

Investigating Elements That Influence Higher Education Institutions' Digital Maturity

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Abstract : In this paper, we present findings from a multi-part study to evaluate candidate elements reflecting the level of digital capability maturity (DCM) in higher education and the relationship between these elements. We will use these findings to propose a model of DCM for educational institutions. We suggest that the success of learning in higher education is dependent in part on the level of maturity of digital capabilities of institutions as well as the abilities of learners and those who support the learning process. It is therefore important to have a good understanding of the elements that underpin this maturity as well as their impact and interactions in order to better exploit the benefits that technology presents to the modern learning environment and support its continued improvement. Having identified ten candidate elements of digital capability that we believe support the level of a University's maturity in this area as well as a number of relevant stakeholder roles, we conducted two studies utilizing both quantitative and qualitative research methods. In the first of these studies, 85 electronic questionnaires were completed by various stakeholders in a UK university, with a 100% response rate. We also undertook five in-depth interviews with management stakeholders in the same university. We then utilized statistical analysis to process the survey data and conducted a textual analysis of the interview transcripts. Our findings support our initial identification of candidate elements and support our contention that these elements interact in a multidimensional manner. This multidimensional dynamic suggests that any proposal for improvement in digital capability must reflect the interdependency and cross-sectional relationship of the elements that contribute to DCM. Our results also indicate that the notion of DCM is strongly data-centric and that any proposed maturity model must reflect the role of data in driving maturity and improvement. We present these findings as a key step towards the design of an operationalisable DCM maturity model for universities.

Keywords : digital capability, elements, maturity, maturity framework, university

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