REGULATORY AND ENFORCEMENT ISSUES OF E-COMMERCE AND CYBER CRIME IN INDIAN CONTEXT

by

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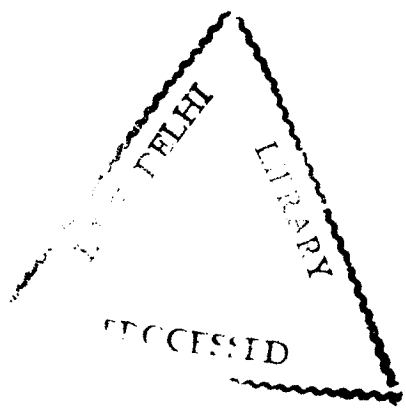

Electronic commerce
E-commerce

CERTIFICATE

The Thesis entitled **Regulatory and Enforcement Issues of E-Commerce and Cyber Crime – in Indian Context**, being submitted by Mr. Madan Mohan Oberoi to the Indian Institute of Technology, Delhi, for the award of the degree of Doctor of Philosophy (Ph.D.) is a record of bonafide research work carried out by him. He has worked under our guidance and supervision, and has fulfilled the requirements for the submission of this thesis, which has attained the standard required for a Ph.D. degree of this institute. The results presented in this thesis have not been submitted elsewhere for the award of any degree or diploma.

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ABSTRACT

The study aims to evolve a framework for developing regulatory enforcement policy related to e-commerce / cyber crime. It makes an attempt to identify and critically discuss various regulatory and enforcement issues concerning e-commerce and cyber crimes. The broad objectives of this study include comparative analysis of different cyber laws; examining the impact of various factors on growth of e-commerce and cyber crime; analysis of policy implications of electronic money; analysis of legal, social, economic, political and strategic policy implications of electronic commerce; identification of problems faced by law enforcement agencies in tackling cyber crime and steps to be taken to remove them.

A reasonably comprehensive survey of literature was done. It has been organized under five broad heads namely, e-commerce, cryptography concepts & issues, electronic money, cyber laws and cyber crime. Review of literature helped in identifying the issues. The important issues included uniform global cyber laws, security of electronic records, privacy of personal information, investigation of cyber crimes, intrinsic value of e-money, systemic and other risks of e-commerce and so on.

The principles of flexible systems methodology have been used for study design. The entire study design was divided in three parts namely exploratory, empirical and analysis & synthesis.

A matrix of cyber laws was prepared on 43 dimensions, using 12 cyber laws. Options Field Methodology was used to generate list of options for all 43 dimensions. Four case studies were also used. Indian IT Act was analyzed using options fields generated and the case studies.

The policy implications arising out of various issues concerning e- money were analyzed. The implications were analyzed from the point of view of four actors namely, government, banks, consumers, and law enforcement agencies. The major policy issues were identified as power to issue e-money, intrinsic value of e-money, systemic and other risks, control of monetary aggregates, liability of stolen / compromised e-cash.

Factors influencing growth of e-commerce and cyber crime were studied. Idea engineering workshop generated 40 variables influencing them. These were grouped in 10 broad factors using Interpretive Structural Modeling (ISM). An Interpretive Structural Model was also prepared for modeling the influence of these broad factors.

Exhaustive lists of legal, social, economic, political and strategic policy implications of E-Commerce were prepared from survey findings. These were analyzed in SAP paradigm from the point of view of the following major actors: Government, Enforcement Agencies, Judiciary, Legislature, and Business Organizations.

A survey was also conducted to find the perception of users (Business organizations, policy making bodies of government and enforcement agencies) of e-commerce about various regulatory / enforcement issues. The survey findings were also used to identify the problems being faced by enforcement agencies in investigating cyber crimes and solutions thereof.

The research study concluded with the discussion of significant contributions of the research, limitations of the work and scope for further research in the area.

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