Implementing A Web-Based School Management System for Sri Lankan Schools

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Abstract. In the 21st -century technology plays a major role in every nation. Today due to the rapid growth of technology and globalization the world has converted into a global village. Due to globalization the information can be shared among the world very easily and hence it helps the rapid development of the nation, and it is solving social problems. To the development of open-minded young generation, education plays the backbone of every nation. In the process of developing open-minded young generation school education plays a primary and major role. Education is one of the most powerful instruments for sustainable economic growth of a nation as well as to reduce inequality and poverty in society. Admissions, data processing, and report preparation are all part of the school's processes and procedures, which are similar to those in business and industry. In the Sri Lankan context still, many schools have paper-based School Management Systems and only a few schools are integrating with automated School Management Systems. Most of the automated School Management Systems don't have an-up-to date active system and active School Management Systems have problems while integrating with the system. The absence of a computer system and the complexity of school transactions, which causes personnel to be overburdened with paperwork in storing and maintaining student records and information, are the driving forces behind the creation of the School Management Information System for Sri Lankan schools. The main aim of this research paper is to discuss the main modules and functionalities of the system and to eliminate the principal perceptions about implemented automated school management system. The design science approach is used as a methodology process model. ISO 25010, a quality model for product/software quality evaluation systems, was utilized to assess the project. This automated school management system was found to be Functional, Usable, and Reliable, with an average score of 4.04 for each category, indicating very good performance based on a Likert scale descriptive interpretation. After carefully identified features that should be included in the system the automated school management system was developed and implemented and released to the end-user. For the development process, agile AWE model was used, and this system was implemented in a school that uses the manual paper-based system for the mange of daily tasks. In terms of functionality, usability, and dependability, the system's overall quality and performance were excellent. This system will be helpful for the schools that are still functioning using a manual paper-based system as well as using automated school management systems because these new features are not available in prevailing automated school management systems.

Keywords: Education, Automated School management system (ASMS), School