Chapter II
Is this the Global Village?:
VoIP and Wire/Wireless Convergence

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ABSTRACT

A long-held desire on the part of many concerned technologists and social scientists has been the creation of a system that would allow individuals in the remotest regions of the globe to have access to communications technologies. Today, Voice over Internet Protocol (VoIP) allows individuals in regions formerly restricted by economic, geographic or cultural reasons to communicate on a broader scale at a reasonable financial cost, through convergent systems and wireless means, for purposes defined by themselves. This analysis explains the core components of VoIP and how it facilitates communication, considers the social and cultural impact of VoIP on a global scale and examines whether we are entering a truly “global village” through greater use of VoIP technologies.

INTRODUCTION

In 1844, Samuel F. B. Morse, developer of Morse code and the entrepreneur who perfected a “language” that enabled the new technology of telegraph to be more effectively used, predicted that telegraphy would result in a truly “global village” in which all communities and nations would eventually be connected by wires to systems that would change global communication patterns. By the end of the 1800s, Guglielmo Marconi had successfully experimented with radio and had begun to construct plans for the Marconi Wireless Telegraph Company Ltd.’s expansion to ultimately become what he called a “global village”—connecting areas and regions of the globe through wireless means (Dunlap, 1927). Later, Marshall McLuhan (1964) predicted visual and aural electronic media would eventually create a “global village” in which all inhabitants of the world could see, hear and respond to instant messages, from anywhere, anytime. Each of these
forecasts maintained an optimistic view that global communication would reduce inequities among cultures and societies, eliminate hunger and social problems and create a more harmonious world in which people would respect difference and care for each other, ideals that might be expected in a village where faces, names and kinship bound individuals to others.

While these visions of a “global village” never came to pass because of technical, economic and political barriers, developments in technologies that combine wired forms (i.e., the Internet and World Wide Web) and wireless forms (mobile telephones) have indeed come of age to suggest yet another image of a “global village” in which the ability to communicate over distances has begun to contribute to cultural change and global awareness in many regions of the world. This time, however, the village represents groups of people who maintain their distinctive indigenous values and cultures while interacting with others throughout the world to maintain and improve their survival at the local level. When these cultures interact through the global economy, the sense of “village” finds a broader meaning. The new global village involves both the way in which local cultures participate in the global economy, and the way information and knowledge can be accessed so that it can be made to work for the best interests of the local community. What makes it possible for these groups to interact with greater knowledge and efficiency is the growth of low-cost communications that extend their ability to communicate over distances. Voice over Internet Protocol (VoIP) is a system that facilitates interaction at relatively low cost that could lead toward a new vision of the global village.

Some of the past barriers to participating in the global economy have involved the cost of large-scale infrastructures necessary to support electronic communications, literacy and restriction to major power-broker access. But today, the lower cost of wireless communication, the ability to use local spoken languages rather than written communication and greater access to knowledge, have aided in the ability of a larger number of nations and cultures to participate in the global information infrastructure.

Voice-over-Internet protocol (VoIP) is the result of the convergence of wired and wireless forms (i.e., Internet and mobile phone) to facilitate voice, data and text-based communication. It marks total convergence, in the sense that VoIP uses all of the same technologies necessary to make seamless interoperability available for voice, data and text.

This analysis focuses on examples of how VoIP technologies and policies have changed communication practices, thereby contributing to cultural change that is viewed through a global lens. By examining some of the situations, we can better understand how this type of convergence brings social and cultural consequences, and consider whether VoIP may indeed be one of the key technologies allowing nations and cultures to participate in the new global village.

There are three objectives for this chapter: to explain the basic core components of VoIP and discuss the phenomena of VoIP communications, to consider the social and cultural impact of VoIP technological convergence on a global scale and to examine whether the “global village” is now a reality, given the growing use of VoIP technology.

**BACKGROUND**

It is amazing to think of the extraordinary changes in the world in the last 60 years—particularly in terms of what we know about other nations, and how all nations have responded to contemporary technology. In post-World War II days, the general knowledge of national and cultural diversity was limited, and that which existed was often primarily parochial and colonial. The post-war years resulted in the organization of several groups that stimulated support of rural telecommunications
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