

**IDENTIFYING AND UNDERSTANDING FACTORS LEAD TO
MALAYSIAN'S PORT DEVELOPMENT: TECHNOLOGY PERSPECTIVE**

A thesis submitted to the Graduate School in partial
fulfillment of the requirements for the degree
Master of Science (International Business)
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by

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ABSTRAK (BAHASA MELAYU)

Kajian yang telah dijalankan ini adalah berkaitan dengan pelabuhan-pelabuhan utama di Malaysia khasnya pelabuhan Klang, pelabuhan Tanjung Pelepas (PTP) dan juga pelabuhan Penang. Objectif kajian ini adalah untuk mengkaji faktor-faktor yang menyumbang kepada pembangunan dan perkembangan pelabuhan di mana penekanan yang utama adalah dari sudut teknologi. Di dalam mencapai objektif kajian ini, pembacaan secara menyeluruh telah dilakukan dan kemudiannya kesemua data tersebut dianalisis sedalam-dalamnya. Kaedah ini juga dikenali sebagai "*Content Analysis*". Kesemua data yang telah dianalisis telah disenaraikan di dalam jadual bagi membuktikan bahawa ianya adalah sah.

Hasil daripada analisis yang telah dijalankan, ianya terbukti bahawa ketiga-tiga pelabuhan di Malaysia menggunakan teknologi yang terkini dalam membangunkan dan mengembangkan pelabuhan masing-masing. Oleh hal demikian hasil daripada analisis ini juga menunjukkan bahawa ketiga-tiga pelabuhan tersebut menggunakan pemindahan data elektronik (EDI singkatannya). Namun begitu hanya pelabuhan Klang sahaja yang menggunakan dan mengaplikasikan EDI secara komprehensif berbanding pelabuhan Tanjung Pelepas (PTP) dan pelabuhan Pulau Penang. Selain daripada penggunaan EDI, terdapat juga pendekatan lain yang digunakan dalam pengendalian kargo.

ABSTRACT

The study that has been conducted basically is related to the three main ports in Malaysia particularly Port of Klang, Port of Tanjung Pelepas (PTP) and Port of Penang. The main objective of this study is researcher wanted to understanding the factors that lead to the development of Malaysian's port whereby the technology perspective is addressed. In order to reach this objective, a comprehensive and intensive reading has been done and it's followed by analyzing those sources in depth. This kind of method is also known as Content Analysis. Those data that have been analyzed is listed in the table in order to show and prove it is reliable.

From the analysis that has been done, it is proved that those three ports in Malaysia use the sophisticated technology in order to develop their ports. From the finding also showed, that those three ports applied and used the Electronic Data Interchange (EDI). However, only Port of Klang use and applied the EDI comprehensively compared to the other ports which is Port of Tanjung Pelepas (PTP) and Port of Penang. Besides, this study also found that the other technology approaches are also being use and apply at those three ports along with the EDI system in order to ensure that the cargo handling can be done smoothly and properly.

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ABBREVIATION

ASEAN	- Association of Southeast Asian Nations
CNS	- Community Network Services
CSI	- Container Security Initiative
DWT	- Deadweight Tons
EC	- Electronic Commerce
EDI	- Electronic Data Interchange
EDIFACT	- Electronic Data Interchange for Administration, Commerce and Transportation
EFT	- Electronic Fund Transfer
<i>et al.</i>	-At All
EU	- European Union
FTP	- File Transfers Protocol
GDP	- Gross Domestic Product
ICDs	- Inland Container Depots
ICT	- Information and Communication Technology
IEDI	- Internet Electronic Data Interchange
IMT- GT	- Indonesia, Malaysia, Thailand – Growth Triangle
IOS	- Inter-Organizational System
ISO	-International Organization for Standardization
IT	- Information Technology
JIT	- Just- In-Time
LNG	- Liquefied Natural Gas

LPG	- Liquefied Petroleum Gas
MNC	- Multinational Company
MOMAF	- Ministry of Maritime Affairs and Fisheries
NAFTA	- North America Free Trade Agreement
PKCS	- Port Klang Community System
PORT-MIS	- Port Management Information System
PPC	- Penang Port Commission
PTP	- Port of Tanjung Pelepas
SMK	- Sistem Maklumat Kastam
SMS	- Short Messaging Service
TDCC	- Transportation Data Coordinating Committee
TDI	- Turkish Maritime Administrative
TEU	- Total Equivalent Unit
UNCTAD	- United Nations Conference on Trade and Development
U.S	- United States
VAN	- Value Added Network
XML	- Extensible Mark-up Language

CHAPTER ONE

BACKGROUND OF THE STUDY

1.0 INTRODUCTION

This chapter presents the background of the research, problem statements, research questions, objective of the research, scope of the study, significant of the study, and limitation of study.

1.1 BACKGROUND OF THE STUDY

The rapid growth of globalization phenomenal and the growth in trade have had a huge impact in the development of the port in Malaysia. It has spurred investment and development of ports and various other transport infrastructures to support its increasing trade with the world's nations. The importance of ports to the country is underlined by the fact that an estimate about 99% of its international trade, the lifeblood of its economy, is being carried through the oceans via its international seaports (Branch, 1986; Razman and Khalid, 2000; Powell, 2001; Southall, 2005; Nazery, 2006).

Ports play a vital role in economic development of the country. Thus, Malaysia government continues undertaken several liberalization exercises (Nazery, 2006) to promote efficiency and competitiveness in transportation sector especially in term of the project investment. Those projects include enhancement in various development of port, highway, water supply, waste disposal and sewerage projects (Hooi, 2001).

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