Chapter 6
Culture, Online Technology, and Computer-Mediated Technical Documentation:
Contributions from the Field of Intercultural Communication

Marc Hermeking
Ludwig-Maximilians University, Germany

ABSTRACT

The global diffusion of technology is increasingly accompanied by both computer-mediated and online communication. Several empirical examples for the influence of culture on the usage of online technology and computer-mediated technical documentation are illustrated with relevant theories from the field of intercultural communication (e.g., Edward T. Hall's model of low-/high-context in particular). Recent developments and national differences in the global diffusion of mobile phones and the Internet are discussed as examples for culture-specific online communication preferences. Similar cultural influences on computer-mediated technical documentation and operational instructions are demonstrated by online manuals from Southeast Asia and by an aviation control system. Beyond the understanding of cultural communication preferences, consequences for construction and design of such technologies are also discussed.

DOI: 10.4018/978-1-60960-833-0.ch006

Copyright © 2012, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

INTRODUCTION

As a precondition and as a result of the era of globalization, the world-wide diffusion of technology – both traditional, mechanical, offline technology and modern, computerized online technology – tends to increase enormously. This phenomenon interconnects people and cultures from all over the world, and, at first sight, this situation seems to indicate a culture-free character of technology. Most of all, this culture-free global image seems to hold true for information and communication technology (ICT) and all related forms of computer-mediated communication (CMC), both wired and wireless/mobile.

The latter, especially, gains an increasing share in nearly all kinds of technical products beyond formerly typical ICT products: Examples for such additional elements of our online environments are cars, trains, ships, airplanes, and even household appliances of the near future – the usage of which tends to be more and more accompanied by computer-mediated instructions and online technical documentation. Consequently, a lot of offline documentation, such as printed operation manuals, has already disappeared and continue to be substituted by human-machine interaction (human-computer interaction) in online environments around the world.

An increasing number of empirical studies, however, confirm the manifold and sometimes subtle, but nevertheless very critical influences of culture on technology in general (Hermeking, 2001; Hermeking, 2010) and on CMC (e.g., the Internet, websites) in particular (Hermeking, 2005; Singh, Zhao, & Hu, 2005; Hermeking 2007; An, 2007; Li & Zhao, 2009; Gevorgyan & Manucharova, 2009; Hauser, 2010). Such cultural influences on technology might not only apply to the perceived design and the visual surface of technical products. Rather, they might also apply to the different contexts and ways of using technologies –as well as the ways of communicating with and about technology. Cultural communication styles exert many, and sometimes utmost critical, impacts on such human-machine interactions.

This chapter provides some empirical examples for the influence of culture on the usage of online technology and on computer-mediated technical documentation. These connections will, in turn, be illustrated by examining relevant theories and models from the field of intercultural communication.

INTERCULTURAL COMMUNICATION

Culture, Communication, and Technology

The implications of cultural diversity and the interactions between members from different cultures are central issues of the academic and the practical field of intercultural communication – a field based on various academic disciplines including cultural anthropology/ethnology, cross-cultural psychology, and translation studies/linguistics. Though personal face-to-face interaction is its traditional focus, intercultural communication is related by many ways to material culture in general (Roth, 2001) as well as to technology and its cross-cultural transfer in particular (Hermeking, 2001; Jansen & Riemer, 2003). The pioneer work of anthropologist Edward T. Hall of the 1950s is commonly regarded as the starting point of this discipline. Since then, it has found broad acceptance and additional theoretical development by many others.

Like many renowned ethnographers of his time, Hall was influenced by anthropological theories of functionalism. According to this perspective, culture comprises material and immaterial products as instruments to cope with problems to which all human beings are exposed during their existence. These problems are identical worldwide, but what instrument out of a variety of possible choices is preferred

12 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/culture-online-technology-computer-mediated/55562

Related Content

Trust in Computer-Mediated Communications: Implications for Individuals and Organizations
Susan K. Lippert (2008). *Computer-Mediated Relationships and Trust: Managerial and Organizational Effects (pp. 1-13).*
www.irma-international.org/chapter/trust-computer-mediated-communications/6881

Learning and Teaching with CMC in the U.S. Higher Education Arena
Allison V. Leveland Amy E. Hoseth (2008). *Handbook of Research on Computer Mediated Communication (pp. 34-48).*
www.irma-international.org/chapter/learning-teaching-cmc-higher-education/19735

Divergent News Media in Computer Mediated News Communication
Michaël Opgenhaffen (2008). *Handbook of Research on Computer Mediated Communication (pp. 492-507).*
www.irma-international.org/chapter/divergent-news-media-computer-mediated/19767

Mass Customization with Configurable Products and Configurators: A Review of Benefits and Challenges
Mikko Heiskala, Juha Tihonen, Kaija-Stiina Paloheimoand Timo Soininen (2010). *Mass Customization for Personalized Communication Environments: Integrating Human Factors (pp. 75-106).*
www.irma-international.org/chapter/mass-customization-configurable-products-configurators/38509

An Application of the UTAUT Model for Understanding Acceptance and Use of ICT by Nigerian University Academicians
N. D. Oye, N. A. Iahadand Nor Zairah Ab Rahim (2011). *International Journal of Information Communication Technologies and Human Development (pp. 1-16).*
www.irma-international.org/article/application-utaut-model-understanding-acceptance/60155