchase agreement is signed, the sales personnel who attended to the particular purchaser would have to follow-up with issues such as loan approval, payment status, etc., with the guide from the system. At the same time, the new purchaser's profile is created for references so that the sales and credit control personnel would be able to keep in touch and cross-check the system on the purchaser's profile to assist sales and marketing staff in making sure that the purchaser had paid the 10% down payment to validate the booking. Overlapping of this procedure between the two departments is unavoidable due to system integration. Duties of employees have clearly expanded and become more complicated than before. Hence, the upgrading of knowledge and skills is needed in order to stay compatible in this organization.

ES is used as the main communication channel to keep the marketing and credit control departments' staff connected. Fortunately, the sales and marketing department staff have no difficulties in using the credit control system due to the standardization of codes adopted in the system. The sales and marketing executive claimed:

> "For those system mediated codes, we don't need to memorize them as we can access the system's codes definitions through pressing F1 button of the keyboard. Therefore, as you are hands-on with the job, soon you will get used to those codes and eventually they just come naturally to your mind when you need them."

With the use of ES as the communication medium, miscommunication and misunderstanding among staff have greatly reduced. A sales and marketing executive explained:

> "We are able to access the same customer's profile. So, if any of us were to make a call to a particular customer, we would make notes on the purchaser's response, the calling time, and the date, using the MEMO function. Most of the time, the level of language used in the MEMO was very simple and standard. Only the new-comers might need some time to adjust to and get familiar with our shared terms. This is the way we keep each other informed of the purchaser's status."

According to the Marketing manager:

> "Now, I don't have to worry about receiving incomplete information or worst, not being informed by my colleague when I'm away from my desk. All I need to do is to access the system and follow up from there according to the information shown in the system."

In addition, by keeping the ES information up-to-date, staff would also be able to provide the appropriate assistance and service to all in-coming calls by referring to the system at any point-in-time.

Thus, operation efficiency and productivity are greatly enhanced without a hint of communication breakdown. According to a sales and marketing executive:

> "We have to learn and get used to the ES codes that are incorporated into the system. So that work tensions between different departments

are greatly reduced when staff are clear about their obligations. We don't have to blame others for not keeping us informed or passing the wrong and confusing information. You will be amazed by the ES power!"

Besides working closely with the credit control department, the sales and marketing staff must also develop a good working relationship with the other departments as well since the system integration. According to the marketing executive:

"We will have to check with the project department staff on issues like the project status and the financial staff for finance-related problems. However, I'm glad that the SI and SOP have clearly stated those we should deal with. That has provided a good connecting point for us. There will be a representative from each department to attend to questions raised, therefore I just need to check with the person in charge. For example, Mr. Low is accountable for the project-related issue, Mr. Chiew responsible for payment, commission, etc."

The marketing executive added that all the sales and marketing staff will have very good relationship with those who are dealing with the preparation of cheques, including the issuing of commission for them. That is because:

"If we don't rush them, don't keep reminding them, we would have to wait for months in order to receive our commission. Therefore we would have to treat them better by buying lunch, cake, etc. for them"

Use of ES: Credit Control Module

The main task of the credit control module is to handle payments collection from purchasers and banks as well as work consistently hand-in-hand with the financial department regarding the daily monetary collections. According to the marketing executive:

> "We must work closely with the accounting department; otherwise our account will be in a mess. At any point of time the accounting staff may come and question us on issues such as a purchaser's account which is still outstanding, the system that has not been updated yet, etc. So we would have to know who is in charge of the project and settle the issue immediately."

Every Monday, the credit control managers would go through the financial aging report and summarize the outstanding files of the week through the system. Based on the outstanding files, the managers will disseminate tasks to their subordinates according to the housing projects handled by them. Along with the job dissemination, staff are also provided with the managers' expected collection target of the week. The marketing manager proudly claimed:

> "Our staff are very obedient, they never refuse to carry out the jobs we assign to them if we request and explain our intension and purpose clearly to them. By doing so, they can fulfill their obligation in the company. Besides that, they also know that we are very fair in the assignment of duties. Before assigning a new housing project account to them, it is our normal practice to refer to their workload to make sure that work is being fairly distributed. We handle the task distribution carefully, and at times we even explain to them why we

need to allocate such tasks to them. However, we do admit that we assign more work for those who are very efficient and those whom we intend to promote them soon as we expect our executives to be very capable and efficient."

The marketing manager also added:

"Those who are given more tasks should appreciate us as we have given them more opportunities to learn and deal with more critical and tricky issues. This is to prepare them for promotion so that they can help us to handle part of our workload. I always like to share my experiences. Only by sharing and training new capable candidates, do we have more time to focus on other more important issues. Working in this big company, you must know how to share your knowledge. By being selfish and trying to keep knowledge to yourself, you eventually end up doing more jobs as your subordinates are unable to help you."

Based on the data compiled by the system and the sets of target provided by the managers, it is the credit control staff's obligation to achieve the target by the end of the week. In order to perform well, every credit control staff must learn to understand and master the ES coding. This is to ensure that staff have the knowledge and skill to further identify the status of outstanding profiles which were being filtered by their managers according to the ES coding. The use of ES coding has indeed increased the efficiency of the system to the extent that miscommunication, misunderstanding and communication time are largely reduced. The senior marketing manager of the credit control department claimed:

"By looking at the different codes next to the purchasers' accounts I can immediately know the status of the collections. For example, by looking at this E002 code, I know that it is time to request to that particular purchaser for the next payment. By using the coding system, not only has it speeded up our working time, but more importantly now one person is able to handle about 1000 purchasers account without any problems, unlike before."

Therefore, the system has greatly eased the workload of this department which then has subsequently reduced the tension within employees. The marketing manager of the credit control department further describes the department working environment:

"I'm very happy to work in this department after the ES implementation. The system has greatly reduced our workload, thus greatly reducing the tension held by each individual as compared to what I needed to do before. In the past, I had to handle the entire housing project from beginning until the end and there wasn't a need for communication between colleagues because each of us handled a totally different project. But now, tasks are separated into three groups, hence cooperation and communication are necessary. I'm glad to see that they are very cooperative because not only are the senior happy to assist the juniors, but they voluntarily help each other by attending to the clients when one is busy or on medical leave."

Good working relationship is the means to ensure job efficiency. Although the SI, SOP and the system have laid a very good foundation to coordinating ES users, such

coordination is very much superficial and external. The marketing manager of the credit control department asserted:

"Although the system is integrated, I would still think that the job efficiency is highly dependent on human effort. Over time, by serving the consistent task through consistent communication, it would enable staff to know and eventually trust each other. Thus a sense of obligation to and expectation of each other would also arise. As a result, the willingness for cooperation is triggered among staff. I say this based on my 20 years of work experience in this organization."

Without good working relationship, tasks may not be completed efficiently and effectively even with the aid of the ES. For example, once the payment is collected by the first credit control team, the purchaser's status and code in the system have to be changed and followed up by another team. However, without good coordination and working relationship between the two teams, the task might not be efficiently and effectively attempted, claimed the marketing manager. She also added:

"To avoid such problem, we usually try to encourage cooperation among our subordinates by setting ourselves as role models to proactively help and assist them. It is through our role plays that our subordinates slowly pick up the right attitude."

Apart from this, managers do not interfere in personal problems as the senior marketing manager has always reminded subordinates saying:

"Do not to bring inter-personal problems into your work, when you come to work you need to co-operate with everyone even though you

may have some personal problems with him or her. I always tell them

to deal with personal issues professionally!"

In addition, during the recruitment process, the human resource team would clearly inform the interviewees of this organization's norms and expectations. According to the marketing manager:

"We always clarify with them how they are expected to work in this

organization. We want to mentally prepare them to accept the norms of

our organization. We want to find the suitable candidates before

training them to use the system."

To foster good internal collective bonding, managers would also arrange birthday cum lunch outings for all subordinates. Creating opportunities for subordinates to get together and know each other better is one way to improve employees' working relationship. As the senior marketing manager claimed:

"A noble way to create a good working environment is to begin by

providing them the opportunity to get to know each other better

besides working."

In addition to the management effort in cultivating good working relationship, the marketing manager added:

"Our staff also organize department trips and travels together. In fact,

they just got back from Japan during the Chinese New Year holidays.

Thus I personally think that our staff can get along very well with each

other."

After the tasks are accomplished by three credit control teams such as the keeping track of payment, documenting and verifying documentations, the credit control department has to promptly prepare hardcopy documents for the finance department so that they can verify and endorse the system information for security purposes. These three teams are managed by three different managers; nevertheless, they have no problem working under different bosses because these three bosses share the common mindset, expectation and goal. According to the marketing manager of the credit control department:

> "The standardized procedures in the system have reduced a lot of conflicts. Therefore the process of dealing with daily tasks would still be the same so long as there is no conflict of interests between the three managers. Anyway, we are working towards the same goal. Moreover, we have been working together for more than ten years in this department."

Much effort is required from the credit control staff to complete the entire credit control process. This is because they have to assist purchasers on how to apply and get their EPR or bank loan approved, as well as to remind and guide them to apply for bank or EPF loans, on top of making sure that they will make their payments soonest possible. The marketing manager claimed:

> "Our job is like a mother taking care of her children. We have to follow through all the procedures until the job is completed. But I'm pleased with the integrated system as all data entries regarding our conversations can be viewed by the follow-up procedures for verification purposes and continuation of the job until its completion."

Good inter-departmental working relationship is necessary to ensure efficiency as any delay from a person would affect the entire work progress that affect inter and intra-departments. Speaking on this, the marketing manager shared an incident that happened not too long ago:

> "To be helpful, I took additional initiative to compile and send the financial statements to the finance department. But in order to ease the workload, we decided to centralize the delivery to the accounting manager in the finance department. However, an accounts clerk became nasty and complained that we should have delivered it to her directly. After the complaint, I stopped delivering statements to her as I see no reason to help a person who did not appreciate. Since then, she had to collect all necessary documents by herself from our department at the 2nd floor then go back to the 21 floor. With this, she had to work doubly hard in order to catch up with her colleagues as the boss would not tolerate any delay especially in finance department whereby daily accounting consolidation had to be done before the end of the day."

Use of ES: Financial Module

The financial module is used by more than 40 ES users who rely greatly on the ES in performing their daily operations. All accounting transactions including (1) organization's daily operational necessity, such as office stationery, employees' salary, etc., and (2) business project transactions, such as payments received from purchasers, payments to contractors, purchases on housing development materials, etc., would be keyed-in to the system before a daily financial report is generated by the system. To ensure high operation quality, this department is further divided into three main functional groups according to the ES operation settings, and they are: (1)

account receivable (AR), (2) account payable (AP), and (3) journal ledger (JL). Figure 4.4 shows the functional structure of the finance department.
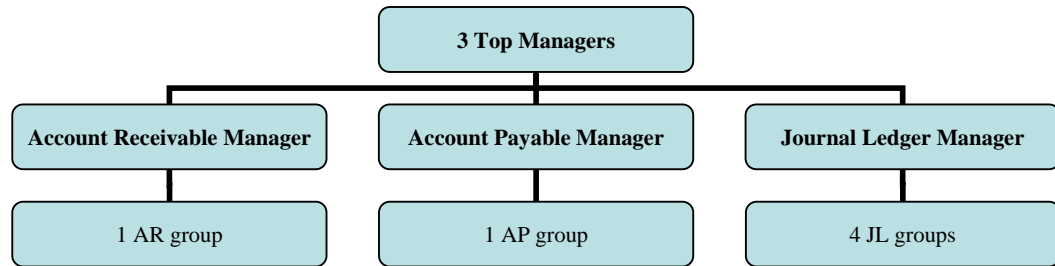
Figure 4. 4: Functional structure of the Finance department

These three groups have full control of and access to all ES functions that are related to their tasks and responsibilities and they are provided with view-only access to other ES finance functions module. The Vice-President (VP) explained:

> "The control is to ensure that employees are focused on their main objectives, job functions, and obligations, at the same time the control is also meant to take care of purchasers' privacy rights and reduce information security issues."

Firstly, AR employees are required to compile all incoming payments and post the information to a temporary file in the system. Secondly, the information is then imported from the temporary file by JL staff to conduct the record of inflow and outflow of cash in the cashbook. Thirdly, AP members will have full access to the cashbook, which is done by the JL staff so that they could issue payments according to cash availability shown in the cashbook. Once the payment is made by AP members, a record is again keyed into the temporary file. Lastly, again the JL staff extract all information which is keyed in to the temp file by AP and AR staff and

carry out their task of consolidating the daily cash inflow and outflow of the company. The finance DVP claimed:

"These three groups of ES users are not closely linked with each other; I know they have cliques among them. However I will always instruct them to help each other, though there's a lot of politics in this company. I doesn't matter whether they talk to each other or not but they must make sure tasks are delivered to me on time. I am not concerned about how they are going to solve the problem as they are matured enough to deal with it professionally."

However, the assistant accounts manager expressed the opposite view:

"It is important to have a good relationship with your colleagues even if you are not in the same group because you may need their help in solving problems. Since the use of ES, staff has to extend their job scope to assist their colleagues from other groups in order to complete the business process. Thus working in isolation is not possible in ES use. I personally think that so long as you are humble and willing to learn, people are willing to teach and help you. Besides, I like my boss and the working environment here too as they judge us by our results (output) through MBO. Therefore, I find that this style has lessened political issues as compared to my previous companies."

Since the use of ES, job enlargement becomes inevitable for this department staff. It is the responsibilities of these three groups of employees to work hand-in-hand especially when information in the system does not compute with the receipts

received or the documents filed. Personal and telephone contacts are highly required to keep employees working closely in order to solve problems without delay.

Besides intra-departmental cooperation, inter-departmental cooperation is also needed. For example, AR staff from finance department have to work hand-in-hand with the staff from the credit control department. The assistant accounts manager claimed:

> "Good inter-departmental working relationship must be cultivated among staff because if there's any check pending or whose status is unclear, AR would have to check with the credit control staff. So for convenience sake, these two groups are located on the same floor."

Owing to the close proximity of the AR and the credit control department as a result of being located on the 2nd floor, face-to-face meetings of staff become very convenient. By doing so, both parties can provide each other with the necessary supporting documents to settle immediate problems, such as receipts and cheques. This is known as the 'quick-relief method' among Talam employees. The other two functional groups: AP and JL are located on the 21st floor in the finance department.

To ensure the smooth running of daily operations, the finance department's top managers have come up with three types of management style in managing the three different groups of ES users. These three groups are differentiated according to their ES job nature. The top financial management executes the Management by Objective (MBO) management style to supervise the six financial managers. Doing so is to ensure department goals and targets set by the President are achieved.

"In other words, these six financial managers are expected to achieve

the President's goal based on their own preferred management styles,"

explained the VP and DVP of Finance Department.

To better manage the ES use in this module, four out of the six managers apply democratic management style to supervise the JL operatives. While the other two managers executed autocratic management style to manage the AP and AR operatives. Table 4.2 summarizes the facts and the paragraphs below will further elaborate the details.

Work structure is arranged according to the ES structure	Managing ES users	ES users
Financial top management to six managers (4 JL & 1 AP, 1 AR)	MBO	Managers would need to be motivated and enthusiastic to further explore the ES functions
Four managers to JL operatives	Democratic	JL operatives and members would need to analyze data from the ES
Two managers to each of the account payable (AP) and receivable (AR) operatives	Autocratic	AP and AR operatives and members would be in charge of for data entry

Table 4. 2: Managing ES use

According to the finance DVP:

"I believe that everyone has his or her own working style, which is

highly dependent on individual personalities. Only they would know

what the best technique is and how to achieve the optimum results by

using their own style. Therefore, I do not want to control. But I will

make it very clear when I want a job done."

This type of management style suits most of the finance managers. Therefore they respect and appreciation the finance DVP's leadership and management style. According to one of the managers:

> "The only reason that I have stayed with this company for more than ten years is that I have an understanding and supportive boss. He does not interfere with my management style as long as I can get my tasks done on time and show him the results monthly. Getting along well with my superior is the most important reason for me to stay here, regardless of the heavy workload or more lucrative offers from other companies."

> "Aside from applying appropriate management style to making sure subordinates are satisfied with the company," claimed the DVP "it is also important to make sure that managers understand and appreciate the ES functions."

The top management understands that ES users' satisfaction would likely lead to their willingness to explore, learn, share and maximize the ES use so that job quality, efficiency and effectiveness are achievable. According to the finance DVP:

> "If you know how to use the system, you could get wonderful outcome by just keying in the right code. Therefore, the bottom line for the top management is to make sure managers are satisfied with the management so that they are supportive and willing to continue learning, exploring and using the ES system. We also hope that our managers would lead, encourage, and teach their subordinates to use

the system as well. In other words, we hope that our managers will adopt the positive attitude to influence their subordinates."

The finance DVP further clarified:

"The use of different coding and key words in different functional sections leads to different data generations from the system. Therefore, to maximize ES capability, users must have the initiative and motivation to explore and learn to upgrade their knowledge in the system."

The other two different management styles employed by the six managers can be classified into two broad categories, they are: (1) autocratic, and (2) democratic (See Table 4.1, p. 67), as claimed by the VP and DVP of the Finance Department. These two management styles co-exist and are executed in the same department. From the VP's point of view, the stern and autocratic type of management style is particularly useful for AR and AP operatives in charge of the daily data entry. The boredom of the task coupled with a lack of incentives and low pay eventually de-motivates them from doing a good job in the long run. According to the manager, in order to rid the negative impact, at times the management has to use authority and threat to coerce staff to ensure efficiency and productivity.

On the other hand, the VP personally thinks that the democratic management style is best applied to employees who are motivation-driven. Mostly, such employees come from the JL group and they are more self-disciplined and dedicated than AP and AR. The JL executive explained:

"This is not a routine job; on the contrary, this is a rather challenging job as we have to analyze the reasons for the company's daily expenditure and provide proposals to the President so that money could be better managed and used in our company investment. I personally enjoy my job and so do my subordinates who are supporting me in this group. They stay back voluntarily to assist me when the workload is a lot without even requesting the company for OT. "

For that reason, the VP commented:

"These types of employees deserve their managers' respect and treatment as friends, whereby democratic management is suitable for them."

Actually besides working, the department managers do initiate house-to-house visits during festival celebrations of the various races to encourage internal bonding among members of the same department. Apart from that, young lady managers would invite their subordinates to shop during the Malaysia Annual Grand Sales. These are the extra efforts donated by the management.

The human resource department respects the recruitment of staff done by the financial department. According to the accounts assistant manager, they are very particular when it comes to candidate selection. They would only look for the right employees with a mindset to readily accept our organizational culture. An example given by the assistant accounting manager:

"In our department we have been looking for people for more than half a year, the reason being that we would prefer to get a suitable employee rather than simply get a person to fill in the position. I would rather do more work than getting a new staff that cannot work well or accept our company practice and style."

Aside from being strict at the recruitment practice, Talam top managers also praise themselves in being able to encourage employees to adopt the organizational norms that are practiced by the majority of the employees. The finance DVP gave an example:

"I always tell my staff to voice out if I have made a mistake. I want to know what, why, how I have done wrong, and I want to know a solution to my mistake. If I agree with my subordinate's suggestion, I will change. Similarly, when I disagree with my immediate superior, I will tell him and give him my reasons. If he insists that I follow his instructions, at least I would have clarified my doubts honestly. Therefore, if anything goes wrong, it wouldn't be my fault. That's how we work here, that's our working environment here."

This has resulted in the strong practice of a two-way communication, in which face-to-face meetings are the most preferred form of communication among Talam employees. Informants find that it is more polite and appropriate to discuss a problem face-to-face with their superiors or counterparts from other departments as that is found to be the best way to eliminate misunderstanding and unnecessary office politics which might affect the entire organization's morale and operations.

Organizational norms, which have developed and evolved through the years, are considered standard procedures from the eye of all informants. As a result, the finance DVP noted that the management would find it difficult to accept suggestions that go against common practices in the company, unless there are good reasons to do so. The finance DVP claimed:

> "We have been practicing such methods for so long and no problems have occurred. Therefore, I don't see the reason why we need to change our common practice."

After making such a claim, the finance DVP further explained his stand by sharing an incident which happened not too long ago in Talam:

> "A new manager did not agree with the format of a standard report given by his superior, and he secretly proposed his ideas to the higher authority by skipping the normal procedure. Although he had temporary advantage in the matter, he had unwittingly sparked off a huge issue in our department. Over here, if you don't agree with your immediate superior regarding his instructions or working style, you should be honest and straightforward with him. Issues can be resolved amicably. But if you try to bypass your immediate superior and engage higher authorities in dealing with trivial problems, you will never be promoted by the boss you had betrayed or acted against within this company."

In every organization there are always some unwritten rules which are to be explored and followed.

"Although initially, all networks and structures are set-up by the internal audit committee to ensure organization operation goes well during ES implementation, the arranged networks and structures operate as a bridge to connect ES users. However, over time it enables staff to know one another better and through the individuals' exploration, eventually they would form their own networks in the organization," claimed the Finance DVP.

Having said that, the Finance DVP added his above comment and claim that is a limit and range for network ties expansion and exploration in this organization.

"I always try my best to reach up to the other department superior to resolve issues based on the provided network ties before requesting help from my superior. However, based on my eight-year experiences in dealing with inter-department issues, I find that at times it would still be more effective and efficient for actors of the same structural level to deal with each other. Therefore network ties expansion and exploration in this company could be just wondering around in the range of the actors' network structure status for actors with weak social interaction skills."

However, there are always some exceptional cases so long as that person wisely uses his or her networks. Such exceptional cases would normally be induced by political benefits, and as long as it is being taken care of properly, it should not cause many problems. An example given by the Finance DVP:

"I managed to establish a good relationship with our President's secretary; with her intuition in providing hints and advices at the right time, I always managed to impress the President with what he needs at the right time and place. Not too long ago, with my early submission of our organization's accounting status, our organization managed to win a million-dollar project. This year, I am the only one in the company who got a triple promotion."

Generally, to make sure that a bad experience is not repeated, every new recruit is provided with a booklet that is recorded with the SI and SOP of this organization. The JL assistant manager explained:

"Our company is too big and so it may be very confusing for new staff joining us, as they may not know who and how to approach people. So the booklet functions as a "street directory" for the new staff. It provides all necessary contacts, guidelines, and obligations of every position in the department and also includes all necessary procedures on accessing information in and between departments."

Responding to this statement, the Finance Deputy VP also claimed:

"Now everyone knows each other's obligations and responsibilities clearly; therefore, issues like "don't know" or play "tai chi" or pushing the bulk to others will not happen in this department. This SI has effectively solved this issue unlike before; otherwise, it is very hard for me to oversee the six managers. In addition to that, ES does provide another alternative for me when errors or accountability occurs. I can

refer to the system, as it will show the log-in time and password of all users, therefore there's nowhere for ES users to hide by using this system."

Use of ES: Customer Service Action Module

This ES module is mainly used by a total of 12 staff. Their main task is to plan and provide best possible customer service to their purchasers. Every day, the CSAC staff would have to attend to customers' complaints through faxes, letters, emails, phone calls, or even walk-ins. All complaints will be keyed-in to the ES's customer service action module. In order to perform well, the CSAC staff has to master the system and also possess good EQ so that they can professionally handle customers' complaints as well as readily handle nasty purchasers. According to the CSAC executive:

"It is certainly easy to key-in information provided by a mild-mannered? Customer, but it is extremely difficult to calm down or worse still record statements of an angry customer accurately, who is all out to create problems or issues."

To promote professionalism within the CSAC staff, the CSAC executive would always remind her subordinates to put themselves into the customers' shoes, so as to be more sympathetic and empathetic to their complaints. For example, staff has to understand the frustrations of customers who in spite of having paid a high price and waited long are in the end given a house below their expectation or not as what was promised. On top of that, CSAC executive always remind her subordinates about the company's golden rule:

"Customers are always right and do not argue with them.' Aside from this, I always share my experiences with them on how I manage to be

psychologically and mentally prepared for scolding from customers. After all, this is the department for customers to express their dissatisfaction."

Good relationships and common understanding among staff are assets to deal with external threats at times of urgency. Furthermore, consensus on certain issues and cooperation among staff, besides the skills and experiences in dealing with problematic customers, can act as a cushion against the emotionally unstable purchasers, while buying time for the staff to initiate corrections and remedies on house defects to appease and satisfy customers. A most unforgettable incident is shared by the CSAC executive:

"There was once a group of angry purchasers, who came to our office, banged our table and broke our office window. At that time, our security guards were at a loss on how to handle them. Although we had given them up-to-date information and explanation, they were still not satisfied. However, I was glad that all of us acted in unison and managed to control the commotion. This may well be the evidence of unity and cohesiveness among us which helps us to overcome and settle untoward incidents in a civilized manner."

Aside from techniques in handling emotional purchasers with professionalism, the CSAC staff must also possess the relevant knowledge and skills to handle complaints from purchasers. A purchaser can lodge the complaint to the CSAC staff by just giving one of the details such as his or her name, identity card numbers, project location, housing lot, etc. The system is able to track and retrieve all information

required. Once the purchaser's information is retrieved, the CSAC would click on the F7 system code which is the defect tracking function to select and identify the respective defects accordingly as per the complaint. The selection and identification of the appropriate defects would require experience and technical knowledge. For example, for customer's complaints such as wall cracks, poor window-frame fixing, etc, the CSAC staff would have to appropriately mark the defect tracking categories provided in the system. Any error on the part of the CSAC staff would have an adverse impact on the repair process as information can be inaccurate or misleading.

In addition, besides the need to select the appropriate defects with technical knowledge and experience, the CSAC staff is required to select and use the appropriate technical jargons in writing short messages in the MEMO function so that it could be understood by the relevant parties such as the contractor department staff and contractors at sites. Such technical knowledge is required in the use of ES, as the customer service action module is forced to standardize language jargons used in order to eliminate unnecessary communication breakdowns among departments which could result in work delay. Apart from this, the use of jargon in daily conversations is common among members of the same department as well as those related departments, such as customer service counters at different project sites.

After the defects selection, the system is able to save and record the complaints such as the data entry time, date, defective areas as well as the name of the personnel who keyed in the information. In addition, through the system, the CSAC staff is able to know the contractors and consultants who are in charge of a particular housing scheme. Then, a hardcopy will be printed and faxed to them for coordination

purposes. Another hardcopy will be sent to the site maintenance office for customer reference. "Previously, all these are done manually as our system has yet to be upgraded," explained the VP.

The up-to-date information generated by the CSAC ES module has enabled the contract department to request respective contractors to fulfill the agreement and remedy the defects within the 9-day timeframe. A second reminder will be provided to the said contractors who do not fulfill their jobs as per request after 15 days, and the last reminder is 30 days after that. Failing this, our system would automatically assign a third-party contractor to repair the defects and the original contractors will have to pay for the costs involved but not Talam. With this system in place, not only has it improved the accountability towards purchasers, but has also enabled CSAC staff to provide purchasers with the work progress from time to time.

From the above descriptions on the running of the system, there is an efficient system of checks and balances in place. However, it still requires certain levels of expertise and experience to optimize the operation of the system. Moreover, to express the management's concern, weekly meetings are held to provide mental support, and sharing of experiences including the advising and assisting of staff in overcoming challenges and stress encountered by them throughout the week.

It is certainly not easy to manage a group of ES users who are always under pressure from purchasers. Many informants of this department claimed that they are "paid to be scolded". For this reason, the performance and quality of work would be significantly affected when they are under stress. In order to counter the stress and

frustration of staff, a more relaxing, friendly and conducive working environment is encouraged, such as playing soft music while working and helping themselves at the coffee corner. Staff can walk around freely and chat with one another when they have done their job or purchasers are not present. In other departments, the working atmosphere is very different as coffee is on served on a regular basis and no music is allowed. The internal bonding of staff in this department is rather impressive. For example, one may know the favorite food of a colleague's son and offer to buy them during the lunch-break for her to take home. The CSAC executive added:

> "Every month, we have a pot-luck in our department. Each of us bring home-cooked food for certain purposes including that of celebrating someone's birthday, welcoming new members, or a farewell party for those who are leaving our company. Our boss, the VP, also treats us to lunch or dinner for all major occasions, such as Chinese New Year, Hari Raya Puasa, Deepavali and Christmas."

The effort put in by the management in organizing so many activities besides work, has improved staff work relationship tremendously. It has promoted easy access of assistance or any clarification for one another. This department staff can signal and call for help at anytime. In normal cases, face-to-face meeting is the most preferred communication channel as it enables staff to solve problems immediately. For example, a staff from the other departments would just come into the CASA department and look for assistance and advice from the executive to solve any problem immediately. Most of the time, problems are resolved on the spot. However, when there is a distance to cover like between site office and the main branch, telephone is used instead. Even so, normally after the conversation, the staff would

end with a joke and laughter, for example: "*Speak Japanese now?*" The CSAC executive explained:

> "There is no point in being so serious at work given that our job nature is stressful enough. Moreover, it is better to maintain a good relationship with colleagues than being unfriendly because you never know when you need their help in return."

To solve more complicated issues such as involving legal law suits, the CSAC executive would refer the customers to her boss, the VP. He is the key personnel who had a wide spectrum of governmental and political networks prior to his retirement. He held a relatively high position in the Malaysian Armed Forces. For that reason, he was invited to join Talam after his retirement to provide guidance and advice on governmental, legal and law suit-related issues to Talam's lawyer as well as to attend to public media when necessary.

Inter-departmental cooperation, coordination and good working relationship play a critical role in the performance of this CSAC department. Under normal procedure when a purchaser files a complaint, the CSAC would need to compile all the relevant information from other departments so as to provide the purchaser with a reasonable and responsible answer. To facilitate the cooperation among departments in providing relevant data for the CSAC, memorandums regarding the importance of having cross-departmental coordination are issued by the managing director to all departments from time to time. However, despite the formal request from the top-management, it is still difficult to ensure everyone's compliance. So, building a good working

relationship among departments is still dependent on all of us. According to the CSAC executive:

"Without the establishment of good working relationship and networking with other department staff, work cannot be done efficiently. For example, if you request for assistance, they would simply tell you to dig from our file-storage room. Even then, I still feel very thankful as they have at least given me a hint to search for the information. I don't mind searching through the poor filing system in the stuffy storeroom for hours so long as I can find what I need in the end. Nothing can be worse than "I don't know". This irresponsible answer can be quite serious at times as it may lead to a legal suit filed against our company, which I had encountered before."

"Learning from my experience, it is very important for the CSAC staff to collect and keep all the necessary documentations for default cases because they might be useful for legal lawsuits in time to come," claimed the CSAC executive.

Hearsays and rumors are not welcome in this department, because unfounded or fabricated stories may affect the corporation's reputation or quality products. Therefore, in this department good network with site offices are important, and when necessary, the CSAC staff would have to verify with the site offices or the personnel concerned to ward off any possible negative impact that may arise and also to provide the right information to purchasers. The CSAC executive added:

"If I hear any negative rumor going round my department, I will do my best to stop it from doing harms. At the same time, I will also try to find a way to handle it so that, when it reaches my subordinates, I'm ready to provide a reasonable response to our customers."

Post-Enterprise System Maintenance

ES maintenance team was set up to provide immediate support and assistance to the users when requested. IT HoD leads this ES maintenance team and he is supported by two IT staff. The first IT staff was involved in the ES implementation cycle, while the second staff possessed the similar background knowledge and joined Talam a few years later. The criterion for the selection/recruitment of these two IT staff was based on their commitment and expertise on the ES operations. In other words, they are the authorized persons who possess the specialized knowledge to carry-out this important task. Table 4.3 is the summary of these two IT staff's obligations.

ES maintenance staff	Years of working experience with Talam	Obligations
Mr. Johnson Ong	12 years	Takes care of users needs, designs and improve on the company's IT systems, Contract, Marketing, and Accounting departments' ES modules, other minor trouble-shooting issues and supports its branch offices
Mr. See	8.5 years	Takes care of more complex maintenance systems and Finance department system and other minor trouble-shooting issues and supports its branch offices

Table 4. 3: IT staff working experience and obligations

The ES maintenance team members are instructed to report to their team leader (the IT HoD) on a weekly basis regarding the users' problems and suggestions. Issues reported by users would be compiled, summarized and then reported to the IT HoD so that he could update the President in the weekly top-management meeting.

To encourage users' feedback, a representative is selected from each department and he or she is given the authority to by-pass his or her head of department (HoD) and directly report to the ES maintenance team. According to the IT HoD:

"We execute this system to ensure that a common consensus is reached in the department before sending us the users' feedbacks. We do not want to repeat our mistakes by attending to each and every user's complaint and change according to their needs and end up being scolded by their department head on acting without their approval or consensus."

To encourage direct communication, users' representatives are given the direct phone number to contact the ES maintenance team. This is because the management clearly understands that it is critical to know and understand users' feedback and needs in order to provide a viable system to reduce users' resistance so that the performance of the organization can be improved.

Most of the time, the ES maintenance staff would try to troubleshoot problems by themselves without interference from their teammates. This is because each of them is able to solve problems within his or her area of expertise. However, when dealing with complicated issues, staff can easily access their colleagues for assistance and advice in time of need. One of the ES maintenance staff added:

"Although we seldom speak to each other as we know what to do, if we need help, we just walk over to our team members and ask for assistance or advice. Our workplace is open and transparent therefore it

is easy for us to find the right person we need by just raising our heads

and looking around"

It is the ES maintenance staff's obligation to assist users in overcoming their difficulties. At the initial stage (about a year) after the ES implementation, most of the problems were compounded by the lack of common knowledge leading to longer time spent on rectifying them. At that point of time, when users could not understand or solve their problems through phone, the ES maintenance staff would pay a visit to their user's office to settle them. The ES maintenance staff claimed:

"We treat them as our customers; we need to listen to them

professionally and we do our best to make them understand us. A lot of

time was spent on drawing bubbles to explain the functions/logic of the

system to them because they did not understand IT jargons."

Due to the lack of command in knowledge at the initial stage (about a year) after the ES implementation, various techniques were being used by the ES maintenance team to assist users to handle the system well.

However, over years of serving the ES-related departments, the ES team and users have finally managed to develop the shared languages not only through interactive interpretation but also learned and adopted different departmental jargons mainly through face-to-face communication that were carried out during providing maintenance to users from time-to-time based on the ES team's assigned tasks. Phone service was made available to resolve simple ES problems for ES users. Therefore shared experiences in accessing, obtaining knowledge and support from the IT

department have provided opportunities for users of different departments to establish common understanding and belief towards the ability and service provided by the IT department. For example, after speaking with the credit control manager regarding the ES team performance on customer-centric ES service, the manager claimed:

> "I have faith in the ES team performance; when the request is beyond their ability, they explain their limitation to us honestly. Moreover, they hold on to their common practice consistently, thus minimizing conflicts as they never give us unachievable promises. I make this comment based on my almost 10-year on and off cooperation with the IT HoD and his team on clearly assigned projects."

In addition, the credit control manager further verified her claimed of trust on the ES team:

> "We all work for the same company and none of us want to see the company fail to perform well. Therefore, the ES team will always provide alternative solutions and do their best to provide us the best system that could support our daily operations and customer needs."

Benefits of Post-Enterprise System Alterations

Since the purchase of this on-the-shelf system, the organization has been constantly working on the systems alteration. This system bought from the IT vendor is just equipped with the fundamental functions that are not specifically tailored to the needs of the housing development industry. Therefore, system alteration is a challenging and on-going task for the Talam IT department. In addition, over the years, many additional systems were incorporated into the system due to changes in housing regulations, customers' requirements and the management strategies. The

mushrooming of new housing developers in Malaysia has also created an additional need in the management to realize the importance of customer service. The IT HoD claimed:

> "Our role is to design a better system that functions to better communicate and serve our customers. It is also our aim to maintain or minimize our customers' dissatisfaction by providing better after-sales service."

The first customer-centric ES was the alteration on the sales and marketing module thereby improving Talam organizational daily operations and efficiency by providing speedy responses, accurate and rich information to customers during peak seasons especially during the launching of new housing schemes. According to the IT vendor:

> "This system provides a one-stop station for customers to complete the sales-and-purchase (SNP) contract, etc. Again, customers wouldn't need to go round and round in the process of buying a house or to line up in long queues as before. Now, it only requires a few minutes for a customer to complete a business deal."

In addition, Talam has also benefited from its customer-centric financial module system, whereby the payment management system was upgraded in 2003. Since then, it provided tremendous convenience to customers as they can make payments at any of the Talam sales offices near their homes or offices without the need to travel to Talam's headquarters. (See Table 4.4 for System alteration projects from 2001 to 2004).

Systems alteration projects from 2001 until 2004			
2001	**2002**	**2003**	**2004**
- Web portal - Disaster recovery plan - Customer Service System	- Integrated with foreign worker system - Frango system - Intranet	- Payment management system - Title management system - Private-end system	- Frango system (Restructure) - Mailmarchal SMTP (Virus protection) - Workflow system - Upgrade Customer Service system *(completed in early 2005)*

Table 4. 4: Systems alteration projects from year 2001 to 2004

The IT assistant manager excitedly claimed:

> "There is no doubt working in this department is stressful as we have
> to conduct system customization and upgrading almost every four
> months, but, on the other hand, they give me the motivation and
> opportunity to learn. And more importantly, I like to work in a friendly
> working environment and enjoy the teamwork spirit. These are the
> reasons I have stayed with this company for more than eight years."

Upgrading of Customer Service System

The most recent customer-centric system implementation was initiated after conducting customer service survey from 130 customers through convenient sampling. The result showed that 78% of the purchasers were happy and satisfied with Talam's customer services, whereas 22% of them felt that fast response, accuracy of information and prompt delivery on completed housing units should be improved. Based on this feedback, all departments' HoDs were called for a meeting by the President to find an appropriate solution to improve and fine-tune the problem. A consensus was reached that they needed a more powerful customer-centric ES at the customer service module. Immediately, the ES team was assigned to study the existing CSAC system. In order to successfully upgrade the system, the vice-

President, who is also the HoD for the CSAC department, gathered his managers and CSAC users to work with the ES team. The participation of the CSAC users are particularly important as they have direct interactions with customers; therefore, they are the best persons to understand customer needs and expectations of Talam.

Working in this large organization, human-related issues are rather complicated especially when it comes to implementing customer-centric ES. Even with years of working experience in Talam, the IT HoD still has the problem of accessing information who from users in the process of drafting users' requirements. According to him:

> "Some are willing to share a little bit; some not at all, but there are also some are willing to share a lot, so it really tricky and taxing to access, explore and extract necessary information and knowledge from users. This issue is even more seriously encountered by junior IT developers."

It is certainly not easy to build good rapport with employees from different departments. This is built through years of working together for projects as well as informal gatherings initiated by the management after work. Users would be more willing to share and feel comfortable with IT developers who they are familiar with. As according to the CSAC staff:

> "Over the years of working together, we know each others' style quite well. Therefore, we always keep to the accepted norms to reduce misunderstanding and improve cooperation. In other words, if they know us well, they would be able to differentiate our jokes and real

business. As in our department, we are used to a very relaxed environment whereby it is our common practice to convey our message through jokes given that we have to deal with angry customers daily. This is our only way of reducing stress and tension in order to cope with any unforeseen problems. Therefore, those who are not used to us might be offended and even do not understand us."

To minimize unnecessary misunderstanding between users and IT staff, the IT HoD always reminds his staff:

"Be patient; be a good listener; treat our users as our customers; respect them and they will respect you in return. Try to be professional and do not bring in personal problems to the other party when you work in a team. We are not external consultants who come and go, and since we work for the same company, inter-departmental relationship is, therefore very important. I do not like to hear users' complaints about our IT department service."

Communication plays a critical role to ensure departments cooperation in drafting customer-centric ES implementation. Choice of communication is found to be a technique in bridging the CSAC users and the IT team. Through experience, a senior IT staff claimed that the choice of communication channels has a significant influence towards the quality of accessing, obtaining information and knowledge. With years of experience working on numerous customer-centric customization designs, informants claim that the most efficient and effective communication channel is through face-to-face direct communication. An IT staff further elaborated:

"Over years of working in this organization along with colleagues from different departments, when discussion on users' requirements goes deeper, there is a need for me to draw diagrams to explain my view to users. Only by doing so, they are able to understand how the system logic flows according to their needs that we are going to design for their benefits even though we are sharing the same language.

Good relationships were also established between these two departments among the seniors who have been through the setting-up of the customer service module in 2001 as well as through frequent system maintenance. Due to the good rapport, there was hardly any communication breakdown among seniors as they were quite familiar with most of the key jargons used by the CSAC staff as well as the department's operation systems.

Those abbreviations which were created and used by the CSAC staff relating to its business operations were for the purpose of convenience.

"We create abbreviations for new housing projects and others among ourselves. For example, the Architect Bina Jaya project was named as ABJ; water and electricity- W/E. Initially only those who are at the same department understood those abbreviations used but eventually, we requested the ES team to add in those newly created abbreviations into the system at least once every half a year. By doing so, it can significantly reduce inter-departmental communication breakdown as those abbreviations become the standardized codes used in the system," explained the CSAC executive

After the collection of users' requirements, most of the follow-ups and clarifications are done through phone calls, mainly because Talam ES users are very much accustomed to the system upgrade. Email is meant for formal clarification or settlement of issues among the top-management. According to the DVP:

> "At times, some people would like to pretend and push away their responsibilities by saying I don't remember this or that or I didn't receive any notice"

To ensure accountability and transparency, Email is used. It is to ensure no misinterpretation and confusion, as all issues are clearly written down in the email and sent to the person in charge and carbon copy to other relevant parties simultaneously. With the date, time and message written in black and white, it enhances clarity and authenticity, subsequently speeding up authority procedures for the CSAC system upgrade.

After years of consistent involvement in customer-centric implementation, certain common understanding and beliefs were established through past cooperation experiences between the CSAC users and the ES team. The CSAC executive said:

> "When the key ES team personnel say they cannot design this function that truly means they cannot. I have been working with them before I was transferred to CSAC few years back. They were very consistent in their principle and style as I experienced it when I was working in the other department. Besides, we share a common goal, which is to improve the performance of the organization and provide good customer service. Since, we are working towards the same goal I see

no point "*passing the buck*". Normally, the ES team suggests other alternatives to make sure that the purpose of that function is served."

It is certainly not easy to build such common understanding and beliefs among the ES users from different departments. This is built through years of working together and keeping tight principles. The IT HoD claimed:

"I will never give very ambitious promises to our ES users when it comes to system upgrade. I will honestly tell them our limitations and what are the best we can provide. Our principle is to provide a simple design with practical and effective functions rather than a fancy design which requires too much manpower. It is not practical as we have limited staff with endless ES projects. Therefore, I always make sure our team members follow this practice, as we don't want to create unnecessary conflicts or politics within departments.

When the system is ready, the ES team would have two cycles of system testing. The first roll out of the system was in mid-September 2004 and the second was in mid-December 2004. It is the ES team's common practice to run the new system for a day in advance for users to familiarize themselves with the system before further discussion, as that would provide users with sufficient time to use and think before giving suggestions.

Since the CSAC users are used to the on-going system upgrade and customizations, good coordination within these two teams have enabled the system go-'live' smoothly in early 2005. Through consistent exposure towards the continued changes in the

organization, users' resistance to change has declined over years. The IT HoD explained:

> "The key factor to reduce users' resistance and create job satisfaction is to explain the benefits of the system to users before and after upgrading and the ability to convince them of the need for change. Obviously, it will be much easier if the system upgrade is initiated by our users and with their participation throughout the process. And the final clue is to recruit employees who are computer-savvy and who can adapt to system changes. These requirements are normally made clear to our short-listed candidates during the interview to make sure that they are mentally prepared before joining our company."

In responding to the IT HoD's comment, the CSAC executive further expressed her opinion:

> "The main reason for the acceptance of change by the users is that the system upgrade will not affect the core operation, features and its functions. In fact the upgraded system is to facilitate our work productivity and efficiency based on our requirements. In addition, so long as you understand the process of your daily work, it is easier for you to pick up the new system because it is designed according to our daily workflow. Thus, the need for training is minimal as most of the added features mainly cater to more accurate information categorizations so that we could provide richer information to our customers."

Even though CSAC staff does not require training, the IT HoD would still station two ES team members in the department for a few days to make sure things run smoothly. After that, the CSAC staff could always phone the ES team hotline for immediate technical support.

In response to the latest customer-centric system, the CSAC executive claimed:

> "The continual upgrading has enabled us to provide rich and accurate information to our customers. By doing so, we see tremendous improvements in our customers satisfaction as customers are provided with the most up-to-date information directly mailed to their home before they even enquire."

Thus, the case of Talam presents an appropriate opportunity to explore the experiences accumulated by the organization in the implementation of ES through the lens of social integration. There are three main lessons which could be drawn from this case study. Firstly, it is important to have a group of highly motivated and committed top-management who are ready to provide guidance and support to coordinate employees in achieving the organizational goal. Secondly, different types of communication channels should be provided for ES users. With the opportunity to choose the best communication channels, misunderstanding among ES users is reduced. Besides, ES users could also share and transfer knowledge and information among one another with minimal distortions in knowledge and information. Lastly, the rapport built through work experience and cooperation can provide actors an

additional impetus in driving them to achieve organizational objectives and goals through seamless social integration.

Chapter 5: Findings and Analysis

5.1 Introduction

The study of social integration is built on the acknowledgement that SI existed and evolved since the implementation of enterprise systems. Besides, the study also acknowledged the existence of different potential values and constructs of SI even before the ES implementation. Building on such understanding, we focus our social integration study in ES usage.

The purpose of this case study is to understand social integration in the use of ES by exploring its dimensions and processes. This is because ES potential benefits performances which are highly influenced by social issues (e.g. Lorenzo, 2001; Ragowsky and Somer, 2002; Newell, et al., 2002) and they are viewed as the necessary conditions or precursors for successful ES implementation (Scheer and Habermann, 2000; Koch, 2001; Sarker and Lee, 2003). Hence, understanding social issues such as access to others' information and knowledge, developing motivation and coherence among actors, as well as cultivating greater competence to integrate actors, would all provide imperative findings in the use of ES. To achieve this aim, this study focuses on ES project as the unit of analysis. Towards this end, 40 in-depth open-ended interviews were conducted with the ES vendor, ES personnel, top-management, middle-management and ES users. The following sections begin with the findings of the three SI dimension- **Structural Integration (D1), Relational Integration (D2) and Cognitive Integration (D3)** so as to open the SI dimension's black box before pursuing to reveal the links between the different dimensions of

social integration, and provide the rationale for social integration in the context of ES usage.

5.2 Social Integration Dimensions

SI dimension refers to patterns observed from the processes. In this case, SI dimension indicates a form of system that presents interactivity and connectivity of SI processes with the three social capital dimensions in which, the acquainted processes are to achieve certain outcomes. Detail elaborations of each SI dimension will be presented in the following paragraphs, followed by SI processes in Section 5.3.

Structural Integration Dimension (D1)

This dimension refers to the integration of staff accessibility to knowledge and information with the two SI processes, viz. *(P1) coordinating employees with a set of clearly assigned tasks, and (P2) cultivating consistent organizational practices*. This dimension refers to the reorganized, reformed, tidily connected and interrelated *network structures and network ties (structural dimension)*. This structure is reformed and integrated by the Talam top-management in accordance with the ES nature. Such structure is to organize the organizational hierarchical formation and the connection between ES users. It demonstrates the users' ability to access and exchange information and knowledge between the integrated departments through the two key elements. Besides, this dimension is found critical in this study because ES were claimed to be the physical manifestation and facilitator of instrumental rationality within hierarchical control structures (Dillard, et al., 2005). So it is important for researchers and practitioners to identify ES structure appropriately to coordinate ES use.

As time passes, actors serving within the same structure and ties would eventually expand and transform along with their personal abilities in exploring and adapting to the **relational integration (D2)** qualities and **cognitive integration (D3)** traits so that timely and better quality information and knowledge may be obtained, transferred, exchanged and created as claimed by informants. In that respect, **structural integration dimension (D1)** is continually being reformed from time to time as an iterative cycle that evolves through consistent human interactions. This finding corresponds with the research of Galaskiewicz and Wasserman (1981), Marsden (1983), and Kogut, et al. (1994), where they see network restructures as network formation which would occur as new relationships by organizations or individuals to exploit the opportunities inherent in the network, so that reinforcing or reshaping of the existing network structure is possible.

As mentioned above, two of the structural dimension key factors identified were the *network structures* and the *network ties.* These two key factors are connected and interacted with each other tidily. These two key factors are expected to expand and manifest the collective networks (Hatzakis, et al., 2005) of multi-cultural employees to achieve cooperation (Walker, et al., 1997) and "seamless access" to resources (Nahapiet and Ghoshal, 1998). The term "seamless access" refers to receiving timely valuable and relevant information and knowledge from the right referrals to members of the same network; a definition that is built upon Burt's (1992) "access" definition finding. In this case, *network structures* function as the connecting point with the *network ties* in order to provide seamless access for information seekers.

In Talam, *network structures* represent the arrangement of ES employees according to their relevant working experience, expertise and level of education. In other words, *network structures* influence the formation of organizational hierarchy (Nahapiet and Ghoshal, 1998) and the vehicle for inducing cooperation (Walker, et al., 1997) to meticulously transmit integrated information and knowledge for the company's business strategy. Aside from this, such *network structures* also provide status, power and authority for staff according to the organization's *network structure* hierarchy. Consequently, based on the structural hierarchy, the President of Talam holds the formal authority and supreme power which can influence most of the business decision-making and needless to say, the business strategy. With this absolute authority, a set of unique and effective network structures was introduced and executed based on the President's top-down directive to manage and integrate complicated and tedious documentations and procedures in relation to its business dealings with ES use. Owing to such top-down hierarchical *network structures*, Talam has successfully survived through its critical transitional period by implementing ES. Such finding corresponded with Fischer and Pollock's (2004) studies that the President of a company, who has absolute power, is more capable of successfully transforming an organization through the critical transitional period. Besides, such success would not have been achieved without the respect, trust and support of Talam's employees to the management. With regard to this issue, the Vice President (VP) explained: "*All employees respected the President's decision and management style because he started the company from humble beginnings and developed it into a multi-billion-dollar business enterprise. Therefore, he could not be wrong in this respect.*" In conclusion, the supreme power possessed by the founder of the company and the past impressive records of the President have gained the respect and

cooperation provided by employees which in turn have played important influencing roles for Talam to transform successfully during the critical transitional period. Such finding is different from Dillard, et al.'s, (2005) research claim that morality of ES actors is recast as organizations emphasize the hierarchical control structures, instrumental in rationalization and legitimized rules.

Based on the organizational network structures hierarchy, network ties refer to links connecting point A to point B which is arranged by the management to coordinate ES users for seamless access to resources. In view of this, Talam VP described Talam's network structures and ties a "spider web", which was centralized with radials (*network structures*) and then connected adhesively with spiral thread (*network ties*). The aforementioned "spider web"- organized *network structures* and *ties-* was clearly written down in the Standing Instructions and Standard Operating Procedures (SOP) to provide guidelines for ES users in accessing, transferring, obtaining, exchanging and combining information and knowledge between ES users.

In this case, four different types of network ties were identified: *formal and informal, direct and indirect network ties*. According to the Journal Leger assistant manager, *formal ties* were designed to coordinate the ES staff and functioned as the "street directory" (the *formal network ties* were written in a booklet) for new recruits to access necessary information and knowledge to accomplish their assigned ES task independently. On the other hand, *informal network ties* are more likely to be driven by social activities such as birthday treats for colleagues, dinner, pub outings after work rather than job-related activities. Generally, the *informal network ties* do not have direct relation with the ES actors' daily operations. However, at times they may

affect work performance, especially if the contents of the information exchanged are sensitive, such as rumors about the organization's downsizing plan which could spread like wild fire across ES departments and have a tremendous impact on most of the employees' performance. For that reason, the CSAC executive claimed: *"If I hear any negative rumor going around my department, I will do my best to stop it from doing harm. At the same time, I will also try to find a way to handle it, so that, when it reaches my subordinates, I'm ready to provide them a reasonable response."* Thus, deducing from the case data, it is without a doubt that *informal network ties* facilitate bond development between ES employees. Without careful monitor from the management, it could be more challenging for ES organizations as social issues still remain the key challenge in ES phenomenon (e.g. Lorenzo, 2001; Ragowsky and Somer, 2002; Newell, et al., 2002).

Besides *formal and informal network ties*, *direct and indirect network ties* are found in this case as well. *Direct network ties* in this case means the information seeker is able to directly access through network information and knowledge needed without any interference or involvement from a third party. For example, the sales and marketing staff could just walk into his/her manager's office when clarification of doubts is needed. Such direct network ties have enabled sales and marketing staff access to information directly without any distortion to information or knowledge. This finding corresponded with Hansen's (2002) result where direct network ties provide immediate information with fewer distortions to the information seeker (Szulanski, 1996). In contrast, *indirect network ties* refer to the need for a third party involvement, such as the gatekeeper, to summarize and filter information between information provider and information seeker. In this case, all ES users would have to

submit their suggestions and opinions regarding the system to the selected ES users'

representatives in each department. These representatives perform as the information

summarizers and filters' to the ES support and maintenance team. The use of indirect

network ties has gained the favor from the ES support and maintenance team because

it has reduced their job confusions. Similarly, this also benefited most of the heads of

departments (HoDs) as they were informed of any changes required. Such finding is

different from Hansen's (2002) result. According to him, *indirect network ties* would

require extra time spent on verifying the relevance of information received to the

project. Perhaps such contradicting finding could be due to the different context of

management style, organizational culture and the research phenomenon. In a nutshell,

overall results showed that management efforts have further substantiated the

interactivity and connectivity of the two key elements in this dimension.

Relational Reformation Dimension (D2)

This dimension refers to the integration of staffs' information and knowledge

accessibility, exchange and combination capability based on two SI processes which

are *(P3) achieving interactive interpretation, and (P4) using system mediated terms.*

Such dimension refers to the relationship between actors, and once developed, it may

significantly motivate seamless information and knowledge integration in an

organization. However, the act of developing good relationship between actors in an

organization would be rather challenging and difficult if key factors of social capital

dimensions which are *trust, norms, obligations and expectations*, remained unknown.

Besides the importance of the key factors, study has also found that interrelation and

connectivity of these key social capital factors were mainly influenced by time,

consistency, repetitive interactions, and communication between staff. These

conditions reform and reinforce relationships between staff thus formulating *trust*:

these conditions also influenced organizational norms, emphasized task obligations and a certain level of expectation by the superiors based on the data collected. For example, this case study reveals that there are many barriers in transmitting common objectives and perceptions across departments after the ES implementation. Hence, a **structural integration (D1)** was needed to pave the way for ES users to systematically carry out their tasks according to the working structure and networks which were later transformed to working relationship (**relationship integration D2**). Over time, the outcome of **relational integration** SI dimension **(D2)** would contribute to the ES users' willingness, motivation, passion, commitment and loyalty to the organization. By cultivating and practicing such SI dimension in an organization, seamless and effective information and knowledge exchange, transfer, share and acquirement could be achieved by the power of cooperation based on the well-established working relationship. As a result, ES users are able to handle their widened job scope with fewer hiccups when they are introduced to the new system. Such achievement is obtained through the iterative cycle between **structural (D1) and relational integration (D2)** dimensions to enhance social integration. This claim provides a more comprehensive explanation of Dyer and Singh's (1998) and Lane and Lubatkin's (1998) studies whereby competitive advantage and difficult-to-imitate organizational capabilities are normally derived from organizations with dyadic networks and relationships.

Among all the identified key SC factors, *trust* is the key that connects and interacts with all factors. *Trust* is known as the essential lubricant to any and all social activities as social capital thrives on authenticity (Cohen and Prusak, 2001). Based on this case, *trust* between ES users is developed from the familiarity through repeated

interactions and structural arrangement of work in the departments. For example, the marketing manager arranges meetings every Thursday to assist his subordinates in familiarizing themselves with the products, followed by a motivation briefing and sharing of his work experiences with them. With such consistent practice executed by Talam's marketing manager, this study has come to the same findings as Bourdieu's (1986) study that *trust* is further enhanced through a history of interactions with and exchange between actors. In other words, *trust* encompasses not only people's beliefs about others (Luhmann, 1979), it also develops over time and plays a key role in the willingness of network actors to share (Inkpen and Tsang, 2005) and use that knowledge as the basis for action (Luhmann, 1979). For example, the ES related knowledge could be accessed by the sales and marketing staff simply by a friendly gesture of tapping their colleagues' shoulder in time of need. Such reaction clearly showed that the sales and marketing staff know that they are competent, obliged and expected to assist each other.

In addition to this, according to Chun and Bontis's (2002) finding, the use of different communication channels have further enabled ES staff to build the basis of *trust,* viz.-honesty, integrity, concern and transparency among staff. The interview data shows that *trust* between staff is further enhanced through the sharing and storing of up-to-date information for absent staff via ES communication channel. Thus, such example demonstrates that the right usage of communication channel between staff could enhance *trust* to offset communication breakdown and misunderstanding among Talam's employees. Thus, *trust* is built on the basis of understanding each other's *responsibilities*, competencies (Shapiro, 1990) and effort invested in communication. For example, the Marketing manager would take the imitative to speak with his

subordinates after each meeting. His effort invested in communication has successfully cultivated a group of cohesive sales personnel whose sales assistants would help each other to entertain customers of their colleagues in the situation where they have to compete among themselves to earn additional commissions. According to a sales person, "We trust each other that we will not steal our colleagues' customer because our colleagues are our friends." This trust in the mind of the ES actors has denoted a positive work practice and a certain level of professionalism in the company. Hence, *trust* and working style are eventually embedded in the social fabric and become the *norms* (Cohen and Prusak, 2001) of the organization.

Norms is socially defined right action being held by the majority of ES users in Talam (Coleman, 1990). *Norms* of cooperation is established through consistent flow of information between actors (Walker, et al., 1997). The general feeling, "*we are just working here, so there is no point in acting bossy; this is the way we get things done here,*" is noted by most of the informants regarding their perception of willingness to cooperate. Such working style or the so-called *norms* was found to transform people with little sense of *obligations* on others, as members of the same community share interests and common goal (Alder and Kwon, 2000). A good example to demonstrate Alder and Kwon's (2000) finding would be the same thoughts shared between the sales and marketing staff in Talam: "*You do me a favor, and I will do you one in return*." Such shared thought is recognized as *obligations* as this factor operates as a "credit slip" held by A to be redeemed by some performance by B (Coleman, 1990, p. 139). Such "credit slip" could also be viewed as "renqing" in Chinese philosophy as it refers to interpersonal exchange of favors (Yang, 1994). This study merges the beauty of both the Western and Chinese philosophy, given the fact that the management of

Talam is run mainly by the Chinese but managed consistently with western rules and regulations. Therefore, the concept of "credit slip" or "renqing" has eventually unveiled the interactivity between *obligations* and *expectations*. For example, the sales and marketing staff claimed, "*We help each other when one is away, as we know he/she will return us the favor when we need help*". Such statements made have clearly revealed that the *expectations and obligations* which the sales and marketing staff have on each other in Talam are very similar to the "renqing" obligation concept as claimed by Yeung and Tung (1996). In essence, reciprocity of such norm-"renqing" still exists in a company where the majority of its population is Chinese employees.

After reviewing the series of connection stated above, again, study has clearly illustrated the connectivity and interactivity of the **relational integration dimension (D2)**. Such finding has verified the logical explanation of the motivation and anticipation motive of ES users to engage in knowledge creation using this **(D2)** dimension as claimed in Nahapiet and Ghoshal's (1998) finding.

Cognitive Construction Dimension (D3)

This SI dimension reflects the influence on accessibility and combination capability of information and knowledge, level of shared understanding (Nahapiet and Ghoshal, 1998; Hatzakis, et al., 2005) and commonality of interest (Hatzakis, et al., 2005) within an organization through two social integration processes: *(P5) fostering internal collective bonding,* and *(P6) establishing external bridging*. The word 'cognitive' reveals ES users' common belief, emotional and intellectual buy-in among users from the embedded social fabric through two main SC factors: *shared codes and language and experiences and stories* that are strongly connected and interacted.

Failure to connect or interact with these key factors will hamper the shared understanding and interpretations between users to cooperate to achieve a cohesive goal, thus affecting the efficiency and effectiveness of ES operations. Such different interpretation of technology in the organization could then influence the ES users views of what the ES could achieve (Cadili and Whitley, 2005).

In this case, such phenomenon would refer to the technology change in Talam- the ES implementation. With the change in the technology, the shared beliefs and values between employees have to be reestablished. Through the **integration of structural (D1)** and **relational dimensions (D2)**, research shows that there is emotional buy-in between actors after reestablishing the codes, language used as well as experiences and stories encountered. Thus, seamless SI is made possible as common value shared by actors coincided with the organizational goal.

The concept of using *shared codes* was introduced in this case to reduce ES users' resistance so that it could speed-up the ES users' learning curve in using the new system and then achieve efficient work coordination between users. The introduction of *shared codes* to users across departments is meant mainly to translate sensory data into perceptual categories and provide a frame of reference for ES users to interpret their environment (Nahapiet and Ghoshal, 1998). For example, the CSAC staff would suggest a new *system code* by which Architect Bina Jaya project is named ABJ to IT department and this was adopted and incorporated into the system so that the shared code- ABJ becomes the point of reference for all ES users in Talam. In other words, the use of *shared codes* enables ES users to share the same interpretation of the phenomenon; hence, confusions and misunderstandings among different departments

are reduced. In the data, the *shared codes* used in the system are found to be used by ES users in their daily communication because such *shared codes* have become the point of reference for all users. By mentioning the *shared codes,* their colleagues would immediately comprehend the message; thereby, capturing knowledge and information instantly. This scenario has sped-up the communication time between ES users while increasing the work efficiency because the job was accomplished with the least possible distortions in information and knowledge. Thus, study claims that *shared codes & languages* are closely connected and equally important for efficient coordination. The reason behind the scenario mentioned above is that *shared languages* function to filter out events for which terms do not exist and filter in those activities for which terms do exist (Nahapiet and Ghoshal, 1998), and according to this finding, it reduces confusion, interpretation time and misunderstanding between actors. For that reason, with the interactivity between these two key elements, ES users are able to communicate more effectively (Boisot, 1995), and the intra and inter-departmental communication breakdown and misunderstanding have also reduced.

The existence of the *shared codes & languages* factor is found strongly connected and interacted with the *shared experiences and stories.* A good example to demonstrate the importance of connectivity and interactivity would be the event where the CSAC executive failed to get assistance from other department colleagues to look for files which were needed as evidence for legal lawsuits. This happened due to problems of miscommunication and different sets of departmental cum personal priority which resulted in her searching the files in the storage room for the entire working day. Learning from such a painful lesson, the CSAC executive always shares her *experiences and stories* with her subordinates to ensure that they are well informed of

what is going on in the office. The motivation to share between users is based on the establishment of **relational integration dimension (D2)** between actors. Similarly the appreciation of the *shared experience and stories* is then based on the level of *trust* between the listener and the information provider. In summary, the connectivity and interrelation of these key elements were found to be able to increase the **cognitive integration dimension (D3)** of ES users' in terms of shared understanding, and common goals. As such, the dimension was found to have impacted on the efficiency and effectiveness in work coordination (Hatzakis, et al., 2005), thus proving that seamless social integration could not have been achieved without the consideration of this dimension in ES use.

Summary

Table 5.1 below shows the research findings of the three social integration dimensions and their definitions.

Social Integration Dimensions and Definitions	
Structural Integration (D1)	Refers to the integration of staff accessibility to knowledge and information with the two SI processes *(P1) coordinating employees with a set of clearly assigned tasks, and (P2) cultivating consistent organizational practices*. It reorganized, reformed, interrelated and tidily connected *network structures and ties* in accordance with the ES nature which enables actors to explore and expand their networks. Once it is achieved, actors could access to speedy, quality information and knowledge.
Relational Integration (D2)	Refers to the integration of staff information and knowledge accessibility, exchange and combination capability based on two SI processes, they are: *(P3) achieving interactive interpretation and (P4) using system mediated terms*. It refers to developing relationships between actors through key factors of SC: trust, norms, obligations and expectations. The achievement of this dimension may significantly motivate seamless information and knowledge integration in an organization.
Cognitive Integration (D3)	Refers to the influence on accessibility and combination capability of common belief, emotional and intellectual buy-in among users from the embedded social fabric through the two SI processes: *(P5) fostering internal collective bonding,* and *(P6) establishing external bridging*. Failure to integrate with these key factors: the *shared code & language and experiences & stories* will hamper the shared understanding and interpretations between users to cooperate and achieve a cohesive goal - seamless information and knowledge integration in an organization.

Table 5.1 Social integration dimensions and definitions

The definitions of the three social integration dimensions must have clearly described the interactivity and connectivity of the three social integrations' key elements. Thus, in the following section a conceptual framework (See Figure 5.1) of social integration will be presented along with the data collected from interviews, and this chapter will end with the summary of the findings.

After describing the definition of each SI dimension, this section discusses the social integration process so as to provide the rationale highlighting why attention should be given in the context of ES use. Based on the data, social integration processes are deeply embedded (Pettigrew, 1997), dynamic, complex, and emergent. Due to the complexity of such processes, they cannot be explained by traditional factors or models that assume linear causality (van de Ven and Huber, 1990, van de Ven et al., 1999). Given such circumstances, this study process is examined by identifying influential relationships among social capital factors (i.e. events, activities and states) using the cognitive mapping approach (Akkerman & Helden, 2002; Butler & Fitzgerald, 1999). It is an approach that seeks out influential relationships among factors based on the cognitive understandings of interviewees and researchers (Kim and Pan, 2006). Building on this concept, the SI process is defined as the process that connects the three social capital dimensions (Structural, Relational and Cognitive) by Nahapiet and Ghoshal (1998) over time. Based on the literature guide and the case study, the formation of social integration at Talam was triggered by the two SI processes *(P1 and P2)* of the **Structural integration dimension (D1).** This SI framework consists of six processes that flow clock-wise and iterative in connecting the three social capital dimensions.

Rooted in the case and the findings that emerged, a social integration model was produced as depicted in Figure 5.1. A brief summary of three social integration dimensions will be presented before providing a more detailed analysis of the six social integration processes that bring about the conceptualization of social integration.
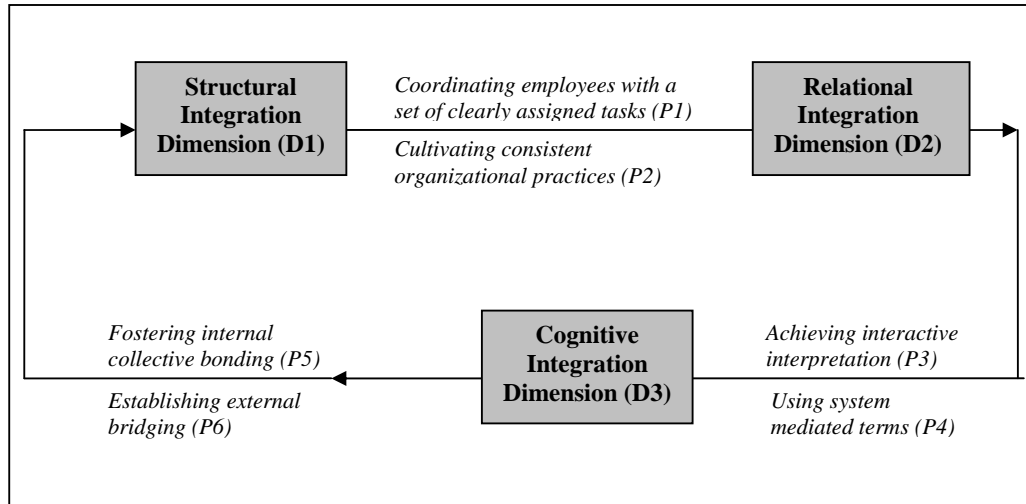
Figure 5. 1: Social integration framework

This framework was derived from the Talam case study data after data triangulation coupled with the existing literature on social capital view. The firm corroborates this model in ways that it enriches this study through presenting the process of social integration (see the three white boxes in Figure 5.1) that brings about the three SI dimensions so as to understand the influence of social integrations in ES use. The three grey boxes summarized social capital factors and categorized them into three SC dimensions according to the Nahapiet and Ghoshal (1998) study.

Based on the collected data, social integration of this organization begins from the **structural integration dimension (D1)** that represented the patterns observed from the SI processes in rearranging networks to facilitate ES users in accessing resources, including information and knowledge after the newly implemented ES. By specifying

work and decision flows, it paves the way to building a good working relationship that explains the ES users' motivation and the willingness for cooperation in the data. Such outcome is known as the **relational integration dimension (D2)** that explicates staff cohesiveness. The sense of coherence between staff is then strengthen via sharing common beliefs, understanding, and language interpretation through the **cognitive integration dimension (D3)** across departments.

5.3 The Six Social Integration Processes

The case of Talam reveals that the social integration development is in support of the six social integration processes which are iterative. In this study, process is examined by identifying influential relationships among social capital factors (i.e. events, activities and states) using the cognitive mapping approach (Akkerman & Helden, 2002; Butler & Fitzgerald, 1999). These six SI processes (See Table 5.2) demonstrated different sets of pattern that were then categorized into three SI dimensions as mentioned. Each of the SI process will be examined and elaborated from multiple perspectives so that clear understanding of SI influences on ES use could be unveiled.

P1. Coordinating employees with a set of clearly assigned tasks
P2. Cultivating consistent organizational practices
P3. Achieving interactive interpretation
P4. Using system mediated terms
P5. Fostering internal collective bonding
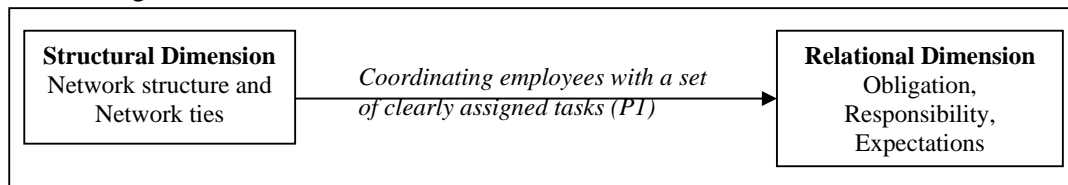*P6. Establishing external bridging*

Table 5.2: Six social integration processes

5.3.1 Coordinating Employees with a Set of Clearly Assigned Tasks (Process 1)

To manage the enterprise system, this study has found that **structural integration (D1)** played the most important role to initiate social integration of ES use. This is

because the larger the firm, the more intense the socialization process could be (Zemans and Roseblum, 1981). King and Burgess' (2006) research suggests that structure arrangement discourages interdepartmental communication and collaboration. In particular departments may not be co-located as they are likely to be constituted with different objectives and work processes. Thus, such **structural** differences will amplify the **relational** and **cognitive** differences over time (King and Burgess, 2006). However, this concern is revoked in this study with the use of SI process to coordinate employees with a set of clearly assigned tasks. So the firm's *structures and ties* represent an important system to guard and control its social capital (Arnold and Kay, 1995) so that social integration is made possible.

The following two paragraphs illustrate two different SI *Process 1* scenarios connecting the structural and relational SC dimensions.

Structural Dimension Network structure and Network ties	*Coordinating employees with a set of clearly assigned tasks (P1)* →	Relational Dimension Obligation, Responsibility, Expectations

Figure 5. 2: The process involved to connecting structural and relational dimensions in achieving structural integration (Scenario 1 & 2)

Scenario 1: Network structures and Network ties (Structural dimension) – Obligation & expectations, responsibility (Relational dimension)

Talam management executed the company's Standing Instructions and SOP (*network ties*- structural) which defined clear guidelines to ES responsibilities (*obligation*-relational) so that ES users know who to interact with to achieve their assigned tasks (*network ties*-structural). To bridge the structural and relational dimensions of social capital, study found that the SI process- *coordinating employees with a set of clearly assigned tasks (P1)* has paved a systematic network structures and ties guide to

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organize, administer, guide and manage ES users to perform their assigned tasks with minimal confusion and conflict. For example, after *coordinating employees with a set of clearly assigned tasks (P1)* with the two written procedures (*network ties and network structures*), now credit controllers are able to work in harmony with sales and marketing staff with fewer conflicts due to clear job allocation. Such process has administered network structures and employees' roles in such a manner that it clarified ES actors' *responsibility and* management *expectations.* Thus SI *(P1)* reduces the challenge and impact on the ES use (Doherty and King, 2005) rather than diminish ES actors' moral *responsibilities* as Dillard, et al., (2005) claimed.

Scenario 2: Network ties and Network structures (Structural dimension) – Obligations (Relational dimension)

The VP divulged the importance of executing such Standing Instructions and SOP in this organization. According to the VP, these two written procedures have enabled employees to identify their assigned task *obligations* and utilize them as "road maps", for example, *network ties and network structures* to assist new recruits to carry out their tasks in an organization where the *network structures and ties* were described as a "spider web" by the informant. The VP's statement is reiterated by the finance department's assistant manager. Thus, the provided "road map" and management's effort in executing the SI process have facilitated ES users to better understand and recognize their *obligations* after the implementation. Having clear goals and objectives for ES users is known as one of the critical success key elements for ES projects (King and Burgess, 2006). In addition, by practicing such SI processes it could be seen as a progression to develop readiness and willingness for implementers and ES users to cooperate (Van de Ven and Poole, 1995) once clear goals and objectives are clearly defined.

Figure 5.3 shows the SC factors involved in SI *Process 1* connecting the structural and relational SC dimensions. Such process activity taking place is further described in two examples below.

Structural Dimension Network structure and Network ties	Coordinating employees with a set of clearly assigned tasks (P1) →	Relational Dimension Trust, Norms
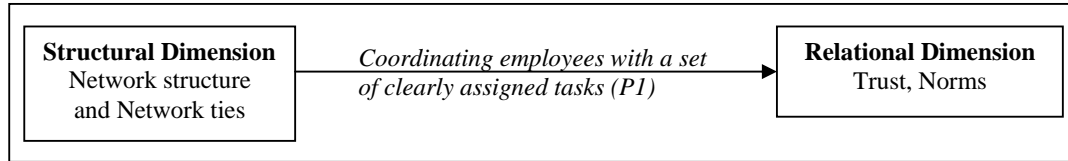
Figure 5. 3: The process involved to connecting structural and relational dimensions in achieving structural integration (Scenario 3 & 4)

Scenario 3: Network ties (Structural dimension) – Trust (Relational dimension)

In addition to the two scenarios stated above, data showed that *coordinating* ES users *to work on a set of clear and consistent tasks* has provided actors' opportunities to further enhance and integrate their networks. More importantly, data also showed that over time, *trust* was developed between actors via evaluating colleagues' competence and capability over time of cooperation, similar to the finding of Szulanski's (1996) research. In this case, the existence of *trust* could be found through the gesture of tapping colleagues' shoulder by the sales and marketing department staff to access information (*trust-* relational). This is because if the sales and marketing staff do not *trust* the knowledge of their colleagues, it is unlikely that the knowledge would be used (Lesser, 2000). Therefore, study asserted that the gesture of tapping shoulders was a sign of representing *trust* establishment which demonstrates the cooperativeness between ES users in the sales   and marketing department. Thus, study agrees with Nahapiet and Ghoshal's (1998) research claim that *trust* lubricates cooperation between actors.

Scenario 4: Network ties (Structural dimension) – Trust, Norms (Relational dimension)

Data also showed that the gesture of tapping shoulder could be interpreted as the common practice or the *norms* of the sales and marketing department. Such *norms* have influenced the way the sales and marketing staff access help and accomplish task in the department. On the other hand, study also acknowledges that *norms* could always be influenced by the rules as formal institutions can influence *norms* and beliefs (Alder and Kwon, 2000). Consequently by *serving the consistent tasks* over time, the flow of information exchange in terms of network ties between actors would influence the establishment of *norms* that lead to cooperation. The collected data showed that through frequent and consistent information exchange and flow while accomplishing tasks has enabled the newly employed IT HoD to quickly realize the *norms* of this organization, such as friendly, humble and easy-going character without any bossy attitude. Hence, the IT HoD managed to gain stronger support, *trust* and respect from his team members and other selected ES users for the system implementation and upgrading projects. Such pattern of claim found in this case is further confirmed by another department- the credit control department. The marketing manager of the credit control department said: *"Over time, by serving the consistent task through consistent communication, it would enable staff to know and eventually trust each other. Thus a sense of obligation to the expectation of each other would also arise. As a result, the willingness for cooperation is triggered among staff. I say this based on my 20 years of work experience in this organization."*

Over time, this process paved opportunities for ES users and IT team to know each other so as to achieve **relational integration (D2)**. Such relation developed between

actors has elevated the success rate for actors to exchange knowledge in Talam. This outcome has clearly shown the SI success in bridging structural and relational dimensions as once actors' networks are established; they will strengthen the knowledge flow in an organization (Inkpen and Tsang, 2005). The bridging of these two SC dimensions has triggered motivation for cooperation between IT team and ES users. An example to demonstrate the above claim would be the motivation and willingness of the IT team and ES users to access, exchange and combine knowledge and opinions during system implementation and system upgrading. Hence, Talam was able to complete its enterprise system implementation and other general system upgrading projects within three months in the following years after a year of familiarizing and studying about the Talam business processes. So it is reasonable to speculate that once social integration is achieved, motivation and cooperation between staff would lead to efficient output.

In conclusion, it is important to have a systematic structural arrangement cum an SI process to provide *clear and consistent task* function as a guideline to facilitate actors to achieve **relational integration (D2)** in organization. Without the opportunity for actors to identify their tasks and *obligations*, it is almost impossible to establish the network for knowledge and information exchange. Similarly, poor *network structures and ties* could not pave a good foundation for *trust and norms* development. Thus, it is needless to hope for motivation and willingness to cooperate, which results in task efficiency that could never be achieved although the system is integrated. Such claim is further confirmed by the marketing manager.

5.3.2 Cultivating Consistent Organizational Practices (Process 2)

To ensure the constancy and standard of the organizational practices, Talam management plays an important role to *consistently cultivate organizational practices (P2)*. This is the second process found to bridge the structural with relational dimensions. The Figure 5.4 illustrates the SI *process 2* linking the structural to relational dimensions with an example.

Structural Dimension Network structure and Network ties	*Consistently cultivate* *organizational practices (P2)* →	Relational Dimension Norms, Trust
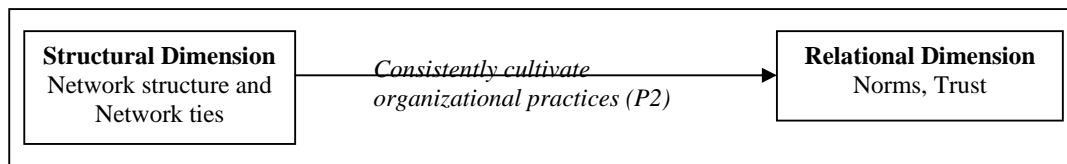
Figure 5. 4: The process involved to connecting structural and relational dimensions in achieving structural integration (Scenario 1)

Scenario 1: Network structures and Network ties (Structural dimension) – Norms, Trust (Relational dimension)

In this company, the process of *cultivating organizational common practice* was carried out in multiple aspects to connect structural and relational dimensions. SI *(Process 2)* is strongly encouraged by the Talam President who is the major share-holder of the company. He believes in cultivating good organizational *norms* such as being goal-oriented, hardworking, creative, loyal, honest, diligent and disciplined. Data found that when such belief is deeply implanted in the mind of top management, after long term cooperation with the President, eventually *trust*, cooperation and cohesiveness between top management and departments were fostered (*network structures, ties- structure – norms, trust-relationa*l). This finding has put to rest the debate of *trust* and cooperation among actors which relate back to *network structures and ties* claimed by Cohen and Fields (1999). It appears that *cultivating organizational common practices* not only established the connectivity between structural and relational dimensions but has also clearly demonstrated the

interrelationship between *trust, norms, network structures and ties* based on the collected data.

The open concept design of the Talam office is to create a foundation in cultivating transparency, honesty and cohesiveness among employees. Such *norms* are made possible partly due to the open concept setting of the office. Informants claimed that with such office design, no one could hide behind partitions or blinds and isolate him or herself from colleagues. This functioned as a pre-requisite to foster cooperation between employees because the transparent office condition allows IT staff to seek help by raising their head to look for the informant or roll their chair over to the informant's seat. Thus, result suggests that *norms* could even be *cultivated* unconsciously through design of the office layout.

Figure 5.5 shows the influential SC factors identified in SI *Process 2* connecting the structural and relational SC dimensions. Such process activity is further described in the four examples below.

| **Structural Dimension**
Network structure and
Network ties | *Consistently cultivate*
organizational practices (P2) → | **Relational Dimension**
Norms, Trust,
Expectations |

Figure 5. 5: The process involved to connecting structural and relational dimensions in achieving structural integration (Scenario 2, 3, 4 & 5)
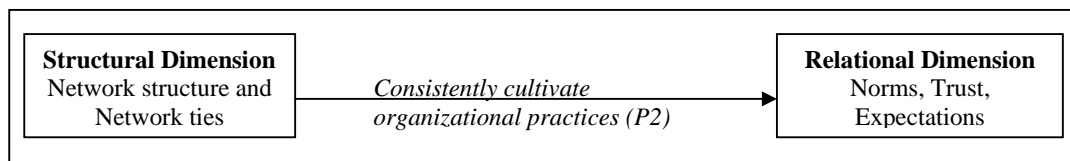
Scenario 2: Network structures and Network ties (Structural dimension) – Trust, Norms, Expectations (Relational dimension)

Talam's senior managers act as the role models for their subordinates to adapt to a new or preferred *norm* in this organization. In this case, to cultivate and encourage an attitude of professionalism among colleagues, the IT HoD and other departmental

managers play the role of moral agents through their words and deeds. For example the IT HoD said: "*I always try my best to make sure that my subordinates get fair evaluation and job dissemination. Practicing good ethical values is the least I can do to reduce politicking in my IT department*." Thus, it seems that this social integration process has to be rightfully practiced so that management could leverage power derived from their managerial status- *structural hierarchy* to shape and transform employees' mindsets to *norms* over time. This is because many *network ties* come with formal positions and are not voluntarily chosen (Podolny and Baron, 1997), so eventually many subtle behaviors and beliefs are shared through routinized task (Hofstede, 1991). Thus, organization *norms* are accepted by ES actors. Once *trust and norms* are established and implanted into ES users' mind, it is likely to reduce the politics in a department (*trust, norms*- relational) just as Alder and Kwon (2000) claimed that *norms* could resolve problems of collective action and bind communities. In addition, based on the execution of the *consistent organizational practices,* according to *network structures and ties*, the credit control managers managed to encourage company's preferred *norms* by expressing their *expectations* to subordinates. Eventually such repetitive practices have minimized the conflicts of interest within the department and the willingness to cooperate becomes instinctive.

Scenario 3: Network structures (Structural dimension) – Trust, Norms (Relational dimension)

Besides, study has found that performing consistent SI process could transform *trust and norms* to obedient working relationship between managers and subordinates. According to the marketing manager of credit control department: *"Our staff are very obedient; they never refuse to carry out the jobs we assign to them as this is because*

they know that we are very fair in the assignment of duties after working with us for years...therefore our staff are very supportive and cooperative." Such statement demonstrates that once *trust* is developed, ambiguity and uncertainty among actors as Nahapiet and Ghoshal (1998) claimed were reduced as shown in the data. As a result, it appears that besides obedience, ES users' also have the passion to exchange and share information and knowledge.

Scenario 4: Network structures and Network ties (Structural dimension) – Norms (Relational dimension)

Consistent cultivating of organizational *practices* by managers has successfully transferred *norms* to subordinates. As mentioned before, politeness and respect were the few *norms* encouraged by the President. Thus, to *cultivate* the *norms*, the IT HoD acted politely and made requests diplomatically as a sign of respect towards his subordinates, especially those with *direct network ties*. For that reason, the IT HoD was provided with better quality of output from his subordinates as compared to the other IT manager who paid less attention to *norms* but enforced his power and status through *network hierarchy*. According to informants, IT subordinates are less motivated to assist the IT manager who disrespects the organizational *norms*. In responding to this, an IT executive said: *"Most of us do not get onquite well with our IT manager, because he doesn't respect us, so we simply work for him just to keep his mouth shut."* Such feedback has clearly expressed the acceptance of organizational *norms* between subordinates and the outcome of not respecting the *norms* by the middle manager. Thus, it seems that those who comply with the organizational *norms* are more likely to develop good working relationship and obtain motivated subordinates' support in accomplishing tasks.

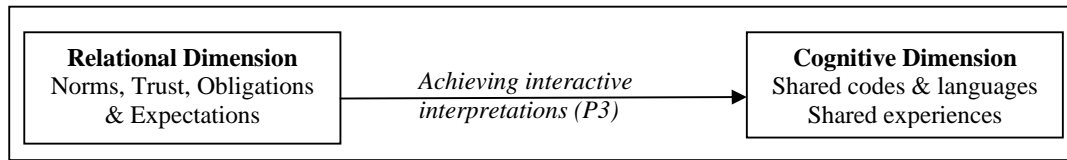**Scenario 5: Network structures (Structural dimension) – Norms, Expectations (Relational dimension)**

Aside from office layout and managers supporting effort, study finds that human resource (HR) department (*network structures*) also played an important role in recruiting the suitable candidates. During the recruitment, the HR manager clearly illustrates Talam's *norms* and management *expectations*. Such clear and open interview session is to mentally prepare the interviewees so as to reduce cultural shocks after joining the company. *"Aside from that, new recruits with suitable mindsets may find it easier to undergo the job training,"* claimed the assistant accounts manager. The other department managers shared a common view that it would take up more work to simply employ an unsuitable candidate. With such mental preparation, Talam has successfully reduced its risk of hiring staff with incompatible attitude that could have hampered the organization's daily performance in this competitive marketplace as organizational norms has an important influence in the process of capability development (Oliver, 1997).

The above outcomes of SI process have eventually reformed the relationship among ES actors of Talam. The above discussions and examples have shown the **integration of relationship (D2)** between management and subordinates of the case study. Thus, the sharing of *norms*, establishment of *trust*, understanding of individual *obligations*, organization and management *expectations* have reduced the politics issues. The existence of norms and trust among actors encourages obedience among subordinates through fair and consistent managerial practice, thus convincing actors to be supportive, motivated and willing to accomplish their *obligations*.

5.3.3 Achieving Interactive Interpretations (Process 3)

Achieving interactive interpretations process *(P3)* was found to be useful to assist Talam ES users to use the *shared codes & languages* to record, keep track and leave messages in the systems when one is away or to transmit the information to other departments for process. In the absence of such social integration process, it is impossible for recipients to cognitively elaborate and understand a particular message (Sussman and Siegal, 2003). In most circumstances misunderstanding and conflicts are due to the variations in elaboration. Thus, study claimed that *interactive interpretations* play a vital role in facilitating a common understanding and interpretation in Talam. Such *interactive interpretation* where shared meaning is found vital to everyday interaction is rooted in the situation (Garfinkel, 1967). More importantly, the meaning of the text used mainly derives from the situation in spoken discourse (Ricoeur, 1981). This study agrees with Ricoeur's (1981) statement where case data showed that *interactive interpretations* is facilitated by the relational ties which function as the platform to establish shared beliefs and understanding. In other words, the increase in the number of times that actors had in *shared experiences* (developed from the relational dimension- *trust, norms, obligations and expectations*) could contribute to higher positive marginal effect on knowledge creation than the opportunity to access resources as claimed in McFadyen and Cannella (2004).

The Figure 5.5 below shows the SI *Process 3* linking the relational and cognitive dimensions.

| **Relational Dimension** Norms, Trust, Obligations & Expectations | *Achieving interactive interpretations (P3)* → | **Cognitive Dimension** Shared codes & languages Shared experiences |

Figure 5. 6: The process involved to connecting relational and cognitive dimensions in achieving relational integration (Scenario 1)

Scenario 1: Obligations, Expectations, Norms, Trust (Relational dimension) - Shared experiences, Shared codes & languages (Cognitive dimension)

Understanding the *shared codes & languages* has a crucial influencing effect on daily interactions in Talam, especially establishing linguistic events where its meaning is similar to referencing text in a document through *interactive interpretations (P3)*. For example, a sales and marketing executive explained: *"Only the new-comers might need some time to adjust to and get familiar with our shared terms. Using shared terms is the way we keep each other informed of the purchaser's status with least misunderstanding."* Such claim has clearly shown that existing ES users (*who know their obligations, management expectation, organizational norms and posses trust within each other*) could successfully transmit information across departments with minimal communication because of their *shared experiences* in working together. This is simply because in the absence of shared meanings or aim, it is difficult to comprehend how and why people would collaborate (Alder and Kwon, 2000). Aside from this, analysis found that time is the other determining factor for ES users to familiarize themselves with the inter-subjective construction of meaning through interactive communication so that ES users could operate the system with ease. Such finding corresponded with Carlson and Zmud's (1999) research where it is important for ES users to communicate in certain pattern so as to establish *shared interpretation*

towards particular *codes and languages* used. Once this is achieved, it is likely for the organization to improve the efficiency in information transmission and effectiveness in tasks accomplishment because a strong sense of community and solidarity is created (Portes, 1998).

The Figure 5.7 below identified and illustrated the SI processes involved in attaining relational integration
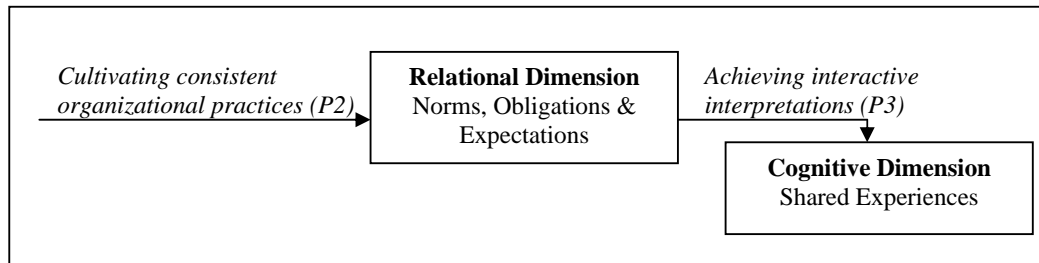
Figure 5. 7: The process involved to connecting relational and cognitive dimensions in achieving relational integration (Scenario 2, 3 & 4)

Scenario 2: Norms, Expectations (Relational dimension) - Shared experiences (Cognitive dimension)

The constant *interactive interpretation (SI process 3)* among CSAC staff and *consistent cultivation (SI process 2)* practiced by management and senior staffs have eventually developed common beliefs and mindsets (*norms and expectations*) between actors of the department. For example: *"Customers are always right and do not argue with them"* is identified as the common sentence used by all CSAC staff. Such common statement could be perceived as evidence of the *achievement of the interactive interpretation* SI process has between staff. Once common understanding of the situation is obtained, it could trigger the urgency to cooperate and provide good customer service.

Scenario 3: Norms (Relational dimension) – Shared experiences (Cognitive dimension)

In addition, based on the findings*, achieving interactive interpretation* process *(P3)* could contribute to group cohesive thinking that would enact common goals. Such cohesive thinking could be the common view established through *shared experiences* between ES users. One interpretation of this would be the "associability", meaning the willingness and ability of individuals to define collective goals that are enacted collectively (Leana and Van Buren, 1999). For instance, actors are clumped together in a common situation serving the consistent or routine tasks which eventually results in them learning to identify and support each others' initiatives since they are positioned in the similar situation. Such scenarios could be a good example to explain how a *norm* is developed. For example, to solve the financial issue, it is Talam's *norms* to settle through face-to-face meetings as they view it as the "quick-relief method". While other types of communication channels, such as use of telephone, email, intranet, and fax are used by actors in supporting their network connections, especially for mobile workers to keep in touch and access up-to-date information from company's database. Appropriate use of technology would have positive impact on the development of social capital for that could strengthen weak ties between individuals in distant offices, such as connecting branch offices with the headquarters, thus making it easier to locate the source of knowledge (Lesser, 2000). In view of the appropriate technologies to support communication between actors, study finds that it has enhanced organization *norms* and induced group cohesiveness which eventually contributed to efficient problem settlement.

Scenario 4: Norms (Relational dimension) – Shared experiences (Cognitive dimension)

With the above identified scenarios, actors are able to achieve **cognitive integration (D3)** through shared vision which embodies the collective goals and objectives of the members (Inkpen and Tsang, 2005). Though group cohesiveness is built through *shared norms and shared experiences,* it might lead to negative outcomes. Organizational *norms,* which were developed and evolved throughout the years, would eventually become the standard procedures in the eyes of all ES users. For that reason, it is difficult for this cohesive group to accept new suggestions that go against common practice. Referring to the collected data, the Finance DVP said: *"We have been practicing such methods for so long and no problems have occurred. Therefore, I don't see any reason why we need to change our common practice."* Such feedback from the management could be good and bad. Good, if their current practice is efficient and effective. Otherwise, it could be bad because the Finance DVP is blinded with the common practice thus resisting improvement. Fortunately, in this company *norms* are to encourage two-way communication; therefore, after discussion, the management found that the proposed idea is not feasible and suitable to be carried out in this organization. Thus, result showed that Talam is managed by a group of open-minded managers. Such positive *norms* could be seen as the asset of the organization as they could critically respond to the proposed idea without being overtaken by what the group thinks.

Result shows that it is vital for employees to know the organization's **relational integration (D2)** well otherwise it could hamper individual career development in the organization. Based on a *story shared* by the Finance DVP, finding showed that

employees who went against the corporate *norms* and had no respect for *network structures and ties* would be penalized. Once one tries to bypass his or her immediate superior and uses his "quanxi" by engaging higher authorities to deal with trivial problems, he or she might have difficulties to be accepted by the department members. The lesson learnt in this case was that "quanxi" must be wisely used and at a certain point "quanxi" does not work especially in an organization with strong respect for organizational norms. Since then, such incidents have been used as the *shared stories* in the organization to remind and warn ES users to respect the organization's norms and common practice. Thus, to have a good working relationship, it is worth the effort to find out those unwritten rules in the organization if one intends to have a smooth ride in career development.

5.3.4. Using System Mediated Terms (Process 4)

Based on the findings, *system mediated terms (P4)* is identified as another SI process to relate relational and cognitive dimensions. In this company, the use of *system mediated terms (P4)* is known as the basic aid to nurture common understanding of the collective goals and function as the systematic procedures to carry out tasks.

The Figure 5.8 illustrates the process of achieving cognitive integration through connecting relational and cognitive dimensions with SI *Process 4*.
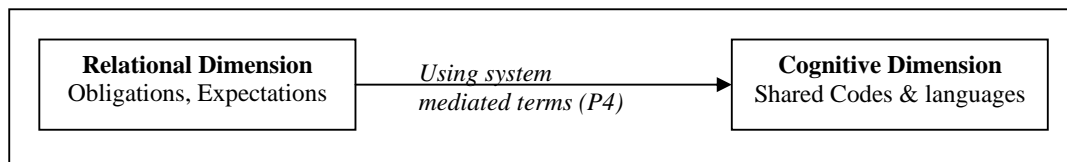
Figure 5. 8: The process involved to connecting relational and cognitive dimensions in achieving relational integration (Scenario 1 & 2)

Scenario 1: Obligations, Expectations (Relational dimension) – Shared codes (Cognitive dimension)

According to data collected from the credit control department since the system implementation, credit controller tasks have been divided into three groups rather than being handled by one person in the past. Such distribution of work and *obligations* has shown the increased need for cooperation between the three groups (*the management expectations*). Based on research, *system mediated terms process (P4)* was identified as the mediating process to connect these three groups of credit controllers. For example, the senior marketing manager of the credit control department claimed: "*By looking at the E002 code, immediately I know it is time to request the particular purchaser for the next housing payment*". Such *shared codes* were clearly classified in the system menu- "F1" for reference. So, with the use of *system mediated codes*, data showed that communication time and misunderstanding between colleagues and other department staff were significantly reduced. The reason for people to understand each other during interactions is because *shared codes* organize sensory data into perceptual categories and provide a frame of reference for *consistent interpretation* (Nahapiet and Ghoshal, 1998). Without such inhibited habits, the use of ES as one of the communication channels could be a failure for an organization (Olesen and Myers, 1999). Since the ES is used as one of the communication channels of the organization practice, the use of *system mediated terms* would not bring dramatic changes in work habit for ES users. Thus, such SI process functions as a fundamental platform to coordinate and integrate ES users across departments.
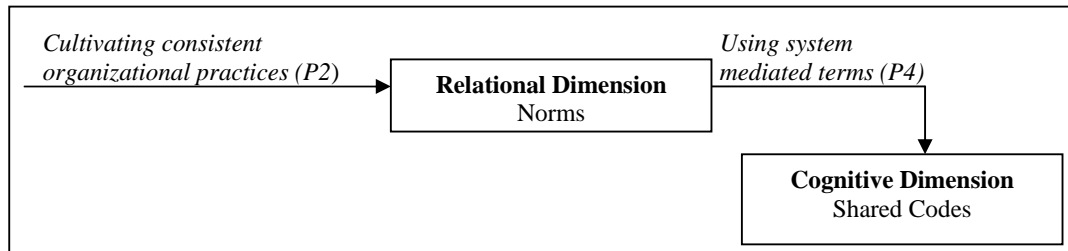
Scenario 2: Obligations (Relational dimension) – Shared codes & languages (Cognitive dimension)

Aside from the credit control department, the *system mediated terms process (P4)* has also enabled CSAC staff to document customers' complaints. Such process has enabled CSAC staff to carry out their tasks (*obligations*) by selecting and using the appropriate technical jargons in writing short messages in the MEMO function in such a way that it could be understood by the relevant parties with little confusion. Besides paying attention to the *shared codes*, it is also important for ES users to carefully use *shared languages*. In this case, data showed that in many circumstances Talam company members used multiple languages such as Mandarin, Hokkien, Malay, Cantonese and English in their daily conversations; for example, "Speak Japan now?" The use of such language is rather intricate for the outsiders to comprehend its implicit meaning though it is just a simple sentence. Based on this point, study has convinced that CSAC staff has thoroughly established strong **Relational integration** for information and knowledge sharing among them to the extent that they could even possibly develop new concepts and narrative forms. This finding has corresponded with Nonaka and Takeuchi's (1995) research.

Based on the above claim on the possibility of developing new concepts and narratives, data shows that Talam ES users took the initiative to develop *new codes*. For example, the CSAC executive claimed: "*We create abbreviations for new housing projects and others among ourselves. For example, the Architect Bina Jaya project was named as ABJ; water and electricity- W/E.*" The suggested *shared codes and terms* were adopted by the IT department and *they* were captured in the system so as to synchronize the use of *terms and codes* in Talam's enterprise system. Such effort in

developing the *shared codes* could assist in integrating actors' relationships (McFadyen and Cannella, 2004) especially in a scenario where the organization project is expanding.

The Figure 5.9 illustrates the process of achieving cognitive integration beginning from the influence of social integration *Process 2*.

Figure 5. 9: The process involved to connecting relational and cognitive dimensions in achieving relational integration (Scenario 3)

Scenario 3: Norms (Relational dimension) – Shared codes (Cognitive dimension)

In the finance department, informants express their appreciation for the use of *system mediated terms (P4)* because they could appropriately use the *shared codes* to channel resourceful information. For example, the Finance DVP clarified: *"Use of different coding and key words in different functional sections leads to different data generation from the system, that's why I always encouraged my managers to explore the system so that they could share with their subordinates... this system is very powerful but if you do not explore you would not know."* This statement shows the top management encouragement for a continued learning and sharing attitude *(cultivation of organizational practices P2).* Such attitude did become the organization's *norm* as it is even practiced by managers from other departments. According to one of the managers from credit control department: *"I always like to explore this system when I have time... Mr. Tan is right, this system is very powerful but we have to self explore... whatever I find I would note it down and share with my*

subordinates." This finding not only shows that relevant knowledge and skills were being required by actors to appropriately use the s*ystem mediated terms (P4),* but also corresponded with Tiwana and Bush's (2005) research, whereby system-mediated relationship with other users of the system would increase continuance for expertise sharing.
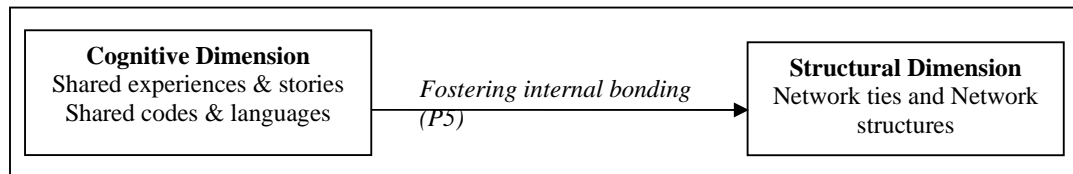
In conclusion, key factors of the cognitive dimension are *shared language, codes, experiences and stories* which are built on the influence of *trust, norms, obligations and expectations* of the relational dimension with two *SI processes: achieving interactive interpretation (P3) and using system mediated terms (P4).* Thus, the achievement of SI dimension **- Cognitive integration (D3),** means users and management are able to "speak the same language" as suggested by King and Burgess (2006). Such outcome has a positive influence on social capital between actors at the cost of decreasing conflicts, misinterpretations, and misunderstandings between actors and departments. For that reason, efficiency and effectiveness between ES users in terms of sharing, exchanging and transferring information and knowledge through multiple types of communication channels became more achievable.

5.3.5. Fostering Internal Bonding (Process 5)

After achieving the **cognitive integration dimension**, and through further exploration, data has identified the *(P5)* SI process-*fostering internal bonding* to explain how cognitive and structural dimensions were connected. Such *internal bonding* may leverage the benefits of intangible assets of organizations such as knowledge, expertise and experience possessed by staff with the effort and patience from the management and ES users. As internal bonding focuses on collective actors'

internal characteristics, such individuals are linked within the group which eventually provides the opportunity to develop collectivity cohesiveness and facilitates the pursuit of collective goals as well (Alder and Kwon, 2002).

The Figure 5.10 illustrates the process of achieving structural integration through the social integration *Process 5*.

| **Cognitive Dimension**
Shared experiences & stories
Shared codes & languages | *Fostering internal bonding (P5)* → | **Structural Dimension**
Network ties and Network structures |

Figure 5. 10: The process involved to connecting relational and structural dimensions in achieving structural integration (Scenario 1, 2 & 3)

Scenario 1: Shared experiences & stories (Cognitive dimension) – Network structures and Network ties (Structural dimension)

In this case, study has identified different examples of Talam management efforts (*network structure*) to *fostering internal bonding (P5)* which enriched social integration between ES users (*network ties and structure*). These three identified examples have adequately demonstrated different management techniques (*network structures*) which have been practiced throughout the years (*norms*) to fostering stronger *network ties* among employees. Example one, the sales and marketing department manager used the opportunity after weekly meetings to listen, share his *experiences and stories* with his subordinates and then have a tea-break after meeting before going home. Likewise, example two, the credit control managers would throw their subordinates birthday lunches so that members of the same department could have more opportunities to know each other besides work. Example three, the financial department managers would lead the team to visit their colleagues during festive seasons, while those younger financial assistant managers would invite their

subordinates to the Malaysian Annual Grand Sales for shopping. Interestingly enough, data shows that finance staff would organize overseas trip for themselves during the long public holidays. Example four, the CSAC department manager would conduct weekly meetings to patiently provide mental support, and *share experiences and stories* including the advising and assisting of staff in overcoming challenges and stress encountered throughout the week. Besides providing emotional support during meetings, CSAC department would also organize their monthly pot-luck, festive celebration outings, and even organize welcome and thank you parties for new-comers and those leaving. Due to these activities, study has found an impressive *internal bonding* example in the CSAC department. The CSAC staff may know the favorite food of a colleague's son and offer to buy them something during the lunch-break for her to take home knowing that her colleague was too busy attending to customers. Each presented example has shown the efforts invested by Talam managers across departments. Such efforts have created greater opportunities for ES actors to know each other better, hence increasing the possibility of fostering *internal bonding*. The above statements matched with the collected data from employees' feedback. Thus, such practices are worth learning from and carrying out in the practitioners' world.

Scenario 2: Shared codes & languages (Cognitive dimension) – Network ties (Structural dimension)

Talam staff does organize additional outings on top of those planned by the management. For example, according to the sales and marketing staff, it is their department's *norms* to have dinner followed by drinking in a pub after the tea-break session with the manager. *"Normally we will invite everyone from the same*

department, and at times even those from other departments," added a sales executive. The above statement shows that ES actors were wise to leverage on the opportunity (the tea-break after meeting) that was initiated by the manager to other outings. Thus outings and gatherings have empowered staff to *foster internal bonding* (expand and enhance *network ties)* based on the face-to-face communication. Such communication method is known as the most preferred and effective technique for ice-breaking between members of the same department, in particular for those that are not familiar with each other. The reason is, face-to-face communication enables actors to respond to each others' comments and complete discussion (*shared codes & languages*) on one issue before proceeding to another. On top of that, actors are also able to elicit the necessary attention that could enhance their ability to share information and knowledge (Miranda and Saunders, 2003) so as to achieve group cohesiveness (**Cognitive integration (D3)**) to attain collective goals (Alder and Kwon, 2002).

Scenario 3: Shared codes & languages, Shared experiences & stories (Cognitive dimension) – Network ties (Structural dimension)

With the common vision, understanding their department priorities and goals is made possible through the support of good *internal bonding* SI process. Such common understanding is one of the key factors of the cognitive dimension, as cognitive represents shared understanding (*shared codes & languages, shared experiences and stories*) among parties explained Nahapiet and Ghoshal (1998). For example, after knowing their *obligations* in achieving monthly sales target, Talam's sales person would assist each other by introducing his/her clients to a colleague who has problem achieving individual monthly sales target. Such examples have clearly demonstrated

the *trust* and *internal bonding* they have for their colleagues to return a favor when they have the opportunity. Such favor could be claimed as a form of "renqing" practice in the company with the highest percentage of Chinese population. From the data, "renqing" which is established through the relational dimension seems to be the precondition to strengthen the *internal bonding* between sales persons.

Based on the study, the relational and cognitive dimensions are known as the foundation to *fostering internal bonding* SI process. This is because the department's common practice- tapping on colleague's shoulder to ask for assistance and walking into their manager's office to seek guidance and advice in Talam have became the *norm*. Such practices signify the *internal bonding* of SI process stipulating the *network ties and network structures* arrangement to be more flexible and efficient for ES actors to obtain, exchange information and knowledge within shorter time frame and higher quality. Such finding triggers the need for SI **structural integration (D1)**. In other words, once **integration of structure (D2)** is achieved, standard instructions and SOP would not be as important as before because formal instructions are meant to provide guidance to connect ES actors before working relationships are established.

From the data, study has found that there are *sub-internal bonding* groups within a department that is mainly due to the ES actors' job nature. The Finance DVP admitted such existence and explained: *"I know they have cliques among them. However I will always instruct them to help each other…It doesn't matter whether they talk to each other or not but they must make sure tasks are delivered to me on time… they are matured enough to deal with personal problems professionally."* Such claims have shown the other perspective- sub-*internal bonding* groups, meaning the splitting of

internal bonding between staff from the same department. Such sub-*internal bonding* group is developed by a group of staff with common perspective, thinking and cohesiveness. For example, the JL group (sub-group of the financial department) would volunteer to assist the management when the workload is a lot without demanding OT from the company. At times, when error occurred in data entry section, managers would reassign two groups of ES actors to cross-check the key-in data through a temporary *network ties*. Since MBO is the consistent *cultivation of norms* by the management, study would argue that Talam has successfully established strong bond, cohesiveness and common goal between ES actors (**cognitive integration (D3)**).
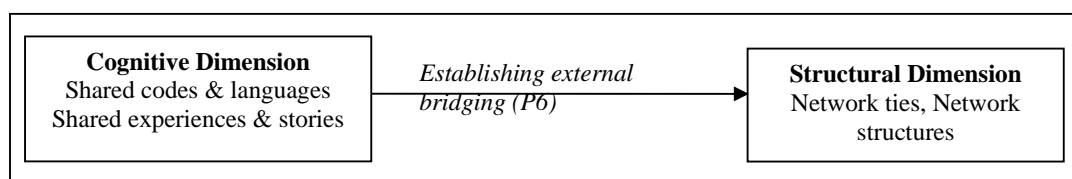
In addition to the above findings, study claims that strong *internal bonding* process played a vital role when the company is challenged by threats at times of urgency. For example at the CSAC department, staff has to work in groups so that they could fully utilize, complement each others' skills and experiences to deal with problematic customers and act as a cushion against the emotionally unstable purchaser. A story was shared by the CSAC executive: *"There was once a group of angry purchasers, who came to our office, banged our table and broke our office window. At that time, our security guards were at a loss on how to handle them. Although we had given them up-to-date information and explanation, they were still not satisfied. However, I was glad that all of us acted in unison and managed to control the commotion. This may well be the evidence of unity and cohesiveness among us which helps us to overcome and settle untoward incidents in a civilized manner."* Since the incident, it further enhanced the *internal bonding* process between CSAC staff thus reducing internal conflicts and politics between members of the same department. Such

outcome resulted in seamless social integration whereby jobs could be completed in more efficient and effective manner without following the fixed network structures and ties that slow down the business process. In other words, with such SI process, it has successfully bridged **cognitive construction (D3)** to **reform the organizational structure (D1)** so that seamless social integration is achieved and empowers CSAC staff to handle and provide better services to customers.

5.3.6. Establishing External Bridging (Process 6)

The last SI process found in this research is *establishing external bridging (P6)*. Such process is to broaden and expand the *internal collective bonding* process *(P5)* to bridge cognitive and structural dimensions. The *external bridging* in this case is viewed as leveraging and expanding personal networks to other departments through management arrangement, job status, and social connections.

The Figure 5.11 illustrates the process of achieving structural integration through the social integration *Process 6*.

Cognitive Dimension Shared codes & languages Shared experiences & stories	*Establishing external bridging (P6)* →	**Structural Dimension** Network ties, Network structures

Figure 5. 11: The process involved to connecting relational and structural dimensions in achieving structural integration (Scenario 1)

Scenario 1: Shared codes & languages, Shared experiences & stories (Cognitive dimension) – Network ties and Network structures (Structural dimension)

From the collected data, study has found that the majority of the *external bridging process (P6)* was mainly influenced by the management's arrangement (*network structures*) as mentioned in the beginning. For an example, the credit control
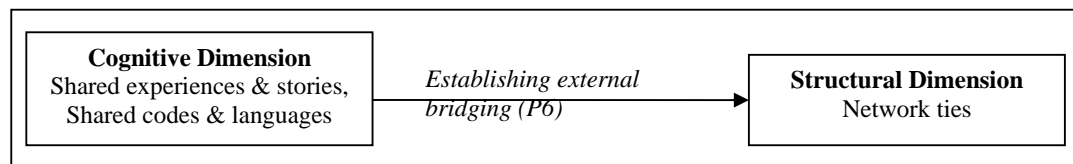
management assigned a duty-roster for the credit controller to assist in sales and marketing department during weekend housing sales. Such arrangement with the process of *coordinating employees with a set of clearly assigned tasks (P1)* has provided an opportunity- the external linkages to connect credit controllers and sales persons with *structured network ties* and clearly assigned tasks so that ES actors are clear with their extended *obligations*. Besides, another example to demonstrate the management's arrangement is the statement made by the sales and marketing manager: *"We don't have to worry about not being able to obtain necessary information on time because we (all departments) are given the same order to get things ready before the housing launch…they (other departments staff) will provide us with information before we request of it from them"*. Based on these collected data, the *external bridging* process is initiated by the management and carried out by staff from different departments. With such SI process, it has empowered efficient business process services in Talam without suffering job overlaps and conflicts between departments although staff duties are now inter-cross with different departments.

Over time, *external bridging* process is made possible through the provided *network ties* as a guide to coordinate cross-departmental staff to accomplish the organization's goal (**cognitive integration (D3)**). Such claim is based on the *sharing of experiences and stories* after *serving the clearly assigned tasks (P1)* according to the sales and marketing executive: *"When there are no purchasers around, we always share our experiences, jokes and problems dealing with the nature of our work… thus enabling us to understand each other better."* Thus, based on the statement above, it seems that the formation of *external bridging process* which is initiated by the management

would highly require the support from ES users so that seamless social integration could be realized.

Besides the *sharing of experiences and stories*, the *sharing of codes and languages* also plays an important role in influencing the *external bridging process* between members from different departments. The example to demonstrate the smooth *external bridging* is reflected by the credit control manager's conversation. She said: *"By checking the coding status in the property management module, we and the finance department would know when and which housing project is ready for collection."* Such sharing of knowledge in technical jargons (*shared codes & languages*) across departments has given advantages for cross departmental coordination and provided more efficient service to customer as all ES staff shared the same interpretation of the jargons used. Besides seamless coordination and efficient service, ES actors also manage to reduce the mistakes in uploading customers' latest profiles into the system. As a result *external bridging* between these two departments is achieved successfully.

The Figure 5.12 illustrates the process of achieving structural integration through the social integration *Process 6*.

Cognitive Dimension
Shared experiences & stories,
Shared codes & languages

Establishing external bridging (P6)

Structural Dimension
Network ties

Figure 5. 12: The process involved to connecting relational and structural dimensions in achieving structural integration (Scenario 2)
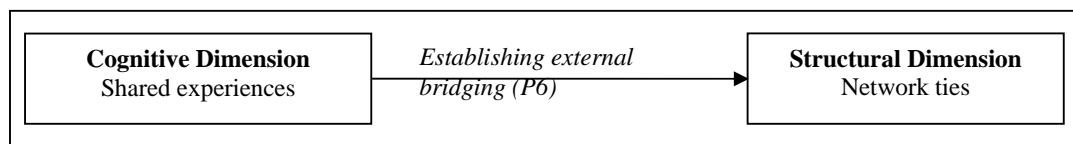
Scenario 2: Shared experiences & stories, Shared codes & languages (Cognitive dimension) – Network ties (Structural dimension)

Aside of management intervention in providing opportunity for *external bridging*, study also found that the establishment of such *SI process 6* would require additional factors such as established *shared experiences, stories, codes and languages* through working together during the new housing launches. For example, the sales and marketing staff would invite colleagues from other departments (i.e. finance staff, credit controller who they have worked with during previous housing launches) who they feel comfortable with and get along well with for outings. Such information across departmental socialization activity is found to be relatively important influencing roles in *establishing external bridging* process. Through the establishment at informal *network ties* (**structural integration (D1)**) the sales and marking staff has obtained *external bridging* benefits to access latest information and obtain their commissions on time from the accounting clerk instead of endless delay in receiving their commissions. Thus, based on this finding, study would claim that *external bridging* initiated by cross-department staff is more likely due to personal interest and benefits.

Aside from that, study also discovers that self-initiated *external bridging* is more challenging and risky, but if it is well handled, it could be rather rewarding. *Establishing external bridging (P6)* between Finance DVP and the President's secretary has enabled the Finance DVP to provide necessary information to the President at the right time. With such connection, the Finance DVP earned his triple promotion in 2005. While on the other hand, the new manager who engaged his *external bridging* partner to go against his immediate boss's common practice,

offended the *norms* of the organization resulting in him being isolated by the majority of ES actors. Being left with very little choice, eventually he left the company. This outcome has clearly explained the rightful use of *external bridging* networks in organization.

The Figure 5.13 illustrates the process of achieving structural integration through the social integration *Process 6*.

| **Cognitive Dimension** Shared experiences | *Establishing external bridging (P6)* → | **Structural Dimension** Network ties |

Figure 5. 13: The process involved to connecting relational and structural dimensions in achieving structural integration (Scenario 3)

Scenario 3: Shared experiences (Cognitive dimension) – Network ties (Structural dimension)

On the other hand, though a memorandum is circulated by the managing director to all departments from time to time, it is still difficult to ensure that everyone complies with the formal request (*network ties*) especially in the absence of *shared experiences* in achieving a certain uncommon task, such as cooperation between different departmental staff in preparing for court of law suits. The CSAC explained: *"Without the establishment of good working relationship and networking with other department staff, work cannot be done effectively."* Thus, study believes part of the failure is because of the unclear boundary and level of assistance and *network ties* stated in the memorandum, while the main failure is due to the poor establishment of working relationship and networking with other departments. The CSAC claimed that without the establishment of good *external bridging* of working relationship with staff from other departments, it could affect work efficiency. For example, *"When you request*

for assistance, they would simply tell you to dig from our file-storage room. Even then, I still feel very thankful as they have at least given me a hint to search for the information. I don't mind searching through the poor filing system in the stuffy storeroom for hours so long as I can find what I need in the end. Nothing can be worse than "I don't know". The above collected data have shown the important role of social integration in influencing the ES operation and use. A summary of the study's major findings are compiled in the following Table 5.4.

5.4 Summary for Major Research Findings

Social Integration Process	Critical Issues	Implications	Role of Enterprise Systems Users	Research Needed
Coordinating employees with a set of clearly assigned tasks (P1) *Cultivating consistent organizational practices (P2)*	Reorganize and establish networks in accordance with ES nature.	Working relationship between ES actors is established through structured networks to speedily transmit quality information and knowledge.	ES users are able to explore and expand their networks to accomplish their extended tasks through using this system.	How to provide and encourage the relevant networks to best suit ES nature and further improve ES performance?
Achieving interactive interpretation (P3) *Using system mediated terms (P4)*	Reform and improve ES users' relationships by providing multiple channels to encourage communication.	Develop working relationship endowed with motivating factor which facilitates seamless working relationship.	ES users are able to establish good working relationship through communication. Good relationships between ES users are the foundation to motivate efficient and effective ES operation.	What can be done to maintain good working relationship?
Fostering internal collective bonding (P5) *Establishing External bridging (P6)*	Foster, shape and create common beliefs to influence and bond ES users to achieve common goals.	Foster good ES users' relationship facilitates the shared understanding and interpretations between users to achieve seamless information and knowledge integration.	ES users are able to operate the system seamlessly when they share common interest, goals and beliefs.	How to strike a balance among ES users so as to eliminate the chances of cohesive group-think?

Table 5. 1: Summary of the major research findings

This case study provides much-needed empirical insights into the notion that seamless ES use is made possible through the understanding of human networks and interactions involved. Social integration is the critical explanation for Talam's long-term success for a technology-based organization (Inkpen and Tsang, 2005), or the so-called 'organizational advantage' (Ghoshal and Moran, 1996) of an organization over markets arising from its superior capability in creating and transferring knowledge. In fact, it has distinguished Talam from other companies that are using the same technology and such finding matches Bijker's (1987) claim that identical technology applied in different organizational contexts will show radically different organizational impact and results. Through social integration, combinations of knowledge are made possible as it constitutes a driving force in the development and growth of young firms, as claimed in Spender and Grant's (1996) research findings.

In a nutshell, study asserts that human efforts-management initiative and support from ES users are known to be the main key to develop seamless social integration in organizations. These six social integration processes have clearly demonstrated important roles and contributions that each SI process could have in influencing the ES use in Talam.

Chapter 6: Conclusion

The purpose of this thesis is to understand the concept of social integration through exploring the use of ES in supporting organizational daily operations. This study enables information systems researchers to produce deeper insights into an IS phenomenon- ES, at the same time, provides better understanding of the relationship between human thoughts and actions in the social and organization contexts (Klein and Myers, 1999; Lee, 1991; Orlikowski and Baroudi 1991; Walsham, 1995). A case study was carried out with Talam Corporation, one of the biggest public-listed housing developers in Malaysia, with a ten-year experience in managing and using ES to facilitate its daily operations and business dealings. Data were collected mainly through personal interviews and supplemented by documentations about the organization. During the interviews, interviewees were encouraged to speak freely about the entire daily operation of the ES including the process of system upgrading. Through interviews with relevant ES personnel a conceptual model (See Figure 5.1, p. 142) that depicts social integration as the process that brings about the integration of the three social capital dimensions (structural, relational and cognitive). Such conceptual model is drawn based on the newly discovered findings - the six social integration processes that systematically connect with three social integration dimensions.

Among recent ES studies, many have examined the ES implementation, development issues, but very few have explored issues related to ES use. Besides the lack of research at post-implementation which becomes the new research concern (Lorenzo, 2001), there is also little research to explore the key elements influencing the use of ES. Based on existing literature, human issues have been identified as one of the main reasons causing the failure of ES implementation and these issues have persisted until

today (e.g. Ragowsky and Somer, 2002; Newell, et al., 2002). Since human and social issues would continue to be a challenge even in the use of ES after implementation, understanding the processes of social integration among ES users could provide a better understanding and explanation for the ES use challenges. This study complements the existing IS literature by demonstrating what the social integration processes are and how the SI processes and dimension are inter-related in the use of ES. Such research findings may provide better understanding of SI in ES usage for academics and practitioners. Details of the theoretical and managerial contributions will be discussed in the following sections.

6.1 Theoretical Contribution and Implications

This research suggests the study of a coherent conceptual social integration (SI) framework to connect the interrelationships among the three social capital dimensions used by Nahapiet and Ghoshal (1998). It opens the black box via analyzing the activities taking place among employees from a systematic yet consistent perspective for deriving contextualized criteria that explain why attention should be given to the social integration in the context of ES use. In specific, the social integration framework explains the interrelationship of a dynamic social capital in an organization in which, such framework enables researchers to identify and "trace" the interactions of the ES users of different departments that could affect the quality of the daily system operation. Thus deliberate investment in social integration could be the foundation for potential organizational advantage as many studies have claimed that new source of value (Schumpeter, 1934; Moran and Ghoshal, 1996) and product innovation (Tsai and Ghoshal, 1998) are generated through social interaction when exchanging and combining resources. However, maintenance of SI should not be

neglected as social bonds have to be periodically renewed and reconfirmed; otherwise, they could lose efficacy (Alder and Kwon, 2002).

In addition, this social integration framework has also contributed to the social capital theory as claimed by Nahapiet and Ghoshal (1998) that the social capital framework lacks a coherent theory to integrate the interrelationships among the three social capital dimensions. Based on the stated inadequacy, this study proposes the term-social integration. It is the process that brings about the integration of the three social capital dimensions (structural, relational and cognitive), which compose of the six social integration processes. This study strongly suggests that it is important to pay attention to the development of social integration. This is because not only does it enable researchers to envision the linkages between the different dimensions of SI, but also highlights the rationale of why attention should be given to SI in the context of ES use. In this manner, understanding the roles of social integration and their influences on ES nature and constraints would illuminate how social integration influences the use of ES through the ways that strategically valuable information and knowledge are created, shared, used and managed across departments as shown below.

Based on findings, **structural integration dimension (D1)** is constructed based on the two SI processes: *(P1) coordinating employees with a set of clearly assigned tasks, and (P2) cultivating consistent organizational practices*. These two SI processes have theoretically bridged the gap between the structural and relational dimensions from Nahapiet and Ghoshal's (1998) studies. In which, these processes have provided systematic constructs to connect, establish and reorganize social

networks in accordance with the ES nature. Thus, the theoretical contribution of this structural integration dimension enables actors to explore and expand social networks to accomplish the assigned tasks more efficient and effectively.

Relational integration dimension (D2) is built on the other two SI processes: *(P3) achieving interactive interpretation, and (P4) using system mediated terms*. These two processes revealed the embedding social capital constructs by linking the relational and cognitive social capital dimensions of Nahapiet and Ghoshal's (1998) studies. With such SI processes, actors' relationships were reformed and improved through the use of multiple communication channels. Thus, the theoretical role of such SI dimension is to share influential factors behind the good working relationship, which is well known as the foundation to motivate efficient and effective ES operations.

Cognitive integration dimension (D3) composes the two social integration processes: *(P5) fostering internal collective bonding, and (P6) establishing external bridging.* These two SI processes have evidently bridged the cognitive and structural SC dimensions (Nahapiet and Ghoshal, 1998). As such processes have brought to light the theoretical contribution through the sharing of the embedded constructs that foster, shape and create common beliefs among actors influencing and bonding actors to achieve the common goals.

In addition to such theoretical claims, unlike most of the earlier studies where previous ES researchers usually stopped after examining the initial implementation process without extensively exploring the post-ES implementation phase (Lorenzo, 2001), however, in this study, the researcher has closely examined the use of ES after

implementation. Results provided a more cogent description and explanation on ES users' activities in operating ES and showed the impact of ES users' roles in influencing ES performances. Further, ES efficiency and effectiveness are highly related to the ES users' degree of social integration, for example, the willingness to cooperate and coordinate. Thus, understanding the role of social integrations and their influences on ES nature and constraints would illuminate how social integration influences the use of ES through the way that strategically valuable information is produced, shared and managed across departments. In a nutshell, ES potential benefits and performances are highly influenced and shaped by the users' social integration and management style.

6.2 Managerial Contributions and Implications

Through a formative evaluation of an SI influence, the study has implication for firms and IT professionals in that SI provides explanations of the contextual factors that influence the achievement of benefits and satisfaction of users and management with efficient and effective ES operation. To leverage the potential of ES and better understand the organizational advantage, this study recommends that ES practitioners focus on these four main areas: (1) understanding organization's external and internal environment status so as to continue planning for ES enhancement, (2) applying a suitable management style to better manage and connect ES users according to the ES nature, (3) providing flexibility in using multiple communication channels to transfer messages, information and knowledge among the ES users, (4) allowing ES users to expand and formulate their networks with minimum interference, and (5) paying extra attention towards the strategic use of social networks and relationships in ES operation.

Firstly, management should be alert and sensitive towards the external environment issues, such as the newly developed systems, systems adopted by competitors, etc. so that organization could stay competent. Good understanding of the systems development in the industry and appropriate benchmarking would enable an organization to stay in a competitive position. It is also crucial for management to switch on the listening ears for users' feedback and needs so that the organization could think ahead about how they can further improve the systems so as to further enhance the systems that best suit their business processes.

Secondly, the social integration framework reveals the process of building good social relationships with colleagues so as to be able to access, exchange and combine necessary information and knowledge to accomplish tasks efficiently. The Talam case shows that it is important for ES managers to execute an appropriate management style that is suitable for ES users and systems. By doing so, not only can it strike a good equilibrium to promote healthy competition and productivity among ES users, it can also ensure business processes are well-designed in accordance with the systems' structure. Providing employees with a set of formally written pre-arranged networks and job descriptions listed in a booklet will be helpful for new ES recruits in large organizations. Meanwhile, managers must also understand that the enforcement of hard and fast rules for ES users will ruin the intention for social integration, as data showed that too much restrictions and management intervention will only achieve superficial cooperation among ES users.

Thirdly, providing advice and guidance for junior employees on the do's and don'ts as well as the preferred communication channels used in the company would

significantly reduce miscommunication and misunderstandings that could possibly interrupt and delay business operations. As for senior employees, management should respect their choice of communication channel, provide sufficient flexibility and allowances for them in their preferred communication channels. This is because the senior employees could have found the best way to communicate over trials and errors. Thus, with the right practice and encouragement, employees could transfer, share, exchange and transform their knowledge and expertise into economically useful products and services (Kogut and Zander, 1992). In short, to motivate and encourage ES users to communicate, management should provide ES users with more varieties of communication mediums.

Fourthly, managers should allow and encourage ES users to expand and formulate their networks without much interference as it is essential for managers to know that social capital thrives on authenticity not on hypocrisy (Cohen and Prusak, 2001). At this stage, flexibilities, guidance and advice should be given by the management to ensure the smooth development of social integration in the organization. Too much control and enforcement would probably ruin the social integration development. In summary, managers should be conscious of the importance of social integration and how it can be leveraged to better connect ES users' and improve organizational performance at large.

Lastly, use of ES is highly dependent on the strategic use of social artifacts (i.e. networks and relationships by individuals) to make sense of the system processes. Through understanding of the social integration processes, it had significantly improved the information and knowledge access, exchange and combination among

ES users, which facilitated users to efficiently and effectively operate the enterprise system. Once the social related issues were identified, managed and facilitated properly, they would bring value to the organization, as they become strategic capital and a source of competitive advantage. As a result, it is essential for practitioners to be attentive towards social related issues in ES use.

6.3 Limitation and Future Research

The findings of this research, however, should be viewed within the context of its limitations. Although this study explored social integration via the usage of an ES, it did not, however, do so at the start of the implementation of the ES. Since SI exists and evolves throughout the implementation of the ES, SI should ideally be identified before one pursues a study of post-implementation. However, due to the constraints afforded to case access, this study was limited to examining SI in the usage of the ES. Future studies may wish to study SI more comprehensively, which would involve investigating SI in an IT artifact from the start of implementation to post-implementation.

Besides, this study executed single-level analysis so as to gather a general view and understanding towards social related issues in ES use. Study did not attempt to have multiply level analysis. Testing a framework that captures different levels of analysis is an important item for future research.

Another limitation of this study is that only the positive values of social integration were shared. With reference to Figure 5.1 and based on the data collected, we were only able to document clockwise SI processes and not the negative aspects. Detailing

the negative aspects would possibly show the flow of SI processes from multiple directions in which the data collected does not provide adequate empirical basis for. As such, this study is unable to shed light on the negative values that are likely to prevail in an organization context, as well as the possibility of SI processes flowing from multiple perspectives during ES usage. In view of the inadequacies, a more comprehensive study could be done to further explore the positive and negative impacts of social integration as well as the dynamics underlying SI processes in an organizational setting. Moreover, researchers may wish to explore and examine the enabling and inhibiting factors and processes of social integration.

In addition, there are limitations in each of the SI dimensions. In **Structural Integration Dimension (D1)**, the researcher would need to further explore ways to facilitate and encourage appropriate network structure arrangement to best suit the operation of organizational software package. More research should be done to examine the ways to maintain good working relationship- **Relational Integration Dimension (D2)**. **Cognitive Integration Dimension (D3)** - further studies should be carried out to avoid cohesive group-think and encourage critical and creative thinking. By achieving these, a more comprehensive SI study could be achieved.

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Appendix A: Copyright Ownership

15 May 2007

National University of Singapore
21 Lower Kent Ridge Road
Singapore 119077

Dear Sir,

Request for Permission to Reproduce Copyright Work

I am a post-graduate student in the National University of Singapore ("NUS"), and am currently working on a thesis for submission to NUS as part of my academic program. My thesis is likely to be published electronically by NUS on the internet and on NUS' own intranets, and copies of my thesis will be made available to NUS and end users.

My thesis examines post-ES implementation issues, in particular, the use of ES in supporting organizational daily operations from a social capital (SC) perspective. The research interest is to understand the concept of social integration (SI) through exploring the use of ES in supporting daily operations of the organizations.

I am writing to seek your kind permission to use and reproduce, for purposes of submission, publication and distribution of my thesis as described above, the following works for which I understand you to be the copyright owner:

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Yours sincerely,

Teoh Say Yen
[Student]

Appendix 1: Total Attempt and Failure Record from Malaysia Organizations

Malaysia Organizations

No.	Company name	IT systems	Approach Date	Status	Reason
1	Shell	ERP	Since Nov 03	Rejected on 14 March 04 by the company	Research is not their 1st priority
2	RHB	CRM	End of 2003	Rejected on Mid Feb 04 by the company	Private and confidentiality issues
3	Petronas	ERP & MSC status	Mid Feb 04	No reply	
4	Shangri-La Hotel	IT systems	19 Feb 04	Rejected by the company	Research is not relevant
5	Help Institute	System integration process & MSC status	3 March 04	Rejected on 18 March 04 by the company	In the restructuring process
6	**Talam Corp. Sdn. Bhd**	**Integrated systems**	**3 March 04**	**Accepted 8 March 04**	
7	SilTerra Corp	ERP	31 March 04	11 April 04	Competitive advantage, not willing to share
8	Panasonic	ERP	8 April 04	No reply	
9	MAS	Integrated System	6 April 04	Rejected	No time
10	Golden Hope Group Property	Implementing ERP and CRM	5 April 04	Rejected on 7 April 04 by the company	Not interested
11	Leo Burnett Advertising Sdn. Bhd.	Implementing CRM	5 April 04	Rejected on 7 April 04 by the company	Not appropriate for their company
12	Mobicon Sdn. Bhd.	SCM	30 April 04	Accepted by the company on 5 May 04	Rejected by the researcher because is inappropriate for this study
13	Yoe's	System Integration	8 April 04	Called in-rejected by the IT Director	No interest to participate in research
14	Intel	ERP	7 May 04	Rejected by the company	Requires too much time and resources of the company. The company prefers survey method rather than interview.
15	Western Digital	ERP and SCM	6 May 04	Rejected on 2 June 04 by the company	SCM system upgrading and confidentiality issues
16	Inti College	Systems restructuring	12 May 04	Rejected in early 2005 by the company	Changed of management

17	Yeos' Sdn Bhd	Integrated system	14 May 04	Rejected 14 May 04 by the company	The company is not interested
18	Carlsberg Malaysia	Integrated system	14 May 04	Rejected in 14 May 04 by the company	The Company is not interested due to their tight system upgrading
19	Tokuii	CRM vendor	18 June 04	Rejected by the company	The company is too new to be studied, claimed the CEO
20	Hexagon	CRM	7 May 04	Rejected by the company	
21	Intel Malaysia	Integrated Systems	May 04	Rejected on late Aug 04	The company refuse to spend too much time and resources in this research
22	Toyota Malaysia	Financial system integration	18 July 04	Rejected by the company	The company has no interest to participate
23	IFCA	Housing Developer System Integration Provider	4 Oct 04	Rejected on late Dec 04	The company refused to invest too much time in the research.
24	SAP consultant- Mr. Raj	SAP system trainer	15 July 2005	No reply	
25	SAP consultant- Mr. Daram	SAP Consultant	14 July 2005	No reply	

Appendix 2: Total Attempt and Failure Record from Singapore Organizations

No.	Company Name	IT Systems	Approach Date	Status	Reason
1	Hong Leong Finance	CRM	29 Sept 03	No reply	
2	Pan-West	CRM	29 Sept 03	No reply	
3	*Singtel*	*CRM*	*30 Sept 03*	*Rejected by the company*	*Too many research studies request*
4	Citibank	CRM	30 Sept 03	No reply	
5	*Shell Singapore*	*Integrated system*	*Jan 04*	*Rejected by the company*	*May involved too much time and resources*
6	*Gartner Consulting Group*	*KM Systems*	*10 Feb 04*	*Rejected by the researcher*	*The Singapore Branch Office informants are too little*
7	Webvision	CRM	16 March 04	No reply	
8	ST LogiTrack	CRM	16 March 04	No reply	
9	*IBM*	*ERP*	*Mid March 04*	*Rejected by the company*	*Too many research request*
10	Barang-Barang	ERP	End of April 04	No reply	
11	*UOB*	*IT systems*	*End of April*	*Rejected by the company*	*Not interested*
12	*Bodum. Com*	*SCM*	*End April 04*	*Rejected by the researcher*	*Not a suitable company as they company does not have a physical office located in Singapore thus difficult to conduct face-to-face interview*
13	M1	CRM	10 Feb 04	No reply	
14	Great Eastern	CRM	10 Feb 04	No reply	
15	Unilever	System objects data integrater	10 Feb 04	No reply	
16	Shell	System Integration	8 March 04	No reply	
17	Webvision	CRM	16 March 04	No reply	
18	**Chio Lim Stone Forest**	**System integration**	**10 May 05**	**Accepted in Aug 05**	
19	**Alexandra Hospital**	**System integration**	**10 May 06**	**Accepted in Aug 05**	
20	Dawn International Forwarded Pet. Ltd.	System integration	5 July 05	No reply	
21	ECS	System	2 Aug 05	No reply	

	Computers (Asia)	integration			
22	Singapore Power	ERP system implementation	5 Aug 05	No reply	

School of Computing

NUS
National University
of Singapore

Asia's Best IT Practices:

A Case Study of Talam Corp Bhd.,

Malaysia

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Table of contents

Background information of the study:

Nowadays, for organizations to compete and excel in this hypercompetitive knowledge economy era, they must not only be well equipped with the suitable Information Technology (IT) systems, but should also be able to critically utilize knowledge among their employees. Many reports have shown that the high failure rates from the systems implementation, especially for Enterprise Systems (ES), Customer Relationship Management (CRM), and even Supply Chain Management (SCM) implementations, are mainly due to the resistance of employees in integrating and sharing knowledge among them. Thus, in order to overcome these challenges, the best way to implement IT is to learn from companies that have been performing well in this arena.

Talam Corp. Corporation in Malaysia:

Ever since last year, the property market's giants, Talam Corp Bhd (Talam) and Kumpulan Europlus Bhd (KEB) based on business rationalization had decided to merge and since then the company's revenue and performance is expected to achieve RM1.5 billion in annual sales for the next three years. At the same time, in order to strengthen the performance and offer better service to the public, a web portal- Talam Online (http://www.talam.com.my) is being established. The success of the merger along with the strong IT practices is going to make Talam Corp Bhd an interesting case to share with other industry practitioners and academics at large.

Purpose:

In view of the Talam Corp.'s success stories, this research wishes to identify their best IT practices and share with the industry partners and academics, at domestic and international spheres of interests.

Objectives of this study:

The proposal of this case study focuses on the exploration of the current issues that are highly concerned by practitioners and academics in the Information Systems arena. The key areas of research are:

- − Roles played by the IT department in Talam Corp.
- − The impact of IT systems in Talam Corp.
- − The nature and scope of services provided by Talam Corp.
- − Knowledge integration practiced by Talam Corp.
- − The core businesses and developments of Talam Corp.

Scope of this study:

The duration of the case study is subject to the availability of interviewees. Our approaches

are:

- To interview approximately 30 people including:

    o Top management (e.g. CIO)

    o Departmental managers in Talam Corp. example:

        ▪ Research & Development

        ▪ Human Resource

        ▪ Sales & Marketing

        ▪ Accounting & Finance

    o Staff of the Talam Corp. IT Department

    o And other related personnel for example:

        ▪ IT Vendors

- To collect Secondary Data (Non-confidential documents only) including:

    o Company Press Release

    o Organizational Chart, Mission, Vision and Goal

    o Organizational History and Development

    o IT implementation plan and other related records

Confidentiality issues:

These would be properly treated, especially on issues that are sensitive and confidential.

Therefore, we are willing to:

- Work in accordance with your corporation interests

- Touch on non-confidentiality information only

- Provide a final report of our study for verification and correction

- Seek approval for publication and public presentations

Plan:

Objectives	Time Schedule
Discussion on the terms and conditions on the best interests of both parties	Early March 2004
Interview sessions ** max time per interview should not be longer than 90-min*	From March until May 2004 *(subject to the availability of interviewees)*
Report for Talam Corp.	December 2004

Knowledge Management Laboratory, S15, #06-15,
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+65 6779 4580
Website: www.comp.nus.edu.sg

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Appendix 4: List of Interview Questions: Prior Company Visit

General Questions:

Adapted from: Collison, C., Parcell, G. (2001), Learning to Fly: Practical Lessons from One of the World's Leading Knowledge Companies, Capstone, UK.

1. What is the main issue you have to deal with?
2. So what are the barriers to creating an attractive environment for the sharing of knowledge?
3. Can you describe how your company uses and values IT techniques?
4. What do you need to learn in this new implemented system?
5. What do you need to know next?
6. What was supposed to happen?
7. What actually happened?
8. Why were there differences?
9. What did the project actually achieved?
10. Did you get what you wanted?
11. What did you really achieve in this implementation/ project?
12. What really went well in the project?
13. What was it that was able to hit the deadline?
14. What repeatable, successful processes did you use?
15. How could we ensure future projects go just as well, or even better?
16. What would your advice be to future project teams, based on your success here?
17. What could have gone better?
18. What were the aspects that stopped you delivering even more?
19. Given the information and knowledge we had at the time, what could we have done better?
20. Given the information and knowledge we have now, what are we going to do differently in similar situations in future, to ensure success?
21. What would your advice be to future project teams, based on your experiences here?
22. Looking back, how satisfied are you with this project; marks out of ten?
23. What would have made it a ten for you?

Social Network Process Theory Questions:

Adapted from: Hansen, M. T. (2002), "Knowledge Networks: Explaining Effective Knowledge Sharing in Multiunit Companies" Organization Science, Vol.13, No. 3, pp. 224-231.

General Questions:
1. Is there any interdepartments communication, If so, how and what are the functions being communicated?
2. What are the technical competencies of each individual/department/vendors?

   The following are the examples of the skill sets you could get through interviews. (These information will be used to correlate the relations in different phases)

   1. Individual – list all skill sets of team members
   2. Department – as a department, what are your departments capabilities which includes infrastructures, and consultancy provided during ES implementation
   3. Vendors – what are their strong knowledge and information they provide.
3. How does your department tied to other departments. List the departments tied to and not tied to your departments.

4. Ask each team member to name intra-division contacts from whom he or she had regularly sought information and advice, then asked about relations between the contacts.

Describe the ties between departments as below:

– Advise seeking relation:- Are there any departments / schools from whom your divisions regularly get technical inputs during ES implementation? Please describe all the types of technical information you receive from the other departments.
– Advise giving relations: List all departments for which your department gives technical advice? Please describe all the types of technical information you give advice.

5. Based on the above ties between departments, what is your departments' role on controlling the information flow?
6. Interview those members who are involved in Phase 1 and Phase 2 and identify the benefits based on lessons learned with respect to information/social networking which ultimately expedite the ES implementation in phase2. *(Phase1 mistakes on longer network path / relations with other departments was corrected in phase2 which benefits the shorter project duration)*
7. Social Network
    1. Is it easy to access the experts in your organization?
    2. Is it difficult to identify the experts with relevant knowledge with you?
    3. Is there anyone in charge of interpreting and passing on information in each department?
    4. Is there inter department communication?
    5. How does a department share information with other department?
    6. How do you access the experts in your organization?
    7. How to identify the experts with relevant knowledge with you?
    8. Is there anyone in charge of interpreting and passing on information in each department? If so, describe the detail of interpreters.
    9. Is there inter department communication?
    10. How does a department share information with other department?
8. Path Lengths
    1. Is it convenient to communicate with members in other department?
    2. What are the most frequently used channels for communication?
    3. Is communication with other members time-consuming?
    4. Do you think you are equipped with enough information?
    5. How do you comment the quality of information you get? Are they distorted?
    6. How comfortable are you to communicate with members in other department?
    7. What are the most frequently used channels for communication?
    8. How long will it take to communicate with other members? Are there any intermediateries to communicate?
    9. Do you think you are equipped with enough information?
    10. How do you comment the quality of information you get? Are they distorted?
9. Direct Relations
    1. How do you comment the relationship between different departments?
    2. Do you feel different departments in your organization are connected? If yes, describe all the connection. Do you often communicate with other members face-to-face? If yes, describe all the areas you communicate.
    3. How do you describe the relationship between you and other members in the case of information sharing?

Secondary Data Collections:

1. What is the scope of the ERP or CRM project?
2. Identify the project organization structure?
3. The particular project schedule and plan (get the project schedule chart with details of the work need to carried out)
4. What are components developed in-house with the own knowledge and outsourced. Describe the details of areas on both.
5. Describe all the areas for which ES is implemented/ in progress. In terms of phase1/phase2/phase3.
6. What are the departments and divisions for which this project is implemented and areas for which ES is implemented.
7. Is there any involvement by external departments like MOE etc.., If so, what are the areas for which they are related.
8. What are the relations between departments/external agencies/etc.., based on the functions in the above categories.

Appendix 5: Sample of Interview Questions: 4th Visit

Appropriable organization, network ties, and network configurations to norms, trust, obligations, expectations & identification
Management style • How do you put your management style into practice? Do you evaluate them from time to time? Is it static or changing? How do you cope with them? Is your staff comfortable with your management style? • How do you react to your staff if they don't agree with your management style? Or what will you do when you see some resistance in your group/from your subordinates? • Looking at the changes and improvements in your company systems, how did you help your subordinates to adapt to the new systems? • Normally how did your managers help/do when there's a new implementation? Do you like it? Or do you think there's still room for improvement? Any suggestions/comments? • As a manager, how did you cultivate/train your subordinates to adopt and accept changes promptly without any major problems?
Cultivating consistent organizational practices • What do you expect from your subordinates/colleagues? …in what ways/areas (congruence value) • If there's a new comer, in what ways or how would you remind him/her about your organization practice? If you were to be given 5 min, how/what are you going to deal with it? • What do you appreciate most in this organization? (Culture, job, salary, people, etc.)
Coordinating & Cooperating tasks • After working for a period of time, do you feel that you are able to access information timely? • What would you teach/guide a new comer to access information efficiently? What is your advice to the new comer? • Can the system help you in gathering/sourcing information which you need without getting help from others? Do you still think establishing a good working relationship is important? • Can you share me a story/an incident that improved your cooperation with others? Under what circumstances that will help to improve your working relationship with your colleagues? • What enables your subordinates to have the sense of obligation and belonging? Is it because of the influence of colleagues or the standard procedures of the systems? • How do you advice your subordinates if they fail to cooperate with one another? • How can the systems help in coordinating tasks? • Do you think the systems have helped to better coordinate your daily tasks with the other departments? How?

Clearly & consistently upholding assigned tasks

- Would you like to be transferred to other departments or in charge of different issues once in awhile? Why?
- Could consistently working on certain tasks or through the same network enhance/create trust between members? In your opinion, what are your criteria for trusting someone?
- By using this system, does it make you feel that your work sequence is pre-arranged, clearly specified and controlled by the systems? Because of that, you feel more structured and less worried of making mistakes, forgetting or skipping something?
- Has the ES brought staff work closer together? Yes/No? Why?

| **Norms, trust, obligations, expectation & identification to** |
| **Shared codes & languages, Shared narratives** |

Multiple communication channel

- Can ES be considered as a type of communication channel? Why? How?
- Do you share common language/ understanding/ interpretation through using the most preferred common channel? Why is this channel preferred by u? Is it because both parties have already established certain trust & expectation to help each other?
- To clarify doubts/grapevine which is your most preferred common channel? Do you have special preference/usage when it comes to deal with formal/informal issue? Example/s?
- Why telephone is the main common channel? Will new comers have problems in enjoying the benefits of using telephone? Why that is the case?
- Would it be possible to deal a counterpart without knowing him or her?

Achieving interactive interpretation

- How is your company's common language/ norms/ practice being formulated? Is it through consistent communication?
- How to promote better understanding with inter- intra department staff?
- Do other departments understand/ use your department's jargon?
- Do the jargon used in the ES shared by everyone? Is it a force jargon?
- After frequent communication would you expect your counterpart understand you better/ would assist you (do you a favor) when you need?
- What is your common challenge when you have to communicate with other department staff?
- Is it time consuming to communicate with other department staff? Would the knowledge of using ES help or lay the foundation which enables both parties to be able to understand each other faster/ easier?

Establishing common beliefs and mindsets

- How do the common benefits and mindsets being achieved in an organization?
- How/ what would you do to influence your subordinates to think/ perform as you hope? Do you think such influence can be considered as common beliefs and mindsets?
- Is story telling or experience talk help motivate your subordinates?
- As a manager do you welcome hearsay? How would you do to/ handle it?
- Does the impression/feeling of others have any bearings on the performance of our job?

Shared codes & languages, shared narratives
To Appropriable organization, network ties, network configuration

Establishing social integration with different types of status
- Do you think by using different social status to speak with different people will enable you to get things done faster in this organization? Which social status do you prefer to use most? As a friend/superior- which social status is more useful/ more widely acceptable?
- Does the integration of business units achieve through good inter-departmental connection or solely depend on the system?

Fostering internal collective bonding
- I'm sure you would have your own group of friends in this organization what has actually bound you all together? – Job description/ hobby/ friendship?
- Are they mostly from the same department or why?
- How did you guys actually meet and get together? Because of what incident/ what common mindset/ beliefs shared by your group?

Establishing congruence value
- What is your secret to perform well in this organization? To respect others, and remember others' favors and return them when you have the opportunities?
- How do you find working with this team? What was your most unforgettable experience?

Establishing external bridging
- How often do you need to call or meet Financier's staff every day? (please give examples to explain)
- Normally when something in the Finance department went wrong, who will contact the IT Dept? Has anyone encounters problems to call up IT dept?
- Normally who ITdepartment staff is in charged of taking calls from other departments? Or those calls will be directly connected to the right IT dept staff?
- Do you have good friends in Finance dept? Do you go out for dinner with other department staff occasionally?
- How is your working relationship with the Finance dept? Do you think it is necessary to build good connection with them as well?
- Do you think to have good connections with other departments is important? Normally how do you try to keep or build these connections? By going out? Examples?

Appendix 6: Example of Agenda and Up Coming Meeting

School of Computing

NUS
National University
of Singapore

Agenda

Venue:	Talam Corp Bhd. Malaysia, Level 23 Menara Maxisegar
	Jalan Pandan Indah 4/2
	Pandan Indah
	55100 Kuala Lumpur
Date:	30 March 2004 (Tuesday)
Time:	10am- 11.30am
Interviewee:	Senior Vice President II, IT Department Talam Corporation.

1. Proposal
2. Purpose of this visit
3. Introduction to this case study
4. Company profile
5. Discussion on the terms & conditions based on the best interest of both parties
6. Schedule arrangement for next meeting
7. Summary of minutes
8. Up coming meeting

Minutes

Venue:	Talam Corp Bhd. Malaysia, Level 23 Menara Maxisegar
	Jalan Pandan Indah 4/2
	Pandan Indah
	55100 Kuala Lumpur
Date:	30 March 2004 (Tuesday)
Time:	10am- 11.30am
Interviewee:	Senior Vice President II, IT Department of Talam Corporation.

This is an introductory meeting with the Senior Vice President II - Mr. Ong Yew Leng from IT Department of Talam Corporation. The corporate structure of Talam Corp. is provided by Mr. Ong including all the departments like IT, Account and financial, Human resource, Sales and marketing together with its IT vendors.

IT Department

Mr. Ong introduces its 10-year-old legacy systems, which has proven its reliability, accountability and accuracy with great respect, appreciation and satisfaction. According to him, the most important requirement of IT is the reliability and stability of the systems in supporting the daily business operations need but not new and fancy jargon systems incurring high cost and yet unreliable. At the same time, the organization's operation is also complemented with intranet, extranet and a web-portal to serve its staff and customers in the best possible way. In preparation for future challenges, Talam corp. is looking forward to improve its daily operation processes by engaging the paperless administration.

The IT department is currently providing professional advice including that of the reliable and high quality systems as well as technical support to all other departments within its institution.

Out-source IT Vendors

The main out-source IT vendor for Talam Corp is IBM, while the lesser one is Frango, which provides a system used by its account and financial department. In order to provide an in-depth study, the researcher may need to interview these IT vendors through the arrangements of Mr. Ong.

Knowledge Integration Practice

Mr. Ong highlighted several knowledge and systems integration of the company. For example, all their subsidiaries within the country and regions are able to access its central database systems. In addition, customers are able to make their payments at any Talam Corp. branches due to its customer data being integrated and available through accessing the central database.

All employees are able to access the corporation's latest information update through public share folder of its Intranet system. Furthermore, every employee is encouraged to share and provide information in the public share folder of the corporation. An employee is assigned to manage the information posted on the intranet daily to make sure that the information are updated, accurate but not overload.

Other Departments
Account and financial, human resource, sales and marketing departments have their own style of management and IT practices. Therefore, to better understand these departments several interviews will be conducted according to Mr. Ong's arrangement.

Secondary Data
Organization secondary data that were provided includes:
- Roles played by the IT department in Talam Corp.
- The nature and scope of services provided by Talam Corp.
- Data on core business and development of Talam Corp.

Organization secondary data will be provided includes:
- Company Press Release
- Organizational chart, mission, vision and goal
- Organizational history and development
- IT implementation plan and other related records

Confidentiality Issues
Talam Corp. culture is transparent in its operations, therefore it is not very particular on the confidentiality issues. However, the researcher promises to seek Talam Corp.'s verification and correction before sending work out (check) for publication and public presentations.

Upcoming Meeting
Propose to visit the Senior VP II to plan for actual study time-frame and personnel involve

Appendix 7: Talam Corporation Berhad History, Future Development, Mission and Goal

TALAM CORPORATION BERHAD (TALAM)
URL: http://www.talam.com.my/

Listed on: KLSE Main Board (Properties) on 30.7.73

Incorporated: In Malaysia on 15.3.2000 as a public limited company

Change of name: From Talam Mines Limited to Talam Corp. Bhd.on 13.1.86

Executive chairman: Tan Sri Chan Ah Chye

Core Business: Property development and investment holding

Other Businesses: Trading, Manufacturing, Complexes, Hotel & Recreation and education contributed approximately 17% of its turnover in year 2003.

Other Activities: Provision of educational programmes, development and management of hotel, golf and country club and investment holding.

Revenue 2003:   Total revenue RM 897 million
                          Profit before tax RM58.33 million

The trading activities has contributed a turnover of RM50.4 million for the financial year under review as compared to RM41.8 million in the preceding year, whilst the turnover of manufacturing activities has dropped to RM18.2 million from RM19.2 million in the preceding year

The Group's oversea hotel development, Maxcourt Hotel has contributed a turnover of RM13.9 million to the Group with the occupancy rate of 64% for the financial year under review. The Group's educational arm, Kolej Aman has contributed a turnover of RM4.3 million during the year under review.

Aim   : To be the largest player in the game *(Source: Property Times 26 Feb 2004)*

Success   : After merger and rationalization with Kumpulan Europlus Bhd (KEB), Talam Corp. Bhd., is targeting RM1.5 billion in annual sales for the next three years.

- one of the largest housing developers in the country
- Talam boasts a yet-to-be-developed landbank of 11,157 acres, of which 3,000 acres are situated in the high-growth area of Puchong in Selangor

Profile   **:** http://www.talam.com.my/profile/

Previously   : Tin mining company

1983   : Ceased its mining operation and ventured into leasing business with the incorporation of Talam Leasing Sdn Bhd.

1985   : Branched into property development, purchasing properties in Setapak, Selangor and Cameron Highlands.

1990   : Acquired Maxisegar Sdn Bhd., announced property development and investment holding as its core business

2001   : Established as one of the major players in M'sia property sector within 11 yrs. (particularly as a developer of affordable homes)

15.6.2001   : Entered into an agreement to rationalize the businesses of Talam, Europlus Bhd (Europlus) and Kumpulan Europlus Bhd (Kumpulan Europlus)

- Europlus and Talam will be consolidated under Talam
- Some of the non-property businesses of both Europlus and Talam will be rationalized and consolidated under a new holding company, namely Kumpulan Europlus (*Source: Property Times 0 Dec 200)*

2002   : Set-up Talam Online (http://www.talam.com.my)

- Provides complete online solutions to the public regardless of age and interests.
- Update the public on Talam Corporation Berhad's township developments, online registration, customer service centre, and career opportunities.
- Keeping the public informed and in touch

- Create virtual community networks. E-youth, E-community and E-associates

- Collaborating business associates in one strong communal working environment is a brilliant solution for business partners to converge en masse in a synchronized and collective manner.

End of 2003   : Talam Corp. Bhd and Kumpulan Europlus Bhd (KEB) have moved concluded the business retionalization and merger exercise

- KEB concentrating on construction, manufacturing and plantations

- Talam focused on property development *(Source: Property Times 26 Feb 2004)*

Talam Projects: Current, New and Future
http://www.talam.com.my/profile/announcement.htm

Current Development projects:
1. Saujana Puchong,
2. Danau Putra,
3. Bukit Sentosa,
4. Saujana Selayang,
5. Bandar Baru Ampang.

New Projects:
1. Taman Puncak Jalil
2. Saujana Damansara
3. Bukit Pandan
4. Jalil Heights

Future Projects:
1. Berjuntai Bistari (Shah Alam 2),
2. Saujana Putra
3. Sepang Land


TALAM CORPORATION BERHAD (TALAM)

Appendix 8a: Talam Corporation Annual Report 2003 Sample

TALAM

FINANCIAL HIGHLIGHTS

	2003 RM'000	2002 RM'000	2001 RM'000	2000 RM'000	1999 RM'000
GROUP					
Property, plant and equipment	287,439	292,571	231,110	205,230	222,974
Shareholders' Fund	575,137	545,414	519,497	472,833*	475,819*
Revenue	897,003	772,529	567,373	495,551	509,436
Profit before taxation	58,333	45,891	53,279	29,342*	23,259*
Earnings per share (sen)	16.02	12.05	12.21	5.63*	8.81*
COMPANY					
Property, plant and equipment	2,685	6,644	6,358	5,516	5,770
Shareholders' Fund	401,007	396,844	392,201	366,108	369,888
Revenue	55,774	53,128	53,515	43,425	37,285
Profit before taxation	15,804	11,184	6,824	1,498	7,837

* The shareholders' fund, profit before taxation and earnings per share of the group have been restated for prior year adjustments
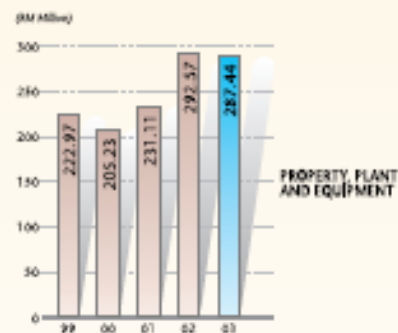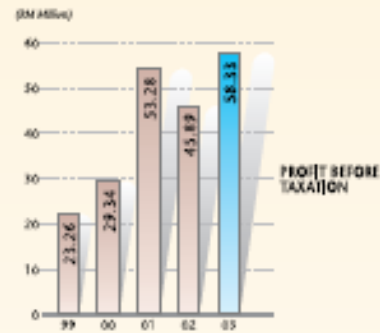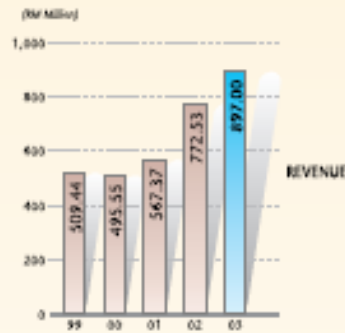
Appendix 8b: Talam Corporation Annual Report 2004 Sample

FINANCIAL HIGHLIGHTS

	2004 RM'000	2003 RM'000	2002 RM'000	2001 RM'000	2000 RM'000
GROUP					
Property, plant and equipment	275.225	287.439	292.571	231.110	205.230
Shareholders' Fund	1,006.018	575.137	545.414	519.497	472.833 *
Revenue	911.985	897.003	772.529	567.373	495.551
Profit before taxation	71.099	58.333	45.891	53.279	29.342 *
Earnings per share (sen)	18.29	16.02	12.05	12.21	5.63 *
COMPANY					
Property, plant and equipment	2.733	2.685	6.644	6.358	5.516
Shareholders' Fund	805.857	401.007	396.844	392.201	366.108
Revenue	66.384	55.774	53.128	53.515	43.425
Profit before taxation	35.609	15.804	11.184	6.824	1.498

* The shareholders' fund, profit before taxation and earnings per share of the group have been restated for prior year adjustments

ANNUAL REPORT 2004
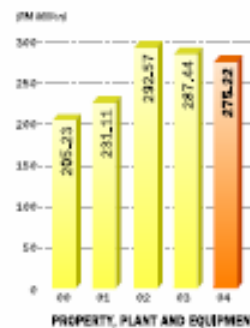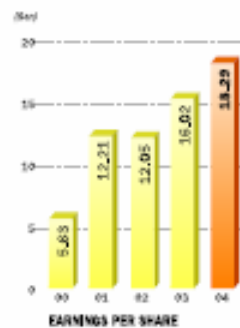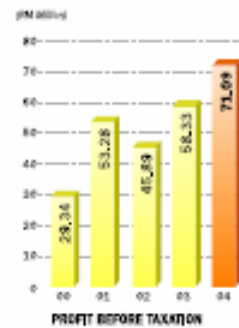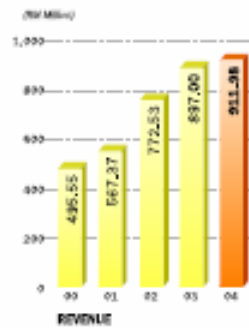
Appendix 9: Interviewees' Background and Role

	Organization Role	Informant's Name	Qualification	Working Experiences
Top management	Vice President	Mr. Micheal Khor	Advance diploma in Strategic and intentional relationship from the military defense college - Attended all kinds of other management related courses	4 yr with Talam (34 years in police force)
	Senior Vice President II cum Head of IT Department	Mr. Ong Yew Leng	Bachelor in Mathematics	> 10 years with Talam
	Confidential	*Mr. Chan Tet Eu*	*Confidential*	*> 10 years with Talam*
Managers	IT Manager Talam Corporation	Mr. Ong Tan Thung (Johnson)	Bachelor in Management of Information Systems	12 years with Talam
	IT Assistant Manager Talam Corporation	Mr. See Eng Seong	Diploma in Data Processing Programming	14 years with Talam
	Deputy Vice President-Finance	Mr. Tan Chee Leng	Bachelor in Finance and Accounting	6 years with Talam (14 years in Audit)
	Senior Marketing and Sales Manager	Mr. Gan Keng Bin	Bachelor in Mass Communication	8 years with Talam
	Senior Marketing Manager	Ms. Foo Nyook Kim	MCE, Form 5	13 years with Talam (7 years with other developer)
	Senior Marketing Manager (Sub-Sales Department)	Ms. Loo	MCE, Form 5	10 years with Talam (24 years in Law firm)
	Marketing Manager	Ms Sandy	Form 5	14 years with Talam (8 years in other housing property company)
ES Users	Web Administrator	Mr. Suresh	Bachelor of Information Technology	2 years with Talam (8 years with other companies)
	Assistant Accountant	Ms. Ng Soo Guan, Carol	ACCA	7 years with Talam
	Customer service officer	Ms. Bonnie	Bachelor in Mass Communication	2 years

	Organization Role	Informant's Name	Qualification	Working Experiences
ES Users	Customer service senior officer	Ms. Mala	Form 5 + Diploma	>5 years with Talam
	Sales Officer	Ms. Sussan	MCE, Form 5	NIL
	Sales Officer	Mr. Jeffery Lam	Certificate in Computer Studies	5 years with Talam
	Sales and Marketing Executive	Mr. Chiew	SPM, Form 5	5 years with Talam
IT Vendor	Maybank Bank Loan Executive	Malay lady 1	University graduate	2 years
	Bank Bumi Purta Loan Exective	Malay lady 2	University graduate	1.5 years
IT Vendor	IFCA Sales Director	Mr. Voon	NIL	NIL
	IFCA IT Director	Mr. Hoe	NIL	NIL

Appendix 10: Data Collected from Talam Corporation

Types of Data and Transcribe Size		Informants	Recording File and Size	
Types of Data	Transcribe Size		Recording File	Recording Size
Pre- Visit				
Proposal Email	75kb	Talam President and Mr. Ong		
MSN	36kb	Mr. Ong		
Email	24kb	Mr. Ong		
Email	15kb	Mr. Ong		
Total	**150kb**			
1st Visit				
Informal Chat	21kb	Mr. Chan		
Interview	60kb	Mr. Ong	0001	15,180kb
Interview	33kb	Mr. Ong	0002	16,266kb
Interview	47kb	Mr. Suresh	0003	2407kb
Interview	158kb	Mr. Johnson Ong	0001	20,3444kb
Interview		Mr. See	0002	7,774kb
Email Report	64kb	Agenda1		
Annual Report 03	2,835kb	Pdf. document		
Minutes summary 1	83kb	Mr. Ong		
Total	**3,301kb**	**Total**		**245,071kb**
2nd Visit				
Interview	50kb	Mr. Tan	Finance	27,686kb
Interview	56kb	Mr. Johnson Ong	01	10,687kb
Informal Chat	30kb	Mr. Suresh	02	23,842kb
Interview	36kb	Mr. Ong	03	1,054kb
Interview	89kb	Mr. Goh	03	44,485kb
E-News	32kb	Word document		
Annual Report 04	8,794kb	Pdf. document		
IT policy	39kb	Word document		
IT Chart	29kb	Word document		
Org Chat	27kb	Excel document		
IT Depart	57kb	Power point document		
Email	34kb	Mr. Ong		
Email Report	64kb	Agenda2		
Minutes summary 2	87kb	Mr. Ong		
Total	**9,424kb**	**Total**		**107,754kb**

3rd Visit				

Observation	47kb	27 Sept- Reception		
Observation	27 kb	27 Sept- IT depart		
Observation	27kb	27 Sept- CSAC		
Interview	82kb	Mr. Ong	02	29,838kb
Interview	95kb	Mr. Goh	07	5,421kb
Interview	62kb	Ms. Mala	09	24,829kb
Email	33kb	CSAC	07	36,025kb
Interview	34kb	Mr. Michael Khor	08	1,853kb
Interview 2	47kb	IT Vendor	10	3,259kb
Informal Chat	56kb	Mr. Suresh	11	229kb
Observation	24kb	2 Bankers	12	3,439kb
Observation	42kb	CSAC	13	3,172kb
Interview	41kb	Ms. Ng	14	887kb
Interview	43kb	Ms. Loo	19	1,025kb
Interview	59kb	Ms. Foo	11	2,153kb
Interview	26kb	Mr. Gan		
Social	25kb	Ms. Susan		
MSN	28kb	Mr. Ong		
Email Report	111kb	Agenda3		
Minutes summary 3	91kb	Mr. Ong		
Total	**1,000kb**	**Total**		**112,130kb**

4th Visit				

Interview	34kb	Mr. Johnson	01	17,836kb
Interview	39kb	Mr. Chiew	08	13, 849kb
Interview	47kb	Ms. Mala	06	35,193kb
Interview	68kb	Ms. Sandy	08	19,797kb
All data	247kb			
Phase 1 & 2	184kb			
Testing 1	223kb			
Email Report	109kb	Agenda 4		
Total	**951kb**	**Total**		**72,826kb**

5th Visit				

Interview	57kb	Mr. Ong	05	28,159kb
Interview	63kb	Ms. Mala	06	16,977kb
Email (9 copies)	92kb	Mr. Michael Khor		
Email Report	83kb	Agenda 5		
Email Report	59kb	Agenda 6		
Total	**354kb**	**Total**		**45,136kb**

Total for all Visits	**15,180kb**	**Total for all Visits**		**582,917kb**

Appendix 11: Press Release- Talam Deserves a Second Look Now

(The Star Online, Tuesday August 10, 2004)

More Channels
Business
Sports
Entertainment
Lifestyle
Health
Technology
Education
Classifieds
Directory
e-Cards
Member
30-Day Archives
Contests
Games
Extras
Property
Motoring
Purple Sofa
Comics
AudioFile
Maritime

The Star Online > Business

Tuesday August 10, 2004

Talam deserves a second look now

Talam Corp Bhd has largely been forgotten by the investing comunity. Credit Suisse First Boston has initiated coverage on Talam and following a recent meeting with management, views that the group merits a second look.

EMERGING from the Asian financial crisis and a company restructuring, Talam now has a stronger balance sheet that should continue to improve as it focuses on improving its margin.

The company now deserves a second look, we believe, as its fundamentals are improving, while the valuations have fallen to a level where the risk-reward ratio is looking favourable.

The restructuring rationalised the listed entities of major shareholder Tan Sri Chan Ah Chye, creating a pure property company in Talam, and Kumpulan Europlus Bhd, which would own the non-property assets, such as a construction business, a highway concession, a manufacturing entity and plantations. The restructuring took effect from Nov 3, 2003, and Talam was relisted from Nov 17, 2003.

Talam is now 49% held by Kumpulan Europlus. Some 8% is held directly by Chan, the executive chairman. Chan, an engineer by training, has been a property developer for over 30 years and has seen three property cycles, and most importantly, survived each time. He was named the "Property Man of the Year 1998" by the International Real Estate Federation. Chan has recently placed out some 10% of his Talam shares to institutional investors, at some RM1.35-RM1.48 per share.

When asked what lessons were learnt from the last recession, Chan candidly replied that it was over-gearing due to being too aggressive in acquiring landbanks; buying large tracts of land that had long gestation periods; investing too heavily in investment properties, such as hotels, shopping complexes and medical centres that tied up cash and provided low yields; and diversifying into new businesses, such as gaming in China in the mid-1980s.

Post restructuring, Talam's gearing level has fallen from 186% in FY03 to 117% in FY04 (including asset-backed securitisation, ABS). This is expected to continue, as its margins should expand, and sales momentum continue.

Talam's book value as at April 30, 2004 is RM1.73, which we believe will rise to RM2.04 by the end of FY05. It is currently trading at a 34% discount to its book value.

Being the largest property developer (by units) in Selangor, Talam has historically captured some 17%-20% of Selangor's market share. Selangor has the fastest-growing population in Malaysia, with relatively high purchasing power.

The group caters to first-time house buyers, with its main focus on medium-cost houses. Malaysia's demographics suggest that the early baby boomers of the 1980s are now moving into the workforce and are likely to be thinking of buying their first home. Some 62% of the population is aged below 30 years old, which bodes well for future demand for houses. Talam is poised to tap this market.

Over the past five years, Talam has sold an average of 11,000 units with a sales value of RM1.3bil per annum. It aims to sell RM1.4bil-RM1.5bil worth of properties in FY05. In the first six months of this year, it sold some RM600mil worth of properties.

In our earnings forecast, we have assumed new property sales of RM1.5bil in FY05, RM1.3bil in FY06 and RM1.1bil in FY07. As Talam's properties are priced below RM200,000 each, where demand is strongest, we are inclined to believe that the market will remain strong, in view of the improving economy.

Talam's main focus will be to improve margins, going forward, as it tightens controls and reviews designs. It has indicated that its construction costs have seen a significant reduction, with an improvement in quality. Although Q1FY05 margins are not showing a sharp improvement yet, we believe that the situation will become more evident in FY06 and FY07, when new contracts are in place.

In the past, Talam's management admitted that contractors would include a high-risk premium in view of the company's tight cashflow. However, following better cashflow with the completion of the restructuring, Talam is looking to negotiate down the construction tenders by allowing Kumpulan Europlus to bid as well.

Talam has poor publicity in the past, when its poor workmanship was highlighted during the crisis in 1998/99. It has taken some measures, including sacking supervisors or contractors who have received more than the average number of complaints, establishing a customer service centre to deal directly with complaints, and appointing a new team to oversee building quality and monitor progress closely to ensure that contractors stick to specifications.

The group currently has a landbank of 4,652 acres, mainly in Selangor, with 80% in the less desired northern region. Three of its projects, Bukit Beruntung, Bukit Sentosa and Pulau Melaka, have been "mothballed" since the last property boom. The "dead money" amounts to some RM1bil, which is a drag on Talam's ROE, ROA and profitability. The landbank in the central and southern regions is the most valuable.

Talam undertakes more than 10 projects at any one time. The current major profit contributors are Ukay Perdana (about 30% of FY04 profits), Bukit Jalil (25%) and Saujana Damansara (25%).

It also owns two office buildings, a shopping complex, a medical centre and a hotel. The returns from these projects have been less than 5%. Talam is hoping to dispose of the investment assets, which will free up its cash flow.

TALAM : [Stock Watch] [News]

Related Stories:
Talam management clears the air on aspects of shareholding

Printer Friendly | Email This

More News: [Go]

Appendix 12: Sample of Publicity Leaflets

Appendix 13: Sample of IFCA Property Solution

Appendix 14: Sample of Organization Charts and Policies
Information Technology Department Chart

```
                    ┌─────────────────────────────────────────┐
                    │ ONG YEW LENG Senior Vice President II     │
                    └─────────────────────────────────────────┘
                                      │
                         ┌────────────────────────┐
                         │     ONG TAN THUNG        │
                         │     Senior Manager       │
                         └────────────────────────┘
```

SEE ENG SEONG Assistant Manager	SURESH Web Administrator

OOI CHOOI AI Senior Executive	TAY KEK SIONG Senior Executive	HAYATI Executive	SITI FARISHA Web Designer	MOHD ZIKRI Web Designer

MOHD KAMARIZAL IT Operator	EDDY SOPHIAN IT Operator	MAZURA IT Operator	SHAIFUL NIZAM IT Operator

	Information Technology **TALAM CORPORATION BERHAD** **(1120-H)** **Introduction, Policies, Standards and Procedures**	**Dept Code**	**IT**
		S.I No	**2**
		Effective Date	**01/01/2001**
Description	**IT Policies**	**Posted Date**	**01/01/2001**

2.1 <u>Software Piracy</u>

Any attempt to copy illegal software is prohibited.

IT Department shall perform audit check on all the workstation / computer to ensure that all software in the Corporation is legal. Any software so called "Alien Software" found during this Audit Check shall be reported to the Management and action will be taken against the staff that had been assigned as the custodian of the workstation / computer.

Only Authorized Personnel from IT Department shall be in position to determine and confirm the legality of software before installation.

2.2 <u>Sharing User Names And Passwords.</u>

Computer accounts, user names and passwords and other type of authorization are provided only for personal/individual users and should not be shared with others. Similarly, do not use or attempt to use other's user accounts, user name and password.

For the technical group users, they are responsible for password protection and should be aware of the protection level assigned to files and directories. They are also responsible for the proper use of commands to set any other desired protection level for example the read, write and delete access permission.

If evidence exists that account, user names and password has been shared, the account will be disabled. If sufficient evidence does not exist to determine who is at fault, a warning is issued to the user/users and efforts to gather evidence continue.

Appendix 15: Example of Talam Corporation: Information Technology Department Objectives

INFORMATION TECHNOLOGY DEPARTMENT

Effective Management and Succession Planning

1.1 Management to achieve results and objectives.

 The main mission of IT Department is to maintain a program of preventive measures to minimise the possibility of disruption of data processing and flow. IT Department should also be ready to minimise the effects of emergency situations and major data processing disaster upon day-to-day business objectives.   In the event of a major loss of computer capacity, IT Department will be prepared to restore all data processing applications within 24 hours.

Therefore, the services provided by IT Department is to ensure that information and application needed to automate the business function (current and future) are available all the time in ensuring that the company's mission is fulfilled.

1.2 Identify the Objectives
- Deliver the right Information System.

- Provide high quality and dependable Information System.

- Provide high availability on existing Information System.

- Move Information System closer to user.

- Identify and acquire new technology to support business objective.

1.3 Formulate Steps and Actions to achieve the objectives

To ensure the right Information
- Identify system's scope
- Identify system's processes and cycles
- Identify system development tools
- Identify manpower requirement for system development.
- Establish system schedules
- Finalise system analysis and design
- System Coding & Testing
- System Implementation

Provide high quality and dependable Information System.
- Constant System Review
- Software and Application Audit
- End User Survey and feed back

<u>Provide high availability on existing Information System.</u>
- Accomplish the comprehensive Disaster Recovery and Business Continuity System.
- Accomplish the Disaster Recovery Team
- Accomplish Disaster Recovery Facilities and Hot Site/ Alternate Site
- Disaster Recovery Manual and Procedures
- Accomplish Recovery Network Infrastructure

<u>Move Information System closer to user.</u>
- Identify User's group
- Identify User's need
- Identify The Required Resources and Tools
- Identify Training Requirements
- Identify Training Schedule

<u>Identify and acquire new technology to support business objective.</u>
- Identify the trend of the near future and acquire the new technology. For example, in term of programming language we might consider looking at Java based programming
- Equipped out IT technical personnel with the new technology

1.4 Identify Problems and Obstacles to the achievement of the Objectives
Minimal. Mostly Human Factor.

1.5 Solutions to the Problems/Obstacles.
To be established when meeting the various department users especially new system development.

Prepared By

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Ong Yew Leng

Appendix 16: Example of the Standard Instructions and Standard Operation Procedures (SOP) for the Information Technology Talam Corporation Berhad

	Information Technology **TALAM CORPORATION BERHAD** **(1120-H)** **Introduction, Policies, Standards and Procedures**	**Dept Code**	**IT**
		S.I No	**1**
		Effective Date	**01/01/2001**
Description	**Introduction**	**Posted Date**	**01/01/2001**

Introduction

Information Technology Department (IT) is the department responsible for operation and administrative computing and networking. As part of modernization process this policies and manuals will serve as a guideline to all computer users in the Corporation.

IT is also responsible for the interpretation and implementation of policy as set forth in this document. The Corporation reserves the right to modify the provisions of this document and will announce all such modifications to all the staff.

This policy would apply to all users which utilize the Corporation computer resources which include Centralized Front End system namely "The Developer System", Centralized Back End system "The Finance System" , Centralized Utility / Property Maintenance System, Mail Servers, Talam Online (Website), Talam Leasing System and all individual workstations and network computing in the Corporation.

Job & Responsibilities

   (a) **General Manager (Reporting to Senior Executive Director)**

- Oversee the whole operation of IT.
- System and DB Administrator of Central Computer of the Corporation.
- Define Management Reporting (Review).
- Task and job assignment.
- Network and security administrator.
- WEB Master of Talam Online.
- System Advisor
- Technical training
- Liaising with Authorities and Vendors.   Inter Departmental Meeting.
- System Planning and Contingency Plan. Data mining and special MIS reporting.

Appendix 17: Talam Corporation Customer Service Center-Complaint Form

TALAM & EUROPLUS

CUSTOMER SERVICE CENTRE - COMPLAINT FORM

COMPLAINT NO.: TCSC101/ / ( )	DATE:
NAME OF COMPLAINANT:	TIME:
UNIT NO.:	PHONE (R/O):
HANDPHONE NO.:	E-MAIL:

NO.	COMPLAINTS:

ACTION:

REMARKS/COMMENTS:		
	SPA	(date)
LAST VISIT: (date)	VP	(date)
CONTRACTOR:	DLP	months

[✓]	FOLLOW-UP DOCUMENTATION CHECKLIST	
[ ]	FAXED / SENT	
[ ]	COMPLAINTS ENTERED TO SYSTEM	
[ ]	COMPLAINTS ATTENDED ON	[ ] ENTERED TO SYSTEM
[ ]	COMPLAINTS RECTIFIED ON	[ ] ENTERED TO SYSTEM
[ ]	CONTACTED COMPLAINANT	
[ ]	COMPLAINANT VERIFIED RECTIFICATION	[ ] E-MAILED FEEDBACK FORM
[ ]	CASE CLOSED	[ ] FILED IN

[✓] OR [X]	COMPLAINANT FEEDBACK CHECKLIST	
[ ]	FAST RESPONSE	[ ] PROMPT DELIVERY
[ ]	ACCURACY OF INFORMATION	[ ]
[ ]	TELEPHONE ETHICS	[ ]

Appendix 18: Method of Data Arrangement

No	Key Words	Content	Informant	Interview	Dept
5	Communication channel	If new launch out, would the meeting increase? 2/3 times a week. Mostly are meeting face to face. Meeting not always all together. Sometimes we just speak to each other when we meet. Is hard to find a common time to sit down for meeting. Not always all together.	Mr. Gan	3rd a	
5		We have meeting with bosses then we will definitely disseminate the information to our subordinates. Everyday, face-to-face just tell the managers what we want, within when, why we want it.	Mr. Tan	3rd	
5		I know very well because I have been here for 7 years. (someone call her to enquire certain info, but she is not in charge of that so she redirected that person to David. Then politely hang off the call.)	Ms. Ng	3rd	
5		Main communication is through face to face. Why face to face? Because is faster, idea sharing, brainstorming, all kind of things that we do…easier to get things done. Intranet is communication between the group Normally is my immediate boss, he will communicate with another department immediate boss. Within this department.	Mr. Gan	3rd a	
5		Bahasa, English, , Cantonese (more because in KL), mandarin	Mr. Lam	3rd	
5		IFCA is program under unix, mostly used by developers. Is a program. For Microsoft office 2000 is for the office work. For managers they have their own email, they communicate through email. We don't have email coz we haven't reach that email. Most of the time they communicate through email. IT will screen through the information, especially the public response and email. IT people will send to marketing, finance, IT will screen through and email to the related person and cc to the HOD.	Mr. Lam	3rd	
5		Attitude is difficult, if I want to implement a new job function I will have a short meeting to clarify with them what I want them to do. What I expect, what step they should follow	Ms. Foo	3rd	

6	Common believes & thinking	We always says don't get personal, we are here to work. Work is work. If you want to get personal, get out of the office, you fight outside, I don't give a damn…as long as u r in the group, you work. I don't care if you don't like each other, that's not my problem, is your personal prob. as long as u are here 9-5pm you work. [12.34]	Mr. Tan	3rd	
6		Share thinking/believe in certain issue? To achieve target is our common goal.	Mr. Gan	3rd a	
6		Stay back unless we have work to do, we have to clear it for tomorrow. Seldom people will stay back unless is very urgent. Other dept will go back very sharp.	Mr. Lam	3rd	
6		She said in a joke that "they are paid to be scolded, and customer is always right" according to her, sometimes we would also have to put ourselves into the customers' shoes because they are paying so much for a house and yet we didn't do a good job… we cannot blame the customer… claimed Ms. Mala.	Ms. Mala	3rd a	
6		After working for this company, what's the common thinking and believes for the staff in this dept, perception on your work or company This is what the boss request, so they just do it between the time frame.	Ms. Foo	3rd	
7	Interactive interpretation	working environment here is "dog bite dog bone" (in Cantonese) if u come and work u will find a lot of vulgarize English that's what we call that [1.09] "people mountain people sea" a lot of these things.	Mr. Tan	3rd	
7		AMB- stands for the name of the bank	Ms. Foo	3rd	
5		Normally, they will call first. Maybe the sales teams talk on phone very day so is easier for them to call me. Everyone use to it, more importantly is free- because it is intercom.	Mr. Suresh	1st Int	
5		Depends, is a two flow. All done by phone, unless documents have to send over to them. To call them is better, no need to go there.	Mrk	1st (2ph)	
5		Inter department- HR-marketing-prospectors sides will use email. [28.41]	Mrk	1st (2ph)	
5		Only managers have the access to the email.	Mrk	1st (2ph)	