

## **List of Contents**

|       |   |    |
|-------|---|----|
| 1     | Introduction.....   | 1  |
| 1.1   | The Target Group .....                                      | 2  |
| 1.2   | Research Question .....                                     | 2  |
| 2     | Review of Related Literature.....                           | 4  |
| 2.1   | Views of Higher Education System and Policies .....         | 4  |
| 2.2   | e-Learning Framework .....                                  | 5  |
| 3     | Education System of Sri Lanka .....                         | 7  |
| 3.1   | Current School and University Education System .....        | 7  |
| 3.2   | Higher Education System of Sri Lanka .....                  | 9  |
| 3.2.1 | Economy Related to Higher Education .....                   | 11 |
| 3.2.2 | Technological Background.....                               | 12 |
| 3.3   | Policies on Higher Education in Sri Lanka.....              | 12 |
| 3.3.1 | Formation of e-Learning Policy for Sri Lanka .....          | 14 |
| 4     | e-Learning Potential for Higher Education of Sri Lanka..... | 16 |
| 4.1   | e-Learning.....   | 16 |
| 4.2   | Learning Management Systems (LMS).....                      | 16 |
| 4.3   | Higher Educational Problems related to Sri Lanka .....      | 17 |
| 4.3.1 | Shortage of Student Seats in State Universities.....        | 18 |
| 4.3.2 | Concern on Deprived Areas.....                              | 18 |
| 4.3.3 | Pedagogical Objectives.....                                 | 18 |
| 4.3.4 | Cost of Education .....                                     | 19 |
| 5     | LMS Platform for e- Learning Framework of Sri Lanka .....   | 21 |
| 5.1   | LMS and Framework.....                                      | 21 |
| 5.2   | Select a Suitable LMS Platform to Sri Lanka.....            | 22 |
| 5.2.1 | Selection and Evaluation Process .....                      | 22 |
| 5.2.2 | Pre-Select Criteria of User Requirements.....               | 23 |

|       |  |    |
|-------|--|----|
| 5.2.3 | Evaluation of the Learning Management Systems (LMS) .....              | 25 |
| 5.2.4 | Method of Evaluation .....   | 26 |
| 6     | Design an e- Learning Framework to Sri Lanka .....                     | 29 |
| 6.1   | e-Learning Framework .....   | 30 |
| 6.2   | Components of the Novel Framework “e-University”.....                  | 32 |
| 6.2.1 | End User Multimedia Centers .....                                      | 32 |
| 6.2.2 | Content Development Unit (CDU).....                                    | 33 |
| 6.2.3 | Main Functions of CDU .....  | 33 |
| 6.2.4 | Central Hub of the e-University .....                                  | 34 |
| 6.3   | Proof-of-Concept Architecture of Novel Framework.....                  | 34 |
| 6.3.1 | Interface Layer.....   | 36 |
| 6.3.2 | Digital Content Management Layer .....                                 | 36 |
| 6.3.3 | Knowledge Management Layer.....  | 36 |
| 6.3.4 | Physical Database Layer.....   | 36 |
| 6.3.5 | Functionality with LMS Environment.....                                | 37 |
| 6.4   | Suitable Delivery Architecture for Deprived Areas of the Country ..... | 38 |
| 7     | Evaluation the Proposed System .....                                   | 43 |
| 7.1   | Curriculum Design and Development .....                                | 43 |
| 7.2   | Content Delivery Method .....  | 43 |
| 7.3   | Course Material Standardization Process .....                          | 43 |
| 7.4   | Student Evaluation Methods.....  | 44 |
| 7.5   | Cost of Education .....  | 44 |
| 7.6   | Cloning of a Subject Expertise .....                                   | 44 |
| 8     | Conclusion and Future Work.....  | 45 |
| 9     | References.....  | 46 |

## **List of Figures and Tables**

### **List of Figures**

|   |    |
|---|----|
| Figure 1 : Focusing Group of the Research .....                               | 2  |
| Figure 2 : University Intake of State Universities .....                      | 8  |
| Figure 3: Proposed e-Learning Framework for Sri Lankan Higher Education ..... | 31 |
| Figure 4 : Proof-of-Concept Architecture of the Framework.....                | 35 |
| Figure 5 : Delivery Architecture for Remote MMC .....                         | 40 |

### **List of Tables**

|   |    |
|---|----|
| Table 1 : Admissions to the Government Universities .....   | 9  |
| Table 2 : Recent GDP Allocations for Public Education ..... | 11 |
| Table 3 : Analysis of e-Learning Platforms.....             | 29 |