The Battle Ground Of Information System Development in Developing Countries: From Mutual Exclusion To Hybrid Vigor

Abstract:

The integration of software components into large-scale and complex information systems is a topic attracting interests from many information systems practitioners and researchers. Less attention is given to the intricate processes in which these infrastructures are built based on multiple independent software components. Introduced by different actors, these components are pushed onto a battleground of functional roles where components are replacing and blocking each other. Based on a case study of the development of an information infrastructure for communicable diseases detection, prevention, and control in Vietnam, we discuss ICT4D as one such battleground. This paper contributes by unpacking this case and conceptualizing its success as an example of the outcome of a strategy of hybrid vigor.

Keywords: information systems, information infrastructure, infectious diseases information systems

# Introduction

Information Systems are no longer designed and implemented in isolation, but are integrated with and extending already existing large-scale and complex information systems. How this situation influences the process of building successful information systems as parts of a larger whole has been a topic attracting interests from many information systems practitioners and researchers. Key aspects that make this context and the nature of the technology different from stand-alone information systems has been theorized as Information Infrastructure and their dynamics described by concepts of openness, shared, evolving, standardized, heterogeneous, and building on an installed base (Hanseth and Monteiro 1998, Hanseth 2010). The term “installed base” is coined by Hanseth (2010) as the existing “set of ICT capabilities and their users, operations and design communities”, and it also encompasses existing institutional and organizational components (Lanzara 2014).

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