

Interoperability Maturity Models for Consideration When Using School Management Systems in South Africa: A Scoping Review

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Abstract : The main purpose and focus of this paper are to determine the Interoperability Maturity Models to consider when using School Management Systems (SMS). The importance of this is to inform and help schools with knowing which Interoperability Maturity Model is best suited for their SMS. To address the purpose, this paper will apply a scoping review to ensure that all aspects are provided. The scoping review will include papers written from 2012-2019 and a comparison of the different types of Interoperability Maturity Models will be discussed in detail, which includes the background information, the levels of interoperability, and area for consideration in each Maturity Model. The literature was obtained from the following databases: IEEE Xplore and Scopus, the following search engines were used: Harzings, and Google Scholar. The topic of the paper was used as a search term for the literature and the term 'Interoperability Maturity Models' was used as a keyword. The data were analyzed in terms of the definition of Interoperability, Interoperability Maturity Models, and levels of interoperability. The results provide a table that shows the focus area of concern for each Maturity Model (based on the scoping review where only 24 papers were found to be best suited for the paper out of 740 publications initially identified in the field). This resulted in the most discussed Interoperability Maturity Model for consideration (Information Systems Interoperability Maturity Model (ISIMM) and Organizational Interoperability Maturity Model for C2 (OIM)).

Keywords : interoperability, interoperability maturity model, school management system, scoping review

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