## Chapter 12: Data Protection Laws Authentication Technologies for Cloud Computing, IoT and Big Data

Hiba Alginahi<sup>1</sup>; Yasser M. Alginahi<sup>2</sup>; Muhammad Nomani Kabir<sup>3</sup>

<sup>1</sup>Department of Forensic Science, University of Windsor, Windsor, ON, Canada <sup>2</sup>Department of Electrical and Computer Engineering, University of Windsor, Windsor, ON, Canada

<sup>3</sup>Faculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang, Pekan, Malaysia

## **ABSTRACT**

Data protection, data privacy, and information privacy are all terms defined as the process of protecting important data/information from corruption, scam, fraud, loss, or compromise. This includes the relationship between the data collection and technology, the public perception and expectation of privacy, and the political as well as legal roots surrounding that data. Therefore, data protection laws aim to provide a balance between the individual's privacy rights and the proper use of data. Data protection is a concern for individuals and organizations who collect, analyze, store, and transmit data; such data could be written on paper or stored on a computer system or network. Both ways of handling information may be prune to loss, damage, or errors. Documents handled as hardcopies may be copied easily, stolen, lost, destroyed, etc. Therefore, it is very difficult to protect such information available in hardcopy format and, in reality, there is no secure method that would safeguard such documents. One may propose to store them in vaults which are secure and protect documents from humidity, light, and fire; however, many questions would be raised in the process of applying/handling such securing strategy before and after storage. On the other hand, electronic information stored on electronic devices and networks needs to be handled very carefully so that these physical systems and the information stored in them do not fall in the hands of those who may use it in fraud, abuse, scam, etc., in addition to policies which should be in place to secure information during the process of transmission and storage. In this chapter, issues related to data protection laws are discussed.

KEYWORDS: Storage management; data protection; law; security of data; document handling

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