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On the Factors Affecting Computing Students' Awareness of the Latest ICTs

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Abstract: The education sector is constantly faced with rapid changes in technologies in terms of ensuring that the curriculum is up to date and in terms of making sure that students are aware of these technological changes. This challenge can be seen as the motivation for this study, which is to examine the factors affecting computing students' awareness of the latest Information Technologies (ICTs). The aim of this study is divided into two sub-objectives which are: the selection of relevant theories and the design of a conceptual model to support it as well as the empirical testing of the designed model. The first objective is achieved by a review of existing literature on technology adoption theories and models. The second objective is achieved using a survey of computing students in the four universities of the KwaZulu-Natal province of South Africa. Data collected from this survey is analyzed using Statistical package for the Social Science (SPSS) using descriptive statistics, ANOVA and Pearson correlations. The main hypothesis of this study is that there is a relationship between the demographics and the prior conditions of the computing students and their awareness of general ICT trends and of Digital Switch Over (DSO) a new technology which involves the change from analog to digital television broadcasting in order to achieve improved spectrum efficiency. The prior conditions of the computing students that were considered in this study are students' perceived exposure to career quidance and students' perceived curriculum currency. The results of this study confirm that gender, ethnicity, and high school computing course affect students' perceived curriculum currency while high school location affects students' awareness of DSO. The results of this study also confirm that there is a relationship between students prior conditions and their awareness of general ICT trends and DSO in particular.

Keywords: education, information technologies, IDT, awareness

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