

2015

Information and communication technology utilization for port decongestion through its operations: a case of Dar es Salaam port

John, Olivary

University of Dar es Salaam

John, O.(2015) Information and communication technology utilization for port decongestion through its operations: a case of Dar es Salaam port. Master dissertation, University of Dar es Salaam. Dar es Salaam.

<http://41.86.178.5:8080/xmlui/handle/123456789/7792>

Downloaded from University of Dar es Salaam Library Repository

Information and communication technology utilization for port decongestion through its operations: a case of Dar es Salaam port

Olivary John

MSc International Transport and Logistics

University of Dar es Salaam, Business School, 2015

The main objective of this study was to demonstrate the problem of port congestion at Dar es Salaam port and how the port congestion can be addressed through the availability of ICT system infrastructure, organizational support in the use of ICT and competence in the use of ICT. The underlying mission is expediting the cargo clearance processes to attain the port decongestion. The main objective of this study were to examine the relationship between organizational support in the use of ICT and the level of port decongestion and to assess the relationship between competence in the use of ICT and the level of port decongestion.

This study was conducted based on the positivism ideology, a natural science approach related to the deductive method by testing through observation and followed by operationalization of concepts in arriving on the conclusion regarding utilization assessment of the ICT for decongestion of the port through its core operations at the port of Dar es Salaam. The used theories are Queuing theory, Data Envelopment Analysis (DEA) and Time Series Analysis (TSA), which were then measured to provide the ability to seek and explain causal relationship among variables. The findings revealed that there is correlation between port decongestion and the ability of ICT system infrastructure, organizational support in the ICT use and competence in the use of ICT separately.

From the findings of the study a number of recommendations have been provided in order to achieve ports decongestion at DSM port.