ABSTRACT

Ideally the objective of any entity concerned with security of online and e-transactions of banks, and hence continuously concerned with revision of standards for online banking, should be to attain a crime level of “zero”! Unfortunately, this status cannot be attained in reality. At least, it is expected that there should be a decreasing trend of cyber crime over time. Probably this is not observed even in the developed economies. As the entities concerned with security try to be innovative and revise their standards, fraudsters would also be innovative in their own way and break the barriers created by such standards. It is dynamic environment wherein one continuously tries to outbeat other.

The objective of this thesis is to review the technological progress made by the banking industry in India in provision of security to its customers in the light of continuous cyber race between devisers of security standards and the fraudsters hacking such security standards. In this thesis, an attempt is made to evaluate the status of security of banking transactions in India by:

1. an analysis of major events of cyber crimes,
2. a survey of the opinion of Indian bankers about their ability/inability in tackling such cyber crimes due to
   i. adequacy/in-adequacy of existing security standards,
   ii. their own efficiencies/deficiencies in adherence to security standards,
3. a survey of the opinion of customers about ‘security’ felt by them in respect of cyber transactions,
4. evaluate the effectiveness in adoption of present security standards by the Indian banking industry and,
5. statistically evaluate the race between the process of revision of standards and increasing number of cyber crimes in India and abroad.

An analysis of cyber crimes in India during last decade suggests that the growing trend and the volume of cyber crimes are basically attributed to the failure of Indian bankers in adherence to the internationally accepted and robust security standards. It is observed that during the beginning and middle
of last decade the security index suggesting adherence to the standards remained less than 70% and hence “WEAK”. However this index has now marginally increased to slightly better position viz. 82 % (just satisfactory).

The bankers also acknowledge that the security lapses are primarily due to failure on the part of banks in India in adherence to security standards. They, however, also point out that the security lapses are also partially due to the inadequacy of security standards even at international level.

The customers feel nervous about online transactions not only because of their new exposure to the concept but also due to:

a. non-adherence of security standards by bankers and,

b. inadequacy of security standards resulting in the increase of cyber crimes.

A statistical study to evaluate the race between the continuous process of revision of standards and increasing number of cyber crimes in India and abroad suggests that the devisers of standards need to be smarter and faster than their opponents viz., hackers.