Paperless OMR System Implementation in UMS Abstract

It is vital that less paper be used in the running of the education system in order to manage a university in a sustainable way. OMR is a very important system of marking and evaluating students objectively and therefore vital for the management of a university education system. The OMR system should therefore be implemented in a sustainable way but without compromising the quality of education offered and if possible to enhance the educational aspect of the sustainable system, instead of deteriorating the quality of education as a result of the sustainable implementation. A system using OMR was successfully implemented at University Malaysia Sabah virtually without using any paper compared to previous OMR implementations. The paperless implementation is not only sustainable, but is so efficient that it can be adopted to detect lateness and absenteeism. The only sheets of paper that were used were the OMR sheets that were recycled. The collection of the OMR sheets was finally done using envelopes that were arranged according to the first letter of the names of students. It eases the collection and later recycling of the OMR sheets. To optimise the value of the recycling process, a feedback system was implemented in the tests and therefore enhances the pedagogical impact of the OMR system. The discipline required for the sustainable implementation of the paperless OMR system is treated as part of the practical aspects of ethics and law in real life situations, which is part of the course of Ethics and Law for Engineers for which environmental sustainability is part of the curriculum.