Chapter VII

When is Standardization Slow?

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ABSTRACT

This chapter presents an analysis of the political, marketing, and technical aspects associated with the perception that standardization is slow. A framework is defined to evaluate the rate of standardization in terms of meeting users’ needs.

INTRODUCTION

It is widely believed that formal standard bodies are less responsive to market needs than industrial associations or consortia. This belief has had at least two consequences. First, there has been an unprecedented increase in the number of ad hoc groups to promote specific technologies. Second, some traditional standards-developing organizations have fallen out of favor and have reduced their activities. Yet the foundation of such a perception has never been fully investigated.

While technical specifications provide the basis for the development of products and services, they also reflect the influence of participants and their power to shape events. When similar technologies offer comparable perfor-
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...mances, parties may adopt divergent or competing paradigms, and their disagreements would not be resolved by proof because the various groups “practice their trades in different worlds” (Kuhn, 1970). Thus, any analysis of the responsiveness of standards to market needs must take into account the merits of the technologies involved, the standardization strategies of the participants, as well as any unstated assumption, whether collective or individual (Sherif, 1997a).

In this chapter, we propose a way to assess the optimum speed of standardization by separating the technical issues from immediate business needs and/or ideological persuasion. The analysis excludes the social and interpersonal aspects of the standardization process on the basis that they relate mostly to the management of human resources. The chapter briefly reviews the current political context in which claims on the relative responsiveness of standardization organizations are stated. Then it summarizes the marketing viewpoint with respect to the need for standards. While this view assists in defining marketing strategies, it overlooks the nature of the innovation and the technological complexity of equipment and services. To overcome these shortcomings, the chapter then introduces a framework to assess the impact of an innovation by combining the notion of value-chain discontinuity (Christensen, 1997) and the technology s-curve (Betz, 1993). Next, the framework is applied to illustrative examples from wireless digital telecommunications services. The final section summarizes the main conclusions of this chapter.

THE POLITICAL CONTEXT OF INFORMATION AND COMMUNICATION TECHNOLOGIES STANDARDIZATION

It is well known that the production of technical specifications intertwines technical considerations with business, social, interpersonal, political, and ideological aspects. This is especially true in the case of ICT that is embedded in a wide variety of products and services. ICT attempts to fulfill a multiplicity of needs exacerbate the inevitable tension among the different requirements, particularly because the time horizon of manufacturers (of terminal and of network equipment) is often much shorter than that of network operators (McCalla & Whitt, 2002; Sherif, 1997b). Furthermore, ICT services do not involve equipment only, but include network-management systems and operation-support systems (OSSs; fault management, performance management, billing, security, etc.), as well as proprietary methods and procedures (M&Ps) specific to a given network provider.

It is often asserted that the new breed of standard organizations and consortia is capable of turning around specifications at a faster rate. Many espouse the view that the Internet standardization process is “fast and