

CHAPTER I

INTRODUCTION

1.1 Background and Statement of Problems

Information and Communication Technologies (ICTs) have paved the way to a renewal of the global competitive landscape (Kostopoulos et al, 2004). In order to increase organizational productivity and performance in today's global business environment, firms have adopted information technology to support the continuous improvement of business processes. (Chalit, 2007) Many business professionals now realize that integration is the key to success, by unlocking corporate information and making it available to any authorized users, anywhere and anytime. This awareness leads to the notion of a "concept corporation" based on well-integration, enterprise wide, application software which is now commonly known as Enterprise Resource Planning (ERP) Systems or simply enterprise system (Poon and Yu, 2006). ERP is an ideology of planning and managing the resources of an entire organization in an efficient, productive, and profitable manner, and is manifested in the form of configurable information packages. ERP system packages promise the seamless integration of all the information flowing through an organization. They fulfill this promise by integrating information and information-based processes within and across the functional areas in an organization, and further by enabling the integration of information and processes beyond the organizational boundaries (Luukkanen et al, 2005). Many benefits have been realized from the use of ERP systems. The advantages include the better information sharing within the organization, the planning improvement, the quality in decision quality, the smoother coordination between business units resulting in higher efficiency, and quicker response to customer demands and inquiries (Luukkanen et al, 2005).

The Shipping industry has obviously been affected by the emergence of new ERP. The adoption and use of ERP is increasingly being recognized as the profitable for the exchange of information between vessels and headquarters. The benefits of utilizing ERP along the entire shipping value-chain include quicker access to information, improved communication with seafarers and headquarter officers, reduce cost and quality of service.

Presently, the primary target of ERP shipping system are the facilitation of routine and critical maritime business processes and tasks such as chartering,

procurement, manning, planned maintenance, technical and operational monitoring of the vessels, voyage planning and navigation and safety. In addition, ERP shipping system can make great efforts in order to link and integrate applications and provide value-added services.

Much information technology research has sought to explain the causes of ERP failure using variety of approaches in spite of high expectations of the organizations purchasing ERP software. Most of ERP projects become over budget, late and even fail. In this study, we apply the Technology Acceptance Model (TAM) presented by Davis (1989) represents an important theoretical contribution towards understanding information system, ERP adoption.

Therefore, this study intends to provide a comprehensive understanding of the factors that explain ERP shipping system acceptance and used by individual users. In order to enhance the ability to obviously understand better ERP Shipping system acceptance and usage, this study extends the Technology Acceptance Model by examining how Maritime Organizational factors (company size, top management support, subjective norms), Maritime technical factors (IT integration, network communication, system compatibility and quality of data), Maritime Individual factors (computer self-efficacy, uncertainty avoidance, ERP training), Maritime regulation factor and perceived cost impact the core Technology Acceptance Model variables (perceived usefulness, perceived ease of use) in the context of ERP shipping system adoption.

In view of the above discussion, the research questions as follows:-

1. Can be used ERP shipping model to identify the user's acceptance factors of ERP shipping system?
2. What antecedents' factors are alignments perceived near-term consequences, perceived long-term consequences and perceived ease of use in term of ERP shipping system?

1.2 Objective of the study

The objective of this study is to examine the factors that constitute ERP adoption by emphasizing the factors affecting the perception of individuals regarding ERP adoption and use. The Technology Acceptance Model of Davis (1989) and other additional factors; Maritime Organizational factors (company size, top management support, subjective norms), Maritime technical factors (IT integration, network

communication, system compatibility and quality of data), Maritime Individual factors (computer self-efficacy, uncertainty avoidance, ERP training), Maritime regulation factor and perceived cost will be utilized as a conceptual model for this study. TAM model will be exploited as a baseline conceptual framework to explain ERP acceptance and use. Maritime Organizational factors (company size, top management support, subjective norms), Maritime technical factors (IT integration, network communication, system compatibility and quality of data), Maritime Individual factors (computer self-efficacy, uncertainty avoidance, ERP training), Maritime regulation factor and perceived cost are being exploited as antecedent variables influencing the perceived usefulness, perceived ease of use and intention to use ERP. This perspective will focus on how antecedent variables approach the system and how their interactions take place between system and individual users.

In view of the above explanation, the objectives of this study are as follows:-

1. To develop and to test the model of factors affecting ERP Adoption from the integration of antecedent variables and technology acceptance perspectives.
2. To provide recommendations for improving ERP Adoption as guaranteed from the research. This study is expected to provide recommendations by specifying the major determinants of ERP Adoption and report suggestions emphasizing managerial interventions that will facilitate more successful ERP Adoption.

1.3 Scope and limited of this study

In this study, it is appropriate to select a target population on the basis of knowledge of a population and the purposes of the study. The survey will be responded by persons who use ERP shipping system in their shipping company. Due to data collection limitation, the considered target population focused on persons who work in shipping company in Thailand only.

1.4 Benefit of this study

1. To understand user behavior of technology adoption in an organization.
2. To explore and develop the guideline of technology procurement in a shipping company
3. To generate new factors for considering technology adoption.
4. To be a prototype study for other industries.