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**Developing a conceptual model for facilitating the issuing of
digital badges in a resource constrained environment**

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Abstract:

Gamification and digital badging are new concepts to the educational environment, where on completion of specific tasks, an individual can earn a badge or badges showing their achievement. Currently Mozilla Open Badges is the standard for the issuing, managing and receiving of digital badges in connected environments. These Mozilla Badges are issued to learners by facilitators or organisational representatives acting as a form of accreditation for the skills said individual has learnt. The issuing of Mozilla Open Badges faces major challenges within resource constrained environments. This is due to the lack of internet connectivity within these areas which is a core requirement for the successful operation of Mozilla Open Badges. Therefore as a major contribution, this paper aims at introducing a model that will solve the problem of issuing badges within resource constrained environments. The study made use of the interpretive philosophy, following the inductive approach with the three-cycle view of design science research. Three project experts were interviewed in order to identify the components that are critical in providing a model for facilitating the issuing of digital badges in a resource constrained environment. Through feedback from users, and in conjunction with the literature review, a final model for facilitating the issuing of digital badges in a resource-constrained environment has been proposed. The proposed model is useful and applicable to any developing or disconnected environment throughout the world.