

701 E. Chocolate Avenue, Hershey PA 17033-1240, USA Tel: 717/533-8845; Fax 717/533-8661; URL-http://www.idea-group.com

**ITB8494** 

## Chapter VIII

# Enabling Technology for Collaborative Working: A Socio-Technical Experience

Dianne Willis
Doncaster College

Elayne Coakes
University of Westminster

#### INTRODUCTION

This chapter looks at the use of enabling technology, in particular the Internet, to share experiences of socio-technical thinking and practice. From an idea of gathering an international perspective on socio-technical practices was born a collaborative venture between three members of the Sociotechnical group of the British Computer Society (BCS). The aim of the venture was to gather together a series of modern socio-technical experiences in book format. As none of the three participants lived close to the other in geographical terms and the basis of the book was to be international experiences, some method of communication was needed that took no account of international timelines and geographical boundaries. Major options considered for the project were the telephone, fax or electronic mail (email). Each communication method has its advantages and disadvantages, but for a truly international perspective, e-mail was considered to be the best option. Whittle (1997) argues that the rapid communication, convenience and economy of e-mail promotes efficiency. The eventual choice of e-mail was influenced by the fact that it takes no account of time differences and people can deal with e-mail as and when they have time. According to Harris (1996), communicating by e-mail is very inexpensive compared to telephone communication, as messages and even files can be exchanged around the world for the cost of a local phone call. This aspect was also highlighted when contributors were asked to send disc and hard copy which proved very expensive, though was undoubtedly more reliable as problems with compatibility of systems disappeared.

At this point, some further consideration of e-mail and the use of the Internet would be beneficial.

This chapter appears in the book, *Human Centered Methods in Information Systems: Current Research and Practice*, edited by Steve Clarke and Brian Lehaney. Copyright © 2000, Idea Group Inc.

#### **ELECTRONIC MAIL**

Hirschheim (1985) described the main characteristics of electronic mail as being:

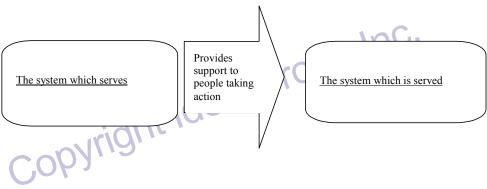
- 1. To support the communications of people in the same building and on distant continents
- 2. To support real-time communications, when the parties are present at their terminals at the same time (this did indeed happen on one memorable occasion when on sending a communication to a contributor in the USA, an instant response was received, as he was on-line at the time—this led to a discussion of the weather on the different continents), and non-real time communications with the recipient reading mail when convenient (the more normal occurrence).
- 3. To allow all messages to be sent when desired, stored where necessary, routed to the most appropriate destination and then easily retrieved.
- 4. To provide the users with facilities to prepare, edit, read, store, receive and retrieve messages easily.
- 5. To cater or to a variety of message types such as formal letter, informal memos and brief notes. (most e-mail systems in use today do not cater for formal letters and memos).

It can be seen that these characteristics are of importance when engaging on a project such as international collaboration for publishing as an audit trail of activities needs to be kept. The major issues arise when, in particular, editors in such a venture use e-mail systems with different capabilities (such as the ability to deal with attachments), and in addition do not store correspondence in the same manner. Harris (ibid) points out that messages longer than 30 pages should be compressed before being sent to avoid the problem of unreadable messages for the recipient.

In the context of the publishing activity, the various e-mail systems used by the editors and contributors can be considered parts of the information system that constituted the whole. In Checkland and Holwell's terms (1998) this whole would be as below:

The system which serves provides the processing of selected data (capta) relevant to people undertaking purposeful action, and the system which is served allows for purposeful action whose doers have information needs.

Figure 1: The Linked Systems of an Information System.



## 10 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/enabling-technology-collaborativeworking/22197

#### **Related Content**

## Evaluating Health Care Appropriateness Means Putting a Value on its Goodness: The Role of Expectations and Trust

Vahé A. Kazandjian (2015). *International Journal of Information Communication Technologies and Human Development (pp. 1-13).* 

 $\frac{\text{www.irma-international.org/article/evaluating-health-care-appropriateness-means-putting-avalue-on-its-goodness/143756}$ 

## Adaptive Cache Server Selection and Resource Allocation Strategy in Mobile Edge Computing

Michael Pendo John Mahengeand Edvin Jonathan Kitindi (2022). *International Journal of Information Communication Technologies and Human Development (pp. 1-16).* 

 $\underline{\text{www.irma-}international.org/article/adaptive-cache-server-selection-and-resource-allocation-strategy-in-mobile-edge-computing/299412}$ 

## The Cultural, Economic and Political implications of New Media: A Case Study on Mobile Telephony among University Students in Kenya

Fredrick Kang 'ethe (2011). Cultural Identity and New Communication Technologies: Political, Ethnic and Ideological Implications (pp. 90-109).

www.irma-international.org/chapter/cultural-economic-political-implications-new/53768

#### Designing for Children's Mobile Storytelling

Sonia Franckel, Elizabeth Bonsignoreand Allison Druin (2010). *International Journal of Mobile Human Computer Interaction (pp. 19-36).* 

www.irma-international.org/article/designing-children-mobile-storytelling/43005

## Exploring Barriers to Coordination between Humanitarian NGOs: A Comparative Case Study of Two NGO's Information Technology Coordination Bodies

Louis-Marie Ngamassi Tchouakeu, Edgar Maldonado, Kang Zhao, Harold Robinson, Carleen Maitlandand Andrea Tapia (2013). *Information Systems and Modern Society: Social Change and Global Development (pp. 87-112).* 

www.irma-international.org/chapter/exploring-barriers-coordination-between-humanitarian/73595