

Proceedings of the 2nd International Conference on Next Generation Computing Applications, NextComp 2019, Mauritius, 19-21 September 2019

Building a digital health innovation ecosystem framework through design science research

Gloria E. Iyawa

Department of Informatics, Namibia University of Science and Technology, Windhoek, Namibia

gloria.iyawa@gmail.com

Marlien Herselman

CSIR, Meraka & University of South Africa, Pretoria, South Africa

mherselman@csir.co.za

Adele Botha

CSIR, Meraka & University of South Africa, Pretoria, South Africa

abotha@csir.co.za

<https://ieeexplore.ieee.org/document/8883650>

Abstract

Digital Health Innovation Ecosystem is a relatively new concept, with studies describing it as an ecosystem that allows patients and other healthcare stakeholders take part in the healthcare delivery process using digital health technologies with the inclusion of innovation principles. This paper presents findings of a study which aimed at developing a contextualised Digital Health Innovation Ecosystem framework for the Namibian context. The use of Design Science Research (DSR) in developing the framework is demonstrated through a case study of the development of a Digital Health Innovation Ecosystem framework for Namibia. The study adopted DSR in three evaluative phases which covered the literature study, Delphi method, local and global expert reviews. Through DSR, processes such as literature review, building components and infrastructure for the Namibian context are unearthed. The Digital Health Innovation Ecosystem framework facilitates the use of various existing approaches in a logical manner that incorporates the needs of a specific country, also taking into consideration that each country context is unique and different, hence, permitting flexibility. The findings of this paper provide useful insights into how a Digital Health Innovation Ecosystem framework may be developed.