

Chapter 1

Delineating the Meaning and Value of Development Informatics

Graeme Johanson
Monash University, Australia

ABSTRACT

This chapter describes the field of Development Informatics as it has emerged in the past two decades, and highlights some of the strengths of its research and practices. It draws on the current literature and the expertise of the other authors of this book to help to define a set of basic terms. Any new intellectual domain is tied to some degree to the vagaries of its institutional alliances, to the perceived international status of its public forums, and to the criticism that on its own it lacks unique methodological rigour. These points are discussed candidly. Multidisciplinarity is the backbone of Development Informatics. The main virtues of Development Informatics are that it offers a platform for an evaluative critique to counterbalance the effects of relentless globalisation, that it comprises strong multidisciplinary teams, that it maintains an intellectual space to build on international momentum that has developed among theorists and practitioners, and that it opens up future imaginative possibilities for collaborative projects which involve communities in developing areas of participatory research and ongoing project evaluation in order to encourage self-sustaining entities.

THE GLARING GAP

In 2000 87% of the world's wealth was owned by 20% of the world's population, and 91% of Internet users were in OECD countries (amounting to only 19% of the world's population). It is tempting to link wealth and Internet usage. Both

these pairs of figures present very large divides to bridge (Pasquali, 2003: 219). The United Nations attempts to measure international development each year, bravely publishing cumulative figures, which are dependent on national governments for accurate data collection (International Telecommunications Union (ITU)). Apart from the CIA *WorldFactbook*, updated every two weeks online, the UN offers the only index of comparative,

DOI: 10.4018/978-1-61520-799-2.ch001

longitudinal data. Let us assume for the sake of argument that they are a rough guide to the comparative status of developing countries. The UN figures place 22 countries in the bottom category of ‘Low Human Development’ based on a range of measures, including life expectancy, levels of health, poverty, and literacy, and adoption of phones and the Internet. The poorest countries are all in Africa: in order they are Senegal, Eritrea, Nigeria, Tanzania, Guinea, Rwanda, Angola, Benin, Malawi, Zambia, Côte d’Ivoire, Burundi, Congo, Ethiopia, Chad, Central African Republic, Mozambique, Mali, Niger, Guinea-Bissau, Burkina Faso, and the poorest of all is Sierra Leone. In the period from 1995 to 2005 people in these deprived countries tripled their ownership of telephone mainlines, from 3 per thousand people to 9 per thousand people on average (still extremely low). In 2005 there were 48 cell or mobile phone subscribers per thousand people, far outstripping fixed phones, and they boasted 12 Internet users per thousand people on average. In contrast, for ‘High Human Development’ countries, the figures in the same categories in 2005 were 394 (mainlines), 743 (mobiles), and 365 (Internet). The figures for the third most developed country in the world, Australia, were: 564, 906, and 698.

It is hard to imagine a more eloquent summary statement of the huge problems which Development Informatics (DI) hopes to alleviate, than these figures presented by the UN. It also forms a fitting rationale for the aims of this chapter, which are to answer two basic questions: What is Development Informatics? and, What is its value?

In order to explore the first question, section two defines information, informatics, development, communications, ICTs, ICT4D, and related terms, using examples from the academic literature. It is hard to enumerate all of the disciplines that relate to developing regions. Section two describes the implications of multidisciplinary, and differentiates Development Informatics from Community Informatics, and Organisational and Social Informatics, with which they

are often linked. It plots the gradual evolution of Development Informatics as an area of study and research in its own right, and acknowledges that the scope is hard to delimit. The chapter points to the growing power of Information and Communications Technologies, which cannot be ignored by anyone. Finally, section three uses a brief content analysis of the other chapters of this book, and other academic sources, to show what authors themselves regard as the attributes of intellectual effort in this field.

To answer the second question—about the value of Development Informatics—fewer points are made in section four. There is a dearth of direct knowledge about how to deal with the pressing issues raised by our researchers in this text; everyone is struggling continually to understand the dimensions and implications of the issues. Most agree that there is a need to try to humanise the extensive commercial, political and technological forces which control development at the moment. Many researchers (some working in developing regions) feel a moral responsibility to use research to promote more equitable participation in the benefits of Information and Communications Technologies (Avgerou, 2008:142; Burrell, 2009:90). They are spreading fast everywhere, and their effects need to be monitored and evaluated.

Development Informatics provides a forum for reflective catch-up, along the lines offered by Critical Theory (Bohman, 2005). Towards the end of this chapter, the research-praxis nexus is addressed. Researchers tend to be depicted as dreamers, who do not converse with policy-makers, who in turn are blinded by political ideologies. Then there are the practitioners who are so preoccupied with day-to-day necessities of project management, that they tend to overlook relevant research (Heeks, 2008:31). Development Informatics can offer a common discussion space to encourage potential interactions, and to jointly face up to collective challenges (United Nations Development Programme—UNDP, 2001:8).

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/delineating-meaning-value-development-informatics/46708

Related Content

Encouraging Internationalization and Entrepreneurial Orientation in Small and Medium Enterprises

Kijpokin Kasemsap (2017). *Handbook of Research on Small and Medium Enterprises in Developing Countries* (pp. 233-259).

www.irma-international.org/chapter/encouraging-internationalization-and-entrepreneurial-orientation-in-small-and-medium-enterprises/177739

Strategy and Structure in a Virtual Organization

Nazim U. Ahmed, Ray Montagno and Sushil Sharma (2012). *E-Adoption and Technologies for Empowering Developing Countries: Global Advances* (pp. 34-45).

www.irma-international.org/chapter/strategy-structure-virtual-organization/62003

An Analysis of The Relation Between Foreign Direct Investment and Sociopolitical Variables in MENA Countries by Panel Regression

Betül Gür (2019). *International Journal of ICT Research in Africa and the Middle East* (pp. 15-30).

www.irma-international.org/article/an-analysis-of-the-relation-between-foreign-direct-investment-and-sociopolitical-variables-in-mena-countries-by-panel-regression/218583

Mapping the Distribution of Tsetse Flies in Eastern Uganda: A Geoinformatics Approach

Teddy Nakato, O. O. Jegede, Ayanlade Ayansina, V. F. Olaleye and Bolarin Olufemi (2010). *International Journal of ICT Research and Development in Africa* (pp. 19-34).

www.irma-international.org/article/mapping-distribution-tsetse-flies-eastern/46098

My Life With Computers on a Remote Island

Bethalia Gaidan (2007). *Information Technology and Indigenous People* (pp. 58-60).

www.irma-international.org/chapter/life-computers-remote-island/23535