Chapter III

Block Alliances and the Formation of Standards in the ITC Industry

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ABSTRACT

This chapter extends the examination of block alliances in standard setting from market-driven to formal or committee-based processes in the information and communications industry. Formal-process block alliances are argued to emerge in anticipation of institutional failure, that is, from the prospect that formal standardization will not yield a timely or correct solution. These block alliances organize around particular standards or more general technology streams and have distinctive characteristics. These include a clear articulation and separation of marketing and technical specification roles. Finally, block alliances in formal standard setting exhibit a governance form corporate in nature and distinct from the star or clique forms exhibited in market-based alliances. Some potential causes of this are examined.

INTRODUCTION

Recent research has begun to examine the role of block alliances in the generation of product standards. In the conflict between Sony and JVC/Matsushita, the ability of the latter to assemble a broad group of producers is
credited with being key in the eventual victory of the VHS format (Cusumano, Mylonadis, & Rosenbloom, 1992). The contest over RISC chips between Mips and Sun has been explored both in terms of the structure of the alliances (Gomes-Casseres, 1994) and the characteristics of the firms within the alliances (Vanhaverbeke & Noorderhaven, 2001). The emergence of digital-video-disc (DVD) technology featured a contest between producers Sony and Philips vs. the product and content alliance of Toshiba, Matsushita, Time-Warner, MGM-UA, and MCA, among others (De Laat, 1999). Ironically, the Sony-Philips alliance had already successfully sponsored compact-disc technology against single entries from Telefunken and JVC (Hill, 1997). All of these studies have focused on conflicts begun and often settled in direct competition between alliance blocks and the subsequent creation of market standards. Yet firms are increasingly turning toward formal standard-setting and standards-development organizations as a means of circumventing market battles. In these arenas, block alliances also play an important, though little explored, role.

In this chapter, I establish motivations for the emergence of block alliances in market-based standards battles. I then contrast this process with block alliances in formal standard setting, which are argued to have two objectives: (a) to create and support a market and (b) to generate a technical standard. In market-based battles, the standard follows success in the market by definition. The standard technology is recognized ex post as the survivor. However, in formal environments, standards are the product of negotiation and are often pre-competitive and anticipatory. The actual standardization process may have little to do with the support and generation of a market. In fact, block alliances in this environment may play either or both roles: In terms of developing standards, the alliances have important coordination and development functions but may also serve as a signal of incipient market power to competing technology groups and prospective adopters. I also examine how alliance organizational structure differs from the star or centralized alliances, or clique or network structures found in market battles. A preliminary model will be developed of block alliances in formal environments using the rich structure of the information and communications technology industry as illustration.

Since a discussion of the information and communications technology industry unavoidably calls on technologies and institutions with complex names, acronyms are used for convenience. Table 1 lists the acronyms used in this chapter and their referents.

**BACKGROUND**

Standards are dominant designs that ostensibly represent a sole solution in the market. As earlier noted, they are generally classified as market derived or committee derived (Farrell & Saloner, 1988). The studies of VHS and Betamax,
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