

## 5. Conclusion and Recommendation

### 5.1. Summary of Problem Owners

#### 1. Government

Everybody agreed that the government, as regulating body of education, is the main responsible party to develop e-learning. It is also responsible for identifying and overcoming the cultural barriers and developing a transformed e-learning course. This is supported by the literature as well.

#### 2. Universities

Universities have the expertise when it comes to education and technology and should work with the government to identify and develop an e-learning course according to all who were interviewed. This too is well supported by literature.

#### 3. Private Organizations



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Private organizations usually have a different culture among themselves and do not conform to the general South Asian culture. Therefore most did not view them as major problem owners. Even in literature, the private organizations are viewed as investors than advisors.

## 5.2. Summary of Stakeholders

### 1. Students / Users

Everybody interviewed agreed that students are the most important part of e-learning. If not for the students, there wouldn't be e-learning. So it is important to take their ideas and problems in to account when designing and planning an e-learning course.



### 5.3. Summary of Cultural Factors

#### 1. Language

Everyone unanimously voted language as the main cultural barrier of e-learning being accepted in South Asian countries. According to the literature, this too has been identified by most as an important factor.

#### 2. Aesthetics

No one interviewed saw aesthetics as a cultural barrier. Mr De Silva mentioned that as long as the material is simple there would be no problem. But literature agrees otherwise, as Friesner and Hart (2004) warns of problems of misinterpretation of colour and images. Gunawardena (1998) and Woodill (2004) both agree that designing a course entirely of text can lead to information overload and de-motivation.

#### 3. Law and Politics

Not everyone was sure of this factor. Mr Rainford, belonging to a governmental organization said that there is a positive approach from the part of the government. Mr Fernando said the same of the university system. Therefore this factor is not a barrier to e-learning.

#### 4. Technology and Material Culture

This too was agreed by all as an important barrier to e-learning. The lack of access and the lack of awareness have resulted in most people especially in rural areas to shy away from computers and their applications. The literature agrees likewise.

#### 5. Education

Next to language, all the interviewees agreed that the current education style in South Asia acts as a barrier to the implementation of e-learning. Everyone felt that a pure self learning system such as e-learning will not fit in to a teacher-centric education culture. This too is agreed as a problem in the literature.

6. Values and Attitudes

Not everyone saw this as a cultural barrier. Only Mr Rainford, Mr Fernando and Mr Dissanayake agreed that South Asians might have negative attitudes towards e-learning. The literature agrees with these three and this is considered an important factor as well.

7. Religion

No one agreed upon religion as an important factor. But certain areas of religion do have to be considered according to the literature, such as observing holidays and respecting religious views

8. Social Organization

Only Mr Fernando saw the importance of this cultural factor. He mentions that interaction is needed between students. No other literature has mentioned this, but Gunawardena (1998) adds that the attitudes of females need to be considered as well.



## **5.4. Summary of Recommendations**

### **5.4.1. Learning Environment**

1. E-learning courses have to be conducted in the country's native languages.
2. If not possible to offer the course in the native language, steps should be taken to provide necessary help to students.
3. Course material should be kept simple and customized.
4. Whenever applicable, use a graphical representation to express a concept.
5. Design the course to minimize the knowledge of operating a computer.
6. Establish proper standards for course material design.
7. Respect the student's view of the teacher.
8. Follow a blended approach for course delivery.
9. Provide resources and computer and Internet facilities.
10. Observe local and religious holidays.



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### **5.4.2. Trainers**

1. Prepare the trainers technologically and psychologically.
2. Guide the students to become self-driven.
3. Reward the teachers for motivation.

### **5.4.3. Students**

1. Should recognize the need for a change of mindset.
2. Learn the English language

### **5.4.4. Government**

1. Create partnerships
2. Create a common e-learning platform
3. Introduce ICT to school curriculum

## 5.5. Conclusion

In conclusion, we can see that culture is a key contributor to the success of e-learning. It is important for e-learning course providers to include a study and analysis of the culture of the target student group in the planning stage.

The suggested strategies are only a guideline for e-learning providers. They should take these into account and use as applicable to the delivery of the course.

Students have to realize that to follow an e-learning course, requires them to have a complete change of their mindset. They need to be more proactive in their studies and not expect to be spoon-fed.

It is important for the government to play the biggest role. It has to work to promote e-learning especially in rural area. It has to create various partnerships and form a centralized body for the development of e-learning.



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Unfortunately, addressing culture alone will not solve the e-learning situation in South Asia. There still has to be a vast development of the infrastructure to support the delivery of e-learning. The education system in these countries requires a change in the methods of teaching to empower the student to study on his or her own.

## 5.6 Directions for Future Research

I hope further research will be done to implement the recommendations given in this thesis to confirm that they will aid to eliminate the cultural barriers of South Asia identified in this thesis.

Research can also be done on how to change the mind set of South Asians to be able to follow a self-learning course. In addition the same research can focus on how to get the rural population involved in IT and how to incorporate IT in their daily work.

More research can be done to assist the government and universities develop a common e-learning platform suitable for South Asia. This platform can be used to address the cultural barriers faced in this culture. E-learning policies and standards can be researched in to as well.




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## Appendix A – Interview Questions and Questionnaires

### A.1 Interview Questions

Name:

Title:

Organization:

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1. What e-Learning projects have been implemented so far in Sri Lanka?
  - a. At what levels were they implemented? (e.g. University-level, School-level, private organization level)
  - b. For what parts of the country were they implemented? (e.g. Urban, Rural, All-island)
  - c. Who was responsible from the planning and implementation?
  - d. Was the e-Learning material developed in Sri Lanka or purchased from elsewhere?
  - e. What factors were considered before implementation?
  - f. What approaches were taken?
  - g. What problems were encountered during the planning and implementation stages?
  
2. What other e-Learning projects are to be implemented in the near future?

By definition, culture is the combination of ideas, customs and social behaviours of a society. Culture includes dimensions like language, religion, education style and values. And when it comes to education, there are some major differences in cultures between developed countries like USA and UK and South Asian countries such as India and Sri Lanka. For example, South Asian education is teacher-centred where all the information is spoon-fed to students whereas in the US students learn actively on their own.

3. Were cultural problems addressed before implementation?
4. What cultural frameworks were considered?
  - a. What cultural factors were identified?
  - b. How were they addressed?
  - c. Whose responsibility is it to identify these cultural issues?
5. What cultural factors were encountered during implementation?
  - a. How were these addressed?
6. What possible solutions have been developed to address these cultural issues in the future when developing e-Learning solutions?



## A.2 Interview Questions (for remote problem owners)

### Introduction

E-Learning promises a lot of advantages for the future. It offers the user the flexibility in learning at his own pace at anytime from anywhere. E-Learning courses have been implemented successfully in USA and many European countries.

But unfortunately, it hasn't reached its potential in the South Asian region. According to the Economists Intelligent Unit e-Learning Readiness Rankings of 2003, countries like Sri Lanka and Pakistan are ranked 55 and 59 out of the 60 countries. There are many reasons for this ranging from the lack of infrastructure to the lack of budget to the cultural issues.

Culture is the combination of ideas, customs and social behaviours of a society according to Hart. For example, language, religion, education style and values



This questionnaire is indented to further identify what cultural problems are present as e-Learning barriers and steps need to be taken to address these issues.

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### Basic Information

Name:

Title:

Organization:

Role in e-Learning:

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**Implemented Projects**

Please fill in the table with information of e-Learning projects implemented in Sri Lanka.

Components Of Implementation (Administration only, Course Material, Lectures, all)	Targeted Level (University, School, Private Org, All-Island)	Targeted Locality (Urban, Rural, All-Island, Selective (please specify))	Responsible personnel for planning and implementation	Educational Material (locally developed, foreign purchased)
1. Project -				
2. Project -				
3. Project -				



What factors were considered during the planning stage? (Please tick)

- Components to be implemented
- Targeted Level
- Targeted Audience
- Educational Material
- Infrastructure
- Budget
- Policies and Regulation
- Culture
- Other: \_\_\_\_\_

What approaches were taken to implement e-Learning?

What problems were encountered during the planning and implementation stages?

## Cultural Factors

By definition, culture is the combination of ideas, customs and social behaviours of a society. Culture includes dimensions like language, religion, education style and values. And when it comes to education, there are some major differences in cultures between developed countries like USA and UK and South Asian countries such as India and Sri Lanka. For example, South Asian education is teacher-centric where all the information is spoon-fed to students whereas in the US students learn actively on their own.

Were cultural factors addressed?

- Yes
- No

What cultural factors were considered important? Please rank in order of importance.

- Language
- Education Style – *teacher-centric vs. self-motivated*
- Aesthetics – *layout of course material and website*
- Technology – *attitude towards new technology*
- Law and Politics – *government policies and regulations*
- Values & Attitudes – *attitudes towards education*
- Religion – *religious attitudes*
- Other: \_\_\_\_\_

How were they addressed?

Were any cultural frameworks considered?

What solutions are available to overcome these cultural barriers?



### A.3 Questionnaires for e-learning students

E-Learning promises a lot of advantages for the future. It offers the user the flexibility in learning at his own pace at anytime from anywhere. E-Learning courses have been implemented successfully in USA and many European countries.

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Name: \_\_\_\_\_

1. Name of e-Learning course taken: \_\_\_\_\_

2. Name of institution offered: \_\_\_\_\_

3. Number of months in course: \_\_\_\_\_

4. Level of implementation of course (Please tick all that apply)

- Course Material available online
- Administration done online (Registration, Results, Timetable)
- Course Lectures are conducted online

5. Did you find following the course in English difficult?

Yes

No

6. Did you find having the design of the website or lecture notes hard to follow?

Yes

No

7. Do you have easy access to a computer?

Yes

No

8. Are you comfortable using a computer?

Yes

No

9. If the lectures were conducted online, were you comfortable following the course online?



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Yes

No

Not applicable

10. Do you find the availability of the course material and administrative material such as timetables online useful? And how often do you access the above?

Yes \_\_\_\_\_

No \_\_\_\_\_

11. Do you understand the references given in examples in class notes?

Yes

No

12. If the course is to followed entirely from home, without attending the university, would have any difficulty following the course? And Why?

Yes

No

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13. What did you like about the course regarding the e-Learning component?

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14. What didn't you like about the course regarding the e-Learning component?

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15. What improvements could be made?

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16. Would you follow a similar online course again? If not, please state reasons.

Yes

No

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Thank you for your input.

