UNIVERSITI TEKNOLOGI MARA

INVESTIGATING THE ADOPTION OF LIMS SYSTEM : A CASE STUDY AT NATIONAL PUBLIC HEALTH LABORATORY

MOHD NAJIB BIN ISMAIL

Report submitted in partial fulfillment of the requirements

for the degree of

Master of Science (Information Technology)

Faculty of Computer and Mathematical Science

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STUDENT'S DECLARATION

I declare that the work in this report was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated of acknowledged as reference work. This report has not been submitted to any other academic institution on non-academic institution for any other degree of qualification.

In the event that my report be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and degree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of Student   : Mohd Najib bin Ismail

Student's ID No   : 2009196929

Program   : Master of Science (Information Technology)(CS770)

Faculty   : Faculty of Computer and Mathematical Sciences

Project Title   : Investigating the User Perception of LIMS System: A Case Study of National Public Health Laboratory Sg Buloh

Signature of Candidate   ....

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ABSTRACT

The National Public Health Laboratory is an organization under Disease Control Division, Department of Public Health, Ministry of Health Malaysia that has been created to provide services to support the investigation and surveillance activities for diseases in Malaysia. The implementation of Laboratory Information Management System (LIMS) system is shown to be a beneficial to laboratory procedures and have been widely used in most of hospitals and public health laboratory in Malaysia. LIMS has been used widely in many laboratories around the world, in various industries, such as medical, agricultural industry, chemical processing industry, food and beverages industry, manufacturing industry and petrochemical industry. This LIMS has many modules, which specifically designed with high flexibility and ease of usage to be implemented in public health labs and hospital labs. However, there are some problems and issue occurs. The operation cost for LIMS is very costly and it obliges a large amount of money and exertion to operate the system. The failure of a LIMS system is sometimes happened and results in a great waste of resources. Therefore, it is important to get the system well functioned. The non-flexible interface has made the LIMS selection process is more complex and unclear. This research will investigate and measure the LIMS system adoption based on user's preferences and acceptance in National Public Health Laboratory. Thus, this will lead to some suggestion and recommendation in improving the LIMS user interfaces based on Human Computer Interaction(HCI) principles.

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TABLE OF CONTENTS