Digital platforms for research collaboration: using design science in developing a South African open knowledge repository

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ABSTRACT:

Research involving the use of information and communication technology for development (ICT4D) inhabits an interdisciplinary space characterized by various philosophies, aspirations, realities and priorities. This diversity in the ICT4D research area complicates knowledge sharing between stakeholders in the field, which may inhibit the dialog between researchers, policy-makers and practitioners and limit collaboration. The purpose of this research was to investigate information technology (IT) enabled collaboration through the design and development of a sustainable open knowledge repository (OKR) according to the design science research (DSR) paradigm. OKRs are tools used to support knowledge sharing and collaboration. The theoretical contribution of this paper lies in the sharing of insights gained into the user requirements, system features and principles for guiding the development process of an OKR for Development Informatics research in South Africa and the implications for knowledge management. The research builds on existing knowledge by applying the four-cycle DSR methodology as a systematic and reproducible method of investigating an OKR as an example of IT-enabled collaboration. The practical contribution is the artifact (OKR) developed to enable the sharing of research knowledge.