

Synergizing E-infrastructures Initiatives to Foster e-Research in Higher Education Institutions in Africa

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Abstract

It is expected that improved connectivity will enable African Tertiary education and research institutions to generate a proportionate amount of intellectual property goods to achieve parity with the rest of the world. Nevertheless this vision can only be attained through intensive collaborative activities. The emergence of large-scale e-infrastructure projects in Africa reflects a trend toward more complex configurations of scientific collaboration. This paper investigates the concepts of *synergizing* which denote the active processes of creating and managing relationships among people, organizations, and technologies in the creation of e-infrastructure. The paper also explores how embeddedness is not only an important result of infrastructure development, but is also a precursor that can act as both a constraint and a resource for development activities. The researchers are more interested with the process of creating and maintaining productive socio-technical relationships, which they refer to as synergizing. Human infrastructure posits that complex infrastructures come about through complex interactions among networks, place-based organizations, groups, and consortia. Through a multiple case study approach and integrated literature survey, the research examines how two e-infrastructure initiatives; UNESCO-HP brain gain and HP catalyst projects attempts to make use of these concepts to foster e-research and draws specific lessons for African HEIs. The study revealed that the two dominant e-research projects have adopted approaches that favor synergizing and embeddedness in e-research however despite funding of 24 projects in 21 HEIs, visibility of Africa in e-research world map is still wanting.

Keywords

E-research, e-infrastructure, synergizing, embeddedness, higher education institutions (HEIs),

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