

ABSTRACT

Containerization in its present form as a method of general cargo handling has been operating for almost three decades. Its use is now universal and its growth has been spectacular.

In Thailand, Containerization was brought to practice since 1978 with the expansion of Bangkok Port by constructing 6 additional wharfs in order to deal particularly with container vessels. The container yards were also expanded. Consequent to the growth of the world economic, transportation by sea has been rapidly increased which brought about the congestion of the ports as the number of containers became very large. One major cause of the problem is the administration. Transportation of containers is conducted by paper documents without developing a modern computer system to the business.

This thesis is organized by data analysis and constructing a model of port container terminal which equipped with an administrative data system for handling the business and servicing. The research is conducted through a feasibility study involving the government rules and regulations in order to draw up a precise model of a future port container. The system is designed and installed at Bangkok Modern Terminal which is a private port located at Prapradaeng District, Samutprakan Province. Apart from this, Simulation model is designed and developed for Decision Support System in administrating and managing a Port Container Terminal. For the completion of the thesis, the entire system is set in a microcomputer IBM/AT Compatible which is widely used in management.