USABILITY OF LEARNING MANAGEMENT SYSTEMS IN BUSINESS & MANAGEMENT HIGHER EDUCATION INSTITUTES IN SRI LANKA

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The Dissertation was submitted to the Department of Computer Science & Engineering of the University of Moratuwa in partial fulfilment of the requirement for the Degree of MBA in IT (Sp) in Business Analytics.

Department of Computer Science & Engineering

University of Moratuwa Sri Lanka May 2020 **DECLARATION**

I declare that this is my own work and this dissertation does not incorporate without

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ABSTRACT

This study explores some ideas drawn from product design and quality management literature to

develop a framework to assess the amount of intervention of e-learning on the current teaching

and learning processes of the undergraduates in business and management faculties in Sri Lanka.

This will provide an intuitive understanding of such assessment measures to the educationalists

involve in e-learning.

Literature surveys and expert interviews provide available teaching and learning tools in

commonly used learning management systems (LMS) in higher education institutes in Sri Lanka.

Our stakeholder structured and semi-structured interviews record the customer requirements of e-

learning delivery. We deploy Analytic Hierarchy Process (AHP) to screen the above

customer/stakeholder requirements in terms of relative importance. Quality Function Deployment

(QFD) maps the tools against the requirements.

Keywords: Analytic Hierarchy Process, E-learning, Learning Management System, Quality

Function Deployment

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LIST OF ABBREVIATIONS

Abbreviation Description

AHP Analytic Hierarchy Process

CAI Computer-assisted instruction

E-LEARNING / EL Electronic Learning

EPLMS Effectiveness Percentage of the LMS

HOQ House of Quality

ICT Information and Communication Technology

ILTC Impact Level of a Technical Capability

LMS Learning Management Systems

MCDA Multi-Criteria Decision Analysis

MOODLE Modular Object-Oriented Dynamic Learning Environment

QFD Quality Functional Deployment

RSCR Relationship Strength between Capability and the Requirement

VOC Voice of Customers

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