## ABSTRACT

A medium sized shipping company in Bangkok is managing its ship chartering business with the help of a small set of expatriate and local staff. Due to an increase in the business volume, existing procedure of managing the Charters (orders) manually, is becoming progressively difficult, demanding more resources. In this circumstance, the management has decided to implement an integrated computerized tool for management of the Charters. This project is an effort to analyze and design a tailormade Information System Software for managing Ship Chartering for the company.

In this project, an attempt has been made to analyze the business procedure, study the existing infrastructure and propose a suitable Information System based solution. System Analysis and Design has been done on Object-Oriented paradigm that is ubiquitously used in developing robust, efficient, extensible and adaptable software within limited time.

To maintain uniformity in system analysis, design and implementation (coding) methods, the well-known Unified Approach is taken. This approach has been crafted in a comprehensive road map by Bahrami, 1999 that has been followed for system analysis and design. Unified Modeling Language notation (championed by Object Management Group: <u>www.omg.org</u>) has been used to represent the models pictorially.

The concept and results of this analysis and design has then been mapped to application and database codes using Java 2 SDK and Object-Relational technologies of Oracle, respectively, both well known for supporting object-oriented paradigm very closely. Apart from system analysis and design, this work also tries to show how analysis and design concepts as suggested by Bahrami, can be exactly mapped to application codes that may be of value to starters of system development.