The Work of an International Standardization Consortia: Paths Towards its Current Structure

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ABSTRACT

This article gives an account of the Open Mobile Alliance (OMA), a standardization consortium. OMA incorporates actors both from the telecommunication and IT sector. The two sectors have different standardization traditions. OMA could have chosen a multitude of setups and work procedures, but ended up with a traditional organization with technical plenary and work groups, and a consensus oriented work style. Why did OMA chose to organize itself this way? The article argues that this is due to the legacy of the organization and its members, the interconnectedness and systemic nature of the infrastructure, and the overall structure and spirit of the telecommunication field. The article also argues that the whish for legitimacy steers the organization towards its current structure, and alternative organizational forms that are less open and inclusive could create IPR licensing problems, and reduce the perceived legitimacy of the OMA standards.

Keywords: case study; consortium; legitimacy of standards; open mobile alliance; specification process

INTRODUCTION

During the last two decades the environment for mobile telecommunication has changed considerable. The changes have been technical, organizational as well as changes in the market structure. We have witnessed 3 different generations of mobile infrastructures, all with their own set of standards. The mobile networks have gone from mostly national to regional and today’s global networks. Due to the deregulation of the telephone market, the operators have gone from national monopolies to full market competition, and there has been a shift in how telecommunication standards are created, from the creation of standards within the formal umbrella of the international telecommunication union (ITU) to the creation of standards done by a multitude of consortia (Weiss and Cargill 1992; Shurmer and Lea 1995; Funk and Methe 2001; Tilson and Lyytinen 2006). Some research have gone into the work of these consortia (Hawkins 1999; Keil 2002), but there is still a need for more accounts of the organizational setup of these organizations. According to Mattlie (2001) the literature on standards setting lacks work
that explains or assesses institutional standards arrangements past or present.

With opening of markets, the digitalization of the telecommunication networks, the development of a range of new services like data, audio and video and the introduction of more software into both the core parts of the network as well as in the handsets, the border between telecommunication and IT is getting blurred. The same goes for the border between IT and telecommunication standardization. Actors from the IT and other industries enter the telecommunication industry (Tilson and Lyytinen 2006). New standardization consortia emerge that encompasses actors from both the telecommunication and IT industry. Acknowledging that Internet standardization organizations (Nickerson and zur Muehlen 2006) operates differently from telecommunication standardization organizations (Schmidt and Werle 1998), how will standards organizations that are at the border between these industries organize their processes and work? They can focus on speed and have a narrow scope and a close community, or they can be consensus oriented and have a broad involvement and scope. They also have a wide range of intellectual property policies to choose from. The overall question addressed in this article is “How are these new standardization organizations at the border between IT and telecommunications organized, how are they working procedures and what factors influence their setup?”

This article presents in detail the organization and the work procedures of the Open Mobile Alliance (OMA) and discus how the organization ended up with its current practices. OMA is today organized according to the telecommunication traditions with a plenary that oversees the technical development and endorses new work and approves finished standards. The IPR policy is also almost similar to the ETSI IPR policy. Why has it become this way, and what would alternative work procedures bring?

In this article I argue that the way OMA work and is organized is due to the legacy of the organization and its members. I also argue that the wish for consensus steers the organization towards its current structure, and that alternative organizational forms would create IPR problems. My findings is that new SDOs in the telecommunication field is best suited with the traditional way of organizing themselves if they want to uphold a consensus and fair access to IPR approach.

The rest of the article is structured as follows. In the next chapter some related research is presented with a focus on previous case studies. Then the research methods of this case study are presented. Chapter 4 presents the OMA case in detail. In chapter 5 some of the reasons for the organizational choice of OMA is discussed before I draw some conclusions in chapter 6.

RELATED RESEARCH

The focus of this article is on the creation of standards and the organization, processes, and work of SDOs. The review of related research will focus on this literature. For an introduction to economic literature on standardization I recommend the review papers by David and Greenstein (1990) and Stango (2004). For accounts of social and strategic aspect of standardization in the IS field the work of Fomin and Keil (2000) and Matlie (2001) are good starting points.

The research on standards creation by SDOs in the IS field can broadly be divided by general accounts on the organization, processes and work of the SDOs, and case studies of particular organizations.

Some Case Studies

There are some case studies on the work of SDOs in creating standards. The case studies have focused on different aspects but they all have the creation of a standard within a SDO as a common starting point. This article adds to these case studies.

Sirbu and Zwimper (1985) looked at the creation of the X.25 standard within CCITT (today ITU). They showed that at that point in time a data communication standard was some-
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