

CHAPTER 6 - CONCLUSION AND RECOMMENDATIONS

This chapter concludes the discussion in the pervious chapters. It further recommends some facts for the business organisations in dealing with the Information Security needs which are developed based on the research outcomes. Some useful recommendations to the future researches are also included in this chapter.

6.1 Conclusion

Process based businesses demands massive use of information and information technologies. This trend will even cultivate in the time to come. Computers are getting faster, smaller, cheaper, and easier to use day by day. Developments of device independent computing – ubiquitous computing – and the growing demand of accessing information where and when it is needed has made businesses dependent in information systems at a major. This is well supported by the growing cyber space; every year tripling in size and would definitely obsolete the business models we practise today very soon.

With the development of information technology and the dynamic changes in business environment achieving perfect Information Security is a nightmare. Even if a business tries to achieve this, it will end up with an immense scope of work which is practically hard and difficult to justify in financial terms. In contrast person who tries to misuse information only has to master one particular area and identify a weakness in the system to start attacking. Therefore avoiding the week areas of a system and maintaining the security measures implemented is a vital move as a start. To understand and develop such weaknesses pertaining to Information Security a solid business integrated balanced approach will help. Integration should consider a proper balance in the following areas as detailed in the discussion in chapter 05.

- Functional Balance
- Managerial Balance
- Technical Balance

- Investment balance

The integration balance in each of above area is to be decided as a collective approach by the business. Information security managers and the business managers have to look at the concept as a holistic business solution.

Information Security is not only to do with IT. It is a business risk as analogues to all the other kinds of risks, which has to be treated in the same way. Identified business risk should be the base to decide the extent to which Information Security measures are needed. This is to be followed as collective effort in the organisation in every functional area as applicable. Model to develop a new Information Security framework is discussed in the chapter 5. Review process includes considerations and analysis of the legal framework, international standards, risk and impact and other policies of the business organisation. Purpose of Information Security strategies is to support business goals of the organisation. Framework for successful implementation of Information Security strategy is discussed in the chapter 5 However protecting information systems from hackers, crackers, attackers, viruses, spyware, spam and other threats that exist because of connectivity is a complex work. It involves individual users, organisational IT departments and policy makers. By putting good security practises into use, a business not only will protect its own systems; but also will contribute to the overall security of the global networks.

Awareness and the gaps in the two different knowledge areas is a major barrier for integration as identified. To fill this gap and to make informed decisions Information Security and Business Managers are to work hand in hand and educate each other. Building organisation wide awareness about Information Security and expected behaviour with regard to the same is a high priority. This should be a constant repeated approach followed by the reviews for the Information Security policy and framework for the business organisation.

Information Security is a fuzzy concept as discussed in literature survey and hence need to be continuously monitored and reviewed for betterment. This is non-avoidable with the development and 'development rate' of information systems. The time and resources need to keep the systems up to date is huge. Hence the organisations must

consider the development of Information Security as an integrated balanced approach. All the areas concerned not demanding resources equality. The proper balance of the resources is to be determined by the business and Information Security managers as a combined effort. Top management should facilitate purposeful interactions and discussions between these two parties to develop a holistic framework for Information Security needs.

6.2 Recommendations

Business organisations should deploy organisation wide Information Security measures to secure the extensive information transaction needs of today and tomorrow. Integrated approach with business management is required to make sure the proper balance and stability of Information Security dispatch is achieved. Information Security risk and impact analysis should be the basis for Information Security deployments. Organisation should start building awareness of all the categories of employees and educating them about the expected behaviour with regard to Information Security measures taken. It will make sure the employees will do the right things when facing an incident. Awareness will keep the employees alert with regard to Information Security. Once the organisation wide commitment for Information Security is established, it has to be maintained; business managers should resource the new way of operation.

An organisation can start quantifying the Information Security braches and prepare the consequences in terms of financial figures. That will give accurate data to take decisions in future with regard to Information Security. This will help to non-technical managers to figure out the matter pertaining, specially the business requirements from Information Security. That will lay the foundation for information security requirement awareness and acceptance.

Business managers and Information systems and security managers have to devote their time to study about each other to make informed decisions in Information Security. Organisations have to make arrangements to share experience and

knowledge with regard to business and Information Security areas to each other. International Standard Organisation (ISO) has developed several Information Security and related standards which is discussed in the literature survey. The standards are continuously developed for about a decade; the current versions have comprehensive details which will be useful. Having heard about the legal developments will do nothing much, the managers have to read and understand the Information Security related legal documents. For this matter combined effort by Business and Information Security managers is recommended.

Information Security manager or any other interested person for that matter can refer the Information Security breaches surveys done by various organisations. In the Internet Search of Chapter 3 those details are discussed. Findings and the recommendations of these surveys will help an organisation to understand about the global trends in Information Security and subsequently to develop the Information Security measures.

6.3 Suggestions for Future researches




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Combined knowledge of Information Security and business management is rare in business organisations. The thesis tried to build awareness among the managers with regard to the same. If a business organisation decides to make use of the outcomes of the thesis, facts presented can be tested as a case study. The proposed models can be further studied and reviewed in practical settings.

With the technical developments and the organisational environmental changes the threats for information systems can not be mistreated. Hence developing the information systems to be secured in the presence of attacks and vulnerabilities is also a good researched area.

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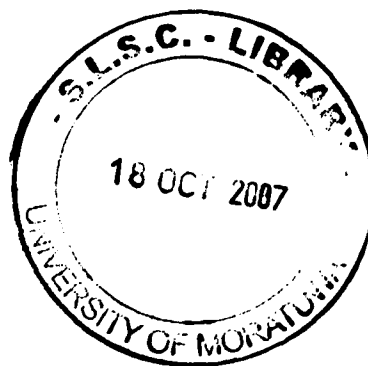


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Appendix



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