Chapter 8

The Role of Electronic Signature in the Third Millennium of the Development of International Trade Transactions

Amir Bagherian

University of Tehran, Iran

Yosef Ebrahimi Nasaband *Islamic Azad University of Persian Gulf, Iran*

Hassan Heidari

Islamic Azad University, Iran

Mahmoud Ebrahimi Azad University of Tabriz, Iran

ABSTRACT

Data explosion, in the present era, has created a lot of changes in the social, economic and cultural relationships of all developed societies. Modern areas usually do not have the required legitimacy; however it does not mean that the way for all kinds of violation is open. Social life requires that order and security also govern these areas and protect ethics and public interests. Electronic commerce law is one of these areas a debatable area filled with innovations and surprises. In this regard, waves of internet revolution and the explosion of e-commerce collide with the legal system and influence the concepts of traditional law. One of the key achievements of information technology is changes in traditional regime of evidence claim. In the system of evidence claim in the majority of countries, written reasons and documents are of undeniable importance, in a way that they are mostly used as citation or to defend the Lawsuit. In fact, a lawsuit and adducing the evidence in our legal life largely depend on delivering or issuance of a written paper such as ID cards, pay stubs, payment receipts, contracts, declarations, warnings, statements, and or commercial documents.

INTRODUCTION

UNCITRAL Model Law on Electronic Commerce Art.11 in 1996 introduced a model law for e-commerce. This law built the foundation of similar laws in Australia, Singapore and some

European Union countries by adopting a technology neutral approach and determining general criteria to obtain a reliable electronic signature, many parts of this model law were placed in the context of national law.

DOI: 10.4018/978-1-4666-8619-9.ch008

American Bar Association formed the e-commerce committee in 1991 that worked for five years in the field of combining modern technology with legal rules and in 1996 issued guidelines for digital Signature. The model law used a special technology method and immediately was manifested as the Digital signature act in the state of Utah in 1995. And within two years, most U.S. states and countries such as Malaysia, Germany, etc accepted it in their own laws.

European Union in 1999 issued instructions for electronic signature by combining UNCITRAL model law with law of the American Bar Association, and introduced a new standard in developing of electronic evidence act. However, this approach is greatly considered a developed model of 1996 and 1998 UNCITRAL (2001).

A glance at legal titles proposed in the field of e-commerce indicates that the major problem lies in the proper and effective implementation of the laws rather than the relevant legislation. For law enforcement, judges familiar with informatics rights issues, trained police, and technical and cryptography fields are required. This section of the legal context of electronic commerce is quite breathtaking and overwhelming for the judicial and administrative system of the country. Is there a short-term solution?

METHODOLOGY

In this section we describe studying the concept, reasons and elements of E-Commerce. Then we in Second topic speak about the legal status of electronic documents. And at last we speak about the nature of documentation electronic signature and public key infrastructure. And final discussion we take results based on that traditional signature is No security for international business and it will Course reduction speed of transaction. Therefore at last discussion we suggest with subject challenges and solutions on 10 items.

Studying the Concept, Reasons, and Elements of E-Commerce

One of the consequences of globalization is the increased competition in the international economy; because in these conditions, we constantly encounter decrease in shipping costs, astounding growth of information technology, increasing development of e-commerce, minimization of geographic limitations, and increase in competitiveness. And as a result, international economic efficiency will increase.

Here, it can be said that the major consequence of globalization on the economy is the growth of electronic commerce. E-commerce and consequently e-commerce models were introduced for the first time in the early 1970's. In this period, the use of e-business models was very expensive and most of its users were financial corporations, banks and sometimes large industrial companies. The application of e-commerce in the course was difficult and therefore required heavy investments to provide needed platform for it. So, the range of its application was limited financial institutions and large firms. In the next step, electronic data exchange standard was created that was a generalization of the banking and financial transfer model using the new tools of information. But it was different; electronic data exchange had the possibility to be used and utilized in other types of trade too. Electronic data exchange led the application domain of e-commerce models spread broader than the range of large financial institutions. In this topic we are going to explain the concept of e-commerce law and evidence claim (Smedinghoff, 1999).

Explaining the Concepts and Nature of Electronic Commerce Law and Evidence Claim

In order to define e-commerce law, first it is essential to define the terms of trade and trade law,

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-role-of-electronic-signature-in-the-third-millennium-of-the-development-of-international-trade-transactions/137345

Related Content

SWELS: A Semantic Web System Supporting E-Learning

Gianluca Elia, Giustina Secundoand Cesare Taurino (2010). Web Technologies: Concepts, Methodologies, Tools, and Applications (pp. 805-829).

www.irma-international.org/chapter/swels-semantic-web-system-supporting/37664

Internet of Things and Security Perspectives: Current Issues and Trends

Kijpokin Kasemsap (2017). Security Breaches and Threat Prevention in the Internet of Things (pp. 19-45). www.irma-international.org/chapter/internet-of-things-and-security-perspectives/177063

Web User Behavior Analysis Using Pre-Processing of Web Documents to Create Effective Web Designs

Abhijit Dnyaneshwar Jadhavand Santosh V. Chobe (2022). Advanced Practical Approaches to Web Mining Techniques and Application (pp. 163-174).

 $\underline{\text{www.irma-international.org/chapter/web-user-behavior-analysis-using-pre-processing-of-web-documents-to-create-effective-web-designs/300218}$

Predicting the Success of a Startup in Information Technology Through Machine Learning

Edilberto Vasquez, José Santistebanand David Mauricio (2023). *International Journal of Information Technology and Web Engineering (pp. 1-17)*.

www.irma-international.org/article/predicting-the-success-of-a-startup-in-information-technology-through-machine-learning/323657

Evaluating NoSQL Databases for Big Data Processing within the Brazilian Ministry of Planning, Budget, and Management

Ruben C. Huacarpuma, Daniel da C. Rodrigues, Antonio M. Rubio Serrano, João Paulo C. Lustosa da Costa, Rafael T. de Sousa Júnior, Lizane Leite, Edward Ribeiro, Maristela Holandaand Aleteia P. F. Araujo (2015). *Artificial Intelligence Technologies and the Evolution of Web 3.0 (pp. 230-247).*

www.irma-international.org/chapter/evaluating-nosql-databases-for-big-data-processing-within-the-brazilian-ministry-of-planning-budget-and-management/127293