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
forecasters maintained an optimistic view that
global communication would reduce inequities
among cultures and societies, eliminate hunger
and social problems and create a more harmoni-
ous world in which people would respect differ-
ence 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 interac-
tion 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 restric-
tion 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 communica-
tions, 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 primar-
ily parochial and colonial. The post-war years
resulted in the organization of several groups that
stimulated support of rural telecommunications
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