# CHAPTER 1 INTRODUCTION

## **1.1 RESEARCH TITLE AND OBJECTIVES**

ITIL implementation and success factors in MSC status organizations: An exploratory study.

The objective of this research is to gauge implementation progress of ITIL and explore success factors of Information Technology service management (ITSM) and ITIL (Information Technology Infrastructure Library) framework implementation in MSC status organizations.

The primary aim of this exploratory research is:

- To understand ITIL/ITSM practitioners perception about effectiveness of ITIL in MSC status organizations.
- To explore practitioners view about ITIL implementation success factors in MSC status organizations.
- 3. To explore if implementation of ITIL is related to different organizational factors.
- 4. To establish a reference study for ITIL implementation progress in MSC status organizations.

#### **1.2 INTRODUCTION AND SIGNIFICANCE OF THE PROBLEM**

#### 1.2.1 The role of information technology in organizations

Information technologies (IT), in the context of this study, include all hardware, software, computer systems networks, technology policies and procedures within an organization.

Information technology (IT) has progressed from conventional role of administrative support to a strategic role within an organization. In modern era, Information technology is recognized and transformed into a most important strategic resource any organization has to manage (Henderson and Venkatraman, 1993). Information Technology has been positioned as an enabler to transform organizational productivity into new heights.

Information technology services are now a strategic asset and pushed organizations to invest appropriate resources into development, support and management of IT services. Organizations with wider level of IT investment also had higher performances, as gauged by return on investment, return on sales, sales per employee, sales by total assets, and market value to book value (Mahmod and Mann, 1993). A critical issue facing senior executives is how to improve the return on information technology investments (Jurison, 1996).

IT investments can lead organizations to achieve competitive advantages and capabilities that creates economic value for the firm (Wen Lin, 2007)

The growing challenge for IT professional is to effectively coordinate and build strategic partnership with business to deliver IT services. Research has been done to improve IT service delivery through structured process approaches (Mayerl et al., 2005; Bartolini and Salle, 2004).

In past, technology department best effort is to assist business and achieve service level agreements (SLA) with complicated management of IT services. This mindset, attitude and practice significantly changed after introduction of IT service management standards in early 1990, notably after ITIL service management framework introduced (OCG, 2000). Services science is evident in the field of Information Technology (IT) through the embodiment of IT Service Management (ITSM), Information Technology Infrastructure Library (ITIL), and ISO 2000 frameworks (Garvas, 2010).

IT Service Management frameworks provides genuine value proposition and benefits by enabling organizations to become more adaptive with cost efficiencies dynamics and aligned business / IT service orientations. IT service providers cannot lose focus on technology services management and must contemplate quality of service and relationship management with stakeholders and customers. (Galup, Dattero and Conger 2008).

Organizations are aggressively demanding more from their technology departments. Business expect IT departments to act as a key enabler of more disciplined and systematic provisioning of IT services (Johnson, Hately, Miller and Orr, 2007). Information technology departments are expected to response immediately, accommodate changing business landscape, capturing new business opportunities and demonstrate strong and responsible financial management. This level of commitment can only achieved via systematic execution of operations with stringent controls of IT management. The swift movement toward service oriented organization model offers unparalleled prospect to business and can only accomplished with service management framework. This is where ITIL (IT Infrastructure Library) comes into the picture. ITIL is an IT service management framework which depict best practices in IT management.

ITGI (2008) stated that ITIL best practices enable and support:

- 1. Better management of IT, a critical factor to the success of business
- 2. Effective governance of IT activities
- 3. Effective management framework of policies and controls
- 4. Other business benefits, including efficiency and fewer errors.

Not only managing IT services, IT service management frameworks also enable organization to improve governance as implementing vigorous IT governance is a basic requirement for organizations (Nassiri, Ghayekhloo, Shabgahi, 2009). IT governance defined as organizational capacity exercised by the board, executive management and IT management to control the formulation and implementation of IT strategy (Van Grembergen, 2002). Governance is an important issue in the information technology area and organizations are implementing IT governance to achieve synergies between IT and business. (Haes and Grembergen, 2006).

Brown and Magill (1994) reported that IT governance outline the locus of responsibility for IT functions. Luftman (1996) argue that IT governance is the degree to which the authority for making IT decisions is characterize and shared among management and process managers in organizations. However, Van Grembergen, (2002) argued that IT governance is an organizational capacity by the board, executive management and IT management to control the implementation of IT strategy.

Sambamurthy (1999) stated IT governance as a patterns of authority for key IT activities while Vitale (2002) illustrated IT governance as organization overall process for sharing decision rights about IT and monitoring the performance of IT investments. IT Governance Institute (2004) define IT governance as the responsibility of the board of directors and executive management.

Despite growing importance and acceptance of IT service management and ITIL, not enough literature concerned with the benefits of IT service management

frameworks is available (Hochstein et al. 2005, Potgieter et al. 2005, Cater-Steel et al. 2006).

There is limited academic research available in ITIL adoption domain (Hochstein, 2005). Despite the phenomenal popularity of ITIL as reported in IT practitioner magazines, there has been little academic research published to date about issues related to ITIL adoption and implementation (Cater-Steel and Wui-Gee, 2008). Academic researchers need to understand benefits and competitive advantages recognized by the companies who adopted an IT service management framework, especially ITIL.

Winniford et al. (2009) reported around 45% of United States companies are using an IT service management framework. According to a research, ITIL adoption rate is 24%, second place was secured by Control Objectives for Information and related Technology (COBIT) with an adoption rate of 14% (ITGI, 2008).

There are studies that investigated success in ERP (Enterprise Resource Planning) implementation, but very less work has been done in ITSM (IT service management) field. There is no IT service management framework or ITIL related academic research in Malaysian context yet, despite Multimedia Development Corporation (MDC) included ITIL as one of the capability development program. Hence, it is vital to study ITIL implementation and

success factors in MSC status organizations. Since ITIL publications do not specify how to adopt or implement the guidelines as part of a service management strategy, it is important to explore different organizational factors influence successful implementation of ITIL framework in MSC status organizations.

#### **1.3 MOTIVATION FOR THIS RESEARCH**

ITIL framework does not offer straightforward implementation approaches. The implementation mechanism left to the implementer to decide. Academic literature related to implementation of ITIL have focused primarily on definitions (Conger, et al. 2008; Chesbrough and Spohrer, 2006). As highlighted by Hochstein (2005), research is needed to identify how organizations are adopting ITIL and implementing it successfully. Many organizations are implementing ITIL (IT Infrastructure Library) "best practice" framework in an attempt to improve their IT service management processes. However, not all ITIL implementations are successful and some companies have been disappointed with the outcomes (Pollard and Cater-Steel, 2009).

There is a need to explore ITIL implementation progress and success factors in both international and Malaysian context to enhance the body of knowledge related to ITIL. In Malaysia, there is limited academic research in the body of ITIL knowledge and framework, academic institutions outside Malaysia started to pick research in ITIL and associated topics.

This research will advance an existing research done by Dr. Aileen Cater and Dr. Wui Gee Tan in Australia. This research will also enable itSMF (IT Service Management Forum), Malaysian Chapter to understand how MSC status organizations perceive factors which shape successful implementation of ITIL.

#### **1.4 RESEARCH AND PROBLEM STATEMENT**

Not all organizations implementing ITIL are fully benefited from implementation (Cater-Steel and Wui Gee 2006). Many of them are unable to identify what are the organizational factors influence ITIL implementation and what key success factors contribute to successful ITIL implementation. This is consistent with findings reported by Cater-Steel and Wui Gee (2005) that only 56% of 108 companies surveyed in Australia felt that ITIL implementation had met or exceeded their expectations.

In Malaysian context, no previous study available to establish a reference about ITIL implementation progress in MSC status organizations.

This exploratory research aims to understand if organizational factors are related to ITIL implementation progress and what are the success factors of ITIL implementation in MSC status companies. Since there is no previous academic research on ITIL implementation in MSC status organizations available, this

research will set a reference baseline of ITIL adoption and implementation progress.

### **1.5 RESEARCH SCOPE**

The scope of this research will focus on MSC status organizations operating in Malaysia (both foreign and local MSC status organizations irrespective of business sector and industry).

MSC (Multimedia Super Corridor) status is the recognition by the Malaysian Government through MDC (Multimedia Development Corporation) for companies that participate and undertake its ICT activities in MSC Malaysia. MSC status is awarded to both local and foreign companies who develop or use multimedia, IT and other high tech technologies to produce or enhance products and services.

#### **1.6 RESEARCH QUESTION AND HYPOTHESIS**

Kerlinger (1986) argue that a good research question should express a relationship between variables. While Black (1993) agrees that a question could meet Kerlinger's criteria but it may be virtually impossible to operationally define some of its variables.

This exploratory research is driven by the following research questions.

**RQ1**: Is implementation of ITIL is associated with organizational factors such as organization size in terms of number of staff, budget or turnover and number of IT staff?

**RQ2**: Organizations implementing ITIL also adopting COBIT governance framework?

**RQ3**: Is ITIL satisfaction level is positively associated with ITIL implementation progress?

MSC status companies in Malaysia have some edge on innovation, financial capabilities and human capital to implement any framework organization wide. These organizations due to size and complexity require more discipline, governance and controls to manage the delivery of mission critical IT services.

MSC status organizations can have dedicated service management department and staff to cultivate new process improvements as these organizations profoundly depend on IT services (driven by MSC Charter). This drive IT department to implement best practices to enable synergy, maximum system availability, value proposition and effective management of mission critical IT services.

The following hypotheses were driven from research questions:

**H1.** Implementation of ITIL is positively associated with organization size in terms of budget/turnover.

**H2.** Implementation of ITIL is positively associated with organization size in terms of total employment.

**H3.** Implementation of ITIL is positively associated with organization size in terms of total number of IT staff.

**H4.** Satisfaction with effectiveness of ITIL is positively associated with ITIL implementation progress.

**H5** Implementation progress of ITIL is associated with implementation of COBIT framework.

## **1.7 ORGANIZATION OF THIS STUDY**

This research is organized into following chapters

- Chapter 1 of this study introduced the problem statement, significance of the problem and brief introduction of research questions with hypothesis.
- Chapter 2 presents a review of literature and relevant research associated with the problem addressed in this study.
- Chapter 3 presents the methodology and procedures used for data collection and analysis.
- Chapter 4 contains an analysis of the data and presentation of the results.
- Chapter 5 offers a summary and discussion of findings, implications for practice, and recommendations for future research.