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The components of an innovation ecosystem framework for Botswana's mobile applications

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Abstract

The literature on information and communication technology comprises numerous studies on the role of mobile technologies in developing communities, including examples of innovative mobile applications which improve literacy and access to healthcare, banking and agricultural services. There is a growing understanding that sustainable development requires more than rational, scientific and technological means – it also requires a web of support from both social networks and business infrastructure. Innovation ecosystems consist of economic agents and relations, as well as non-economic components such as technology, institutions, sociological interactions and culture, which facilitate idea-making, innovation and the diffusion of such innovations. There is, as yet, no evidence-based innovation ecosystem conceptualisation to describe the situation in Botswana. This study aims to identify and present the essential components of a mobile application innovation ecosystem, by using Design Science Research methodology and adopting a pragmatic research approach which draws on two theoretical streams: the Computing, Connectivity, Content and Capacity (4Cs) framework for infThe components of an innovation ecosystem framework for Botswana's mobile applicationsormation and communications technology, and a systems theory-based Triple Helix Model of Innovation. In addition to making a theoretical contribution towards understanding information and communications technology for development innovation frameworks, the study provides practical recommendations in respect of supporting mobile application innovations in Botswana.