

# **Abstract**

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## **Modeling and Developing Digital Signage using SMIL: A Case Study**

The purpose of this research is to minimize the Multimedia Presentations (MMP) problems on display screens such as DS. Since DS screens are widely used these days in a variety of contexts such as universities, malls, and even streets in order to provide better means of communication with other parties. Thus, there is a calling need to investigate such systems and the technology used. The majority of previous literature showed a clear gap in matching components and requirements of DS systems. In addition, there is a deficiency in providing evaluation models for DS systems generally and specifically in universities. As a consequence, this research provides a matrix showing the different components and requirements of DS systems, which would be used to build an evaluation model for DS systems in universities. Moreover, it analyzes XML alternatives for the implementation of such systems. Semi-structured interviews and focus groups were conducted and accordingly the evaluation model was tested based on them. Finally, a framework was developed based on the results and a system was implemented using SMIL.