Chapter 2
Standardization, Not Standards, Matters

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ABSTRACT

This chapter looks at ways to actually use the art of Standardization (since there is not enough data to make this a discipline yet) within the Information Technology sector and within a commercial organization to effect change of some type. Note that this is not about Standards - which are relatively sterile documents - but rather a description of how to manage (some might say manipulate) cooperative action which will result, in some manner, in a Standard which can be used to create Standardization to further a defined policy, legal, social, or business management goal.

PROLOGUE

Standardization is one method of controlling a market, either politically, economically, legally, technically or in any combination of these areas. Generally, standardization is an unappreciated art because the signal product of standardization - a standard - is usually a boring document and as such, suffers from business, academic, and policy neglect. It has been observed that standards (and implicitly, standardization) are a hallmark of an industrialized society, since standards provide the necessary interconnections to make things interoperate.

Standardization can be seen and used as a social policy tool, a public policy tool, and as a business management tool. There is very little literature (academic, legal, or otherwise) that describes how to pursue standardization within a corporation or other commercial organization to accomplish these activities (policy, social control, or business management) except in a retrospective view.

The author is, and has been, involved in standardization in a multitude of software based IT companies, and this biases my view of standardization. The first and most critical bias is that, unlike many other industries, the software industry is characterized as a low capital, high intellectual property activity. It is an industry that has been characterized as "IP Intensive". Facebook, Alibaba, e-Bay and Amazon and multiple other multi-billion organizations are all examples of software based firms that started with

DOI: 10.4018/978-1-4666-9737-9.ch002

little or low capital investments and continue to operate in high Intellectual Property, as opposed to real property, investment arenas. As an example, when Alibaba wants to add another 100,000 customers, it adds a server and possibly several more systems administrators; when a brick-and-mortar store seeks to add a 100,000 customers, it needs warehouses, property, stores, and retail associates. This difference is especially critical in IT standardization, since it drives a transient standard, less influenced by process than it is by immediacy and deployment.

INTRODUCTION

Standards, and standardization, are now a fact of life in all industries globally. With the growth of the linked global economy, and with the dependence of industry on the World Wide Web and the Internet for information, the importance of standards has increased substantially over the last 20 years. While it can be argued that telecommunications (with their implicit standards and standardization) have been present since the early 1900s I would argue that the use of the web for everything from retail to supply chain management to personal entertainment devices has dwarfed the importance of the earlier telecommunications standardization activity.

Most importantly, nearly all of the Information Technology standards which are the basis of current computing are voluntary standards created by the IT industry. There is a deliberate exclusion of telecommunications standards here, since many of them, although created by a voluntary process, end up being utilized in a regulatory (or at least highly regulated) telecommunications environment. It is this distinction – the use and creation of voluntary, industry led, consensus standards as opposed to regulated or governmentally influenced standards – that has made standards less than a discipline and more of an art form, leading, in turn, to a lack of both predictability and serious academic study.

To understand the whole issue, it is first necessary to look at the document called a "standard". In this article, I will ignore "management standards" and similar types of documents, since they tend to describe best practices garnered from participants in a singular practice (quality, environment, security). What I'd like to look at is "technical specifications" – that is, documents that describe some specific technology. As an example, the following is part of a technical specification (W3C HTML 5 specification):

3.2.5.8 The Style Attribute

All HTML elements may have the style content attribute set. This is a CSS styling attribute as defined by the CSS Styling Attribute Syntax specification. [CSSATTR]

In user agents that support CSS, the attribute's value must be parsed when the attribute is added or has its value changed, according to the rules given for CSS styling attributes. [CSSATTR]

Documents that use style attributes on any of their elements must still be comprehensible and usable if those attributes were removed.