Chapter VI

Electronic Signature: The Core Legislation Category in Digital Economy

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Abstract

E-Business, as well as all of the active participants in the digital economy environment, raises a host of new legal issues that must cope with the fact that the technical expectations imposed by participation in digital economy will increase. Besides technology implementation, it is evident that the biggest barriers to E-Business today come from the notion that people don’t trust the security and authenticity of the E-Business environment. Since the companies doing E-Business activities are not operating in an unregulated world, the old rules still apply in the new digital environment. Considering the functionality and applicability of such issues, this chapter is finding one, generic shaped, key category that links all of the separate E-Business legal issues in one regulated scene – the answer is done by introducing the electronic signature as the equivalent of a hand-written signature no matter what type of information technology is in use. There are more legal environments, solutions and applications of electronic signature from which several examples are described accompanied with the E-Business view on electronic signature utilization.
Digital economy is the infrastructure development of modern society towards full coverage of information society attributes. Information society is coming through three-revolution convergences:

- digital revolution, that opens the ways for
- economic revolution, that in turn, strengthens
- social revolution.

In the scope of the information society development, the core categories should be recognized, introduced and activated (Castells, 2000). The information society underlined with information-communications systems' full utilization and knowledge-based economy and social activities, functions just like any society. There is the community of the people that communicate to exchange opinions, knowledge, etc., and act under social rules agreed to by most of its members. Thus, we can acclaim three basic segments of the information society, each of them consisting of one core category:

- infrastructure - telecommunications infrastructure (the members of the society must communicate)
- services - the content (the goal of communications is to transfer the content)
- legislation - electronic signature (the goal is to compile rules of intercommunication processes in which the electronic content is interchanged).

E-Business, as well as all of the active participants in the digital economy environment, raises a host of new legal issues which is being driven by four key factors:

- *electronic medium* – doing activities, business in digital form, in real-time over open digital networks without paper or traditional legal and security methods raises new legal issues;
- *geographical constraints* – although a digital economy is not constrained by geographical borders, countries have different laws, languages, cultures;
- *business models* – new ways of doing business electronically in a digital economy environment may present unfamiliar and unknown legal constraints;
- *legislation models* – legislators and courts alike are transforming laws as they struggle to address the features and implications of the digital revolution and digital economy, as well.

All of these facts are considering E-Business systems, too. What makes the positive future scenario of the E-Business systems in the age of the information-communications
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