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INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

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12.   **FIGURES & TABLES**: These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text.*

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BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.

- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

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UNPUBLISHED DISSERTATIONS

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ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

BUSINESS ETHICS AND INFORMATION SECURITY IN THE DIGITAL WORLD

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ABSTRACT
In recent years, technology development has progressed rapidly. Technology has transformed business activities. The development of technologies has brought with it a great number of benefits to the organization and its customers. Technology makes business highly competitive because of which there is a tendency for an organization to indulge in illegal and unethical practices. There are many ethical implications due to the rapid development of technology and furthermore there is no adequate law or the laws are not comprehensive to deal with misuse of technology. The objective of this research is to explore the issues in business ethics with regard to the security of online information. Ethical issues are likely to increase with the increase in the use smart technologies for business purpose. Every organization using technology must have health security based on ethics, which play an important role in the misuse of technology. The data is collected from published journals, articles, reports and books on business ethics and information security. The researcher's suggestion will assist the business concern to instill strict code of ethics to keep information safe and secured.

KEYWORDS
business ethics, information security, technology.

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INTRODUCTION
In recent years technology development has progressed rapidly. In the past few decades, technology has spread to every area of life and society. For instance, nowadays almost every ordinary person uses internet and every business uses online services. The current generation has created a trend and ease of access has capture almost every modern man to browse the World Wide Web and forced business to establish an online presence and utilize online services. The development of technologies has brought with it a great number of benefits to the organization and its customers. Some experts say that the digital technology makes business highly competitive because of which there is a tendency for an organization to indulge in illegal and unethical practices (Marshall, 2016). There has been an increase in the number of identity thefts, unlawful pirating, internal theft frauds, money making schemes, reliability on information provided and how the information is used**.**

NEED OF THE STUDY
Organization's that collect customers data using a software; put the customers in dark of the data collected and how it is used. According to a leading information and technology research and advisory company, it is projected that by 2018 there will be 50 percent violation of business ethics due to improper use of big data analytics (Hasselbalch, 2016). They argue as how this can be controlled and the limitation on organization collecting the information. There are many ethical implications due to the rapid development of technology and furthermore there is no adequate law or the laws are not comprehensive to deal with misuse of technology.

OBJECTIVE OF THE RESEARCH
It is quite natural that the technology development and transformation will bring with it ethical issues which organization's have to deal with. The objective of this research is to explore the issues in business ethics with regard to the security of online information.

RESEARCH METHODOLOGY
The study is based on secondary data. For the purpose of study, the data is collected from published journals, articles, reports and books on business ethics and information security.

DEFINITION OF TERMS
BUSINESS ETHICS
Menezes (2016) in his study on business ethics and its importance defined 'Business ethics' as a relationship of business techniques and goals to individual needs. It includes responsibilities accepted by an individual when he is part of commercial world. It comprises of decisions, situations and activities that addresses issues of right and wrong. Business ethics is related to business goals and practices to definite human requirements. He discussed Business ethics viewpoint of employee, customer and management. According to Menezes, different people's viewpoint of business ethics is different. For the organisation it is loyalty, for professionals it is faith while for the employees it is justice. Menezes (2016) reported the main features that implies to business ethics are that it generates trustworthiness with people, provides management credibility with employees, it helps management in decision making, ethics can protect society, to outline an acceptable behaviour, to encourage ethic practice of high standards, to set a benchmark for self-appraisal and to create basis for profession responsibilities and behaviours. According to the study maximisation of profits and business ethics go hand in hand without any problems.

Research firm Gartner defined "digital ethics as a system of values and moral principles for the conduct of digital interactions between businesses, people and things." (Buyetendijk, 2016). Buyetendijk (2016) say that ethics existed long before, however in the recent years awareness of ethics is getting critical, as the public doubt the security of their information and its used without their knowledge. All business concerns have ethical responsibility and are liable from the consequences of its actions. Business gains reputation and success by maintaining high ethical standards. In recent time, due to the competitive market there is an increase in corruptions and moral dangers.

Ethics is a moral standard as to what a person chooses between 'Right' and 'Wrong' for a given situation Reynolds, (2016). It deals with what is good and bad. It is a measure of integrity, which assesses the norms, values and rules that creates a relationship with individual and people, from a moral viewpoint. As risks due to inappropriate action in the use of information technology have increased and is likely to have a negative impact. Reynold (2016) claimed that it is important to promote ethics among employees, as this will help to gain goodwill, operate business consistently, foster moral practices in the organisation, protect the organisation against legal action and evade development of negative publicity

INFORMATION SECURITY
Information security is a set of tactics in order to manage process, tools and policies that are needed for protection, detection, prevention, documentation and hindrance of risk to digital and non-digital information. It also includes management duties to protect information from modifying, changing, editing, transferring and storing information (Schnedl & Schweizer, 2000).

Petlier (2004) claims that business information is one of the essential asset of the organization whether it is spoken, handwritten, typewritten, printed, filmed or computer generated. Hence, information needs to be protected against security threats and risks with comprehensive security programs in order to ensure continuity and success of the business.

All organizations use information and many need it for various purpose. Information is an important asset of the business and like the other asset, it must be well protected. With the increase in the threat and vulnerabilities, security of information must be give importance and the required practices and measures be put in place. Whitman & Mattord (2012) stated that the need information security began with the introduction of computers. They also stated that Information Security was required during the early years of introduction of computers to secure the physical location, hardware, software against the possible threats and at that time the security of information was simple and easy which included physical security and organization of documents. However, by close of the twentieth century, computer networks became very common forming global network of networks to store large amount of data that is unsecured as attackers want to steal, sabotage or corrupt it and therefore there is a need to increase protection, integrity and value of organizations' information. Protection of the confidential information in all organizations has become a business and ethical requirement in recent years.

ETHICAL ISSUES IN INFORMATION TECHNOLOGY

Technology has transformed business activities. Businesses large and small take advantage of technology and use computers, e-commerce and internet. Technology is developing much faster compared to the development of the legal system. It has open doors to computer misuse and intrusion. Moreover, it has brought in evils of crime and there is a need for legal laws to protect the business information.

Some of the ethical issues include control of electronic information and access to information, confidentiality and misuse of information, and international aspects. Ethical issues are likely to increase with the increase in the use smart technologies for business purpose. Ethical issue is a problem, condition or occasion, which requires business concern to make a choice from numerous action that is right or wrong (Ethical Issues, 2015). There is increase in the external pressure faced by business in order to improve their ethical record in the market. It is the stakeholder that pressurizes the business organization.

Most of the organizations permit their employees to check their email while at work and control other activities of the internet like chat, discussion, and browsing. All efforts are made to ensure that employees make best of the working hours to the company. This state of control has given rise to ethical issues. On one side, the companies claim that their control system is in place to check use of employee's time, however on the other hand there is the moral right to privacy. There has been increase in computer security attack each year. The most recent one is in May 2017 the WannaCry ransomware attack (Newman, 2017). It spread around the world attacking information in health services. Hospitals, airlines and even universities. It attacked more than 300 thousand computers in 150 countries demanding ransom payments. There have been many such attacks by malicious software stealing personal financial information.

While attacks by malicious software can take the form of viruses, adware and spyware, it is found that most strains are new Panda Trojans. Trojan wreak havoc by looting the personal financial information. There has been massive attacks and threats to confidential information of bigger business concerns by Trojan, PUPs (Potentiall Unwanted programs) and Cryptolocker in the year 2015. (Pandalabs Report, 2015). Every year the hackers come with new tricks and innovative malware to attack digital information.

In an uncertain and difficult economic climate, organisation's face a big challenge to maintain profits and revenue (Reynolds, 2016). In a highly competitive environment, there is pressure from cutthroat suppliers, aggressive competitors, tight deadlines, demanding quota and unrealistic budgets. In order to maintain profits some organisations resort to unethical practices. According to Luyendijk (2016) such organisations are not immoral but amoral. Amoral mean that right and wrong has nothing to do in decision making. Their belief is they have to do such things to make money for the shareholders. Furthermore, the information security personnel do not have adequate knowledge and strong understanding of the modern technology crimes (Philip, 2002). These legal experts are not able to make judgement and decisions when called for (Philip, 2002).

The operation of business in recent time have become so complex and sophisticated. The products and services are offered online is becoming more and more intricate. It is observed that many aspects of such business are less transparent and not expressive. For example, the confidentiality of the business, client's data, credit policies and procedures etc. In contrast to the other organisation, the development rate in organizations doing online business is too fast. As a result, these organizations tend to ignore a numerous issues in directing the society towards commonweal. There are also concerns on financial businesses that deal with money. These organizations have to take all precautions and care to handle money in the right way. Money can be used for various purpose good as well as bad. They have to protect and grow people's money that is maximise clients' investment. Furthermore, they should not charge high rates and enforce partial advantage for themselves. Therefore, there must implement investment and lending policies in order to prevent wrong or offensive practices

Businesses in financial institutions like bank is the clients do not receive the necessary information of kind of their investment. Many a time, these business concerns are involved in speculative investments because of which the client suffers losses while the management receives huge amount compensation and bonuses (Ethical issues, 2015). Such huge loss of client's wealth and generation of wealth of management is an ethical concern. Financial organisation like banks, insurance and securities have ethical policies, which have to be followed. The ethical polices comprise of human rights, social responsibilities, global trade, customers consultation and social enterprise. However, it is observed that these are not followed.

With the online services provided, companies information face problems caused by hackers. Hackers hack the database of those business concerns doing online business like financial and retail business to steal customer information and use it for their own personal gain. Hackers access information by using Trojans. The client face some of the ethical issues as there are no specific ethic for online services provided. This may cause huge financial impact and moreover it can cause damage to the reputation and weaken the customers confidence. According to The Symantec Internet Security Threat report 2016, the attacks by hackers "can do serious harm to a company's reputation and credibility."

Most of the developing and underdeveloped countries have a trend to move or follow the western culture. It is not only that workforce travel from developing countries to western countries, moreover they copy the west by using pirated software used in the west. The BSA Global Software survey 2016 finding shows that in year 2015, 39 percent of software installed are unlicensed, while in 2013 it was 43 percent as per BSA's global study in 2013. According to the survey, the installation of unlicensed software rate is the highest in South Africa that is 34 percent.

It is critically important for a company to be aware of what software is on the company network. Yet there is a significant awareness gap concerning the extent of unapproved and unknown software that employees are installing. Moreover, in most companies there is awareness gap of the unlicensed software installed on the network by employees. It is mostly the employees in the organization that download the unlicensed software and they do it without company's knowledge. It is estimate that 15 percent of the employees download software without their company knowledge (BSA global study, 2013). Moreover, almost 49 percent of the security threats are from the malware coming from unlicensed software. The survey found that the use of unlicensed software worldwide rate is 39 percent (BSA global study, 2016), while 25 percent is from insurance, banking and securities businesses. The software is a major threat to security and according to the BSA global study 2016 the security threat from unlicensed software globally is 49 percent. Furthermore, even in insurance, banking and security businesses where in there are strong internal controls the use of unlicensed software is high and BSA global study 2016 record show it is 25 percent.

The development of technology is so fast that the legal system set for the protection against misuse is lagging. The development of technology has made it difficult to find the vulnerabilities in the systems and with this, it is even more difficult for the information security professionals to know its existences until it is found. Therefore, it is important for every organization using technology to have health security based on ethics, which play an important role in the misuse of technology.

RECOMMENDATIONS

There will be rise in new ethical issues with the development of information technology; consequently, organizations should take measures to mitigate. In every organization, the ethical concern should be clear and, moreover the management and employees should accomplish their responsibility in best interest of the company.

Companies need to develop new roles focusing digital ethics and all employees must adhere to digital ethic guidelines to be successful. Researchers support that moral development of people in the organization takes place through proper training programs (Reynolds, 2016). Hence, code of ethics must be communicated

to all levels of employees by conducting formal training programs. Such training would enhance awareness of code of ethics and its application. It can reduce company's legal liability and legal action against the employees and the organization.

All organization should have a compliance department, internal and external audit to keep a check on the wrong doings and actions of the management and employees (Financial Services Industry Compliance Benchmark Study, 2012). Although it is difficult to set correct ethics for every behaviour, however the organisation can provide strict code of ethics that act as guidelines and, penalties for the employees based on values and standards of the organisation. This would help in understanding the expected behaviour and following correct pathway. There can surveillance cameras installed for the purpose of monitoring physical availability of the employees in using software monitoring computer activities.

Financial institutions dealing with people money should be very cautious in handling the money and making investment decisions for investor. They should avoid massive loss of wealth on investments to investor. Financial institution like banks should take a responsible approach in lending and investment. These organisations should protect the clients 'information and should collect data of the client that is required for the purpose. The confidentiality and security of the client information must be maintained at all time.

'Just policies is not sufficient and even the best of are likely to fail if the employees are not educated of it (BSA Global Software Survey, 2016)). Organisation should provide ethical training and awareness on regular basis on the implications and preventative measures to all employees. The training should include guidelines, rules to follow and how to handle data. The Information technology professionals should encourage all employees to adhere to it. This will streamline the important business values and make the company safer, efficient and cost effective. Subsequently if the information security personnel do not have adequate knowledge and strong understanding of the modern technology crimes, the organizations should either take service of trained expert attorney or provide the required training to their legal personnel with required expertise to face the computer security (Philip, 2002).

The government also should take measures for the security of information. It should implement policies and procedure to permit distribution and data analysis for the purpose of fighting the security threat to information. There is a need to fight the hackers and attacker to information security. There should be policies in a country for the business organization and government should work together to minimize risk and threats to information.

The management should clearly understand the network installed and that the software installed is genuine and licensed. The illegitimate and unlicensed software are more likely to be exposed to risk and attacks by malware is much higher (Ronald Chan, 2016). Companies can mitigate information security risk from unlicensed software installed on network by purchasing legitimate and licensed sources. Employees 'installing software on company network should be controlled by implementing strict policies for employees not to download or use unlicensed software. Additionally, security software should be updated to protect the confidentiality of the information and also regular backup of the computer files kept at secured location.

CONCLUSION

Technology has brought development and transformation of business. With the increased use of smart technologies in business we can only expect the ethical dilemmas to grow in frequency and complexity. Information security professionals and the management have to understand the persuasiveness and magnitude of the problems. Organisation must develop and implement heathy business ethics to reduce internal and external risks to information and punish offenders. Organizations must recognize that there is no single approach that will fit in as code of ethics and the ethics will vary from one organisation to another. Organisations need to apply compassion, empathy and sheer common sense to resolve each of the ethical dilemmas.

This research articles provided an overview of the ethical issues in information technology. The study shows that with the fast development of technology there are increase in unethical and illegal practices which result in risk and threat to information security. The suggestion will assist the business concern to instill strict code of ethics to keep information safe and secured. The finding of the current study proposed research in several directions. Further research can be carried out on ethical challenges in banks, hospital, universities and even in financial marketing industry. The study can be made to a particular country. The researcher is confident that this study has laid a strong foundation for future research.

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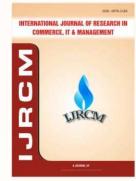
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