INFORMATICS INSTITUTE OF TECHNOLOGY

B.Sc. Hons. in Information Systems with Business Management

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Textbook Gateway

An Exploratory study to increase the efficiency and effectiveness of Sri Lankan Government Schools textbook and Teachers' guide distribution

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ABSTRACT

Education plays a major role in the life and culture of Sri Lankan people. Therefore, the government made it compulsory for the children to attend schools and provided with free textbooks. Educational Publications Department (EPD) is given the authority to print and distribute the textbooks all over the country. The objective of Textbook Gateway Project is to study, research and identify existing issues related to textbook distributions by the Department and to develop and evaluate an effective and efficient IT solution that will enable a better medium of communication between the staff of the EPD and stakeholders.

Therefore, in this report, the reader can find how the EPD presently handles the work of the distribution of free textbooks to schools and the problems faced by the EPD in distributing the books to the students before the Christmas holidays each year.

The reader can also find in this report the reasons for the problems such as delays in distributing textbooks are due to non-availability of predicting the next year's book requirements, data maintenance and delivery mechanism.

In this report, the usage of Simple Moving Average Forecasting Technique was carried out to predict the number of book requirements needed for next year to ensure delivery of books on time. Also the shortest path algorithm which was used to find a solution to the delivery problem were also analysed. Research on similar systems was carried out. Through research, it was revealed that a web based solution will assist to increase the efficiency and effectiveness of the distribution system.

Hence a web-based solution has been identified as a way out for the problems faced by the Educational Publications Department and this report also describes the analysis, design and implementation of a website created using PHP and MySQL which assisted in the success of the project.