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"INFORMATION AUDIT AND INFORMATION SECURITY MEASURES FOR HIGHER EDUCATION IN INDIA"- A CONCEPTUAL STUDY

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Abstract: The Information is very important asset of the organization in the present era of Information Technology age. Information if properly used to take sound decisions in the basic functions of the Organization and business will directly affect the profitability of the origination and life of the organization will be increased. Use of ICT is must for getting benefits of the Internet and its allied services for any type of the Organization. The Author has studied this important aspect of Information Audit and Security for the present situation in the world wide organizations . Higher Education and its functions can be done through proper planning and information security measures. The authors have done decent contribution in the field of Higher education through this paper . Security at Information level will directly affect the programming efforts and it will give loss to educational Institutes if not taken seriously. Activities which will audit the information available in the origination starts with collected information from all four functional areas of management like finance, production, marketing and human resource. It will save money, efforts and other useful resources of the organization. The major benefits are in terms of time saving and with more effectiveness we can perform other activities. The developing country like India can not afford to use their resources for unproductive activities The use of these tools, techniques will directly make India a developed country over a period of time. What are the problems of such activities? The major problems are availability of reliable electricity, Internet Connectivity, Bandwidth and other infrastructural problems make this difficult to execute.[1] The main aim of this paper is to study concept of Information Audit and Information Security . also its effect on the business organizations its advantages and disadvantages . Author has considered only conceptual view. In future Author intends to add data to this topic of the research. The Higher education in India is in growth stage and information security will play a important role in it. The Information Audit and Information Security for Higher education Institutes will benefit directly by having control over financial transactions and it will be useful to students staff and faculty in getting better financial services and payments.

Keywords: - Information, Audit, Internet, Online, Offline, E-Cash, Client, Library, Server, Higher Education, College

I. INTRODUCTION

Information Audit (IA) extends the concept of **auditing** holistically from a traditional scope of accounting and finance to the organizational **information** management system. The concept of auditing in higher education will be new addition in the knowledge area of higher education. Now days security is main concern for any organization and Education sector is also affected by security threats world wide. The information and the given paper highlights on the issues and benefits of audit and security issues at large.[1]

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Information is The representative of a resource which requires effective management and this led to the development of interest in the use of an IA. The information is processed data. The output is based on the various factors of the education in which the quality of the Institutes is checked. Information plays a vital role in decision making process. The Educational Institutes can decide the best policies and plan the activities to get best results. [2]

The Use of technology in Audit has become the basic need of the business organizations today. The Internet users are increasing to a large extent in India which makes these technologies need of the industries and have to update and upgrade these technologies whenever required .[7]

Auditing tools are easy to implement a udit transactions has number of advantages in terms of saving the cost of manual activities of audit and activity of the Business Organizations. The online audit is now becoming common phenomena due to cashless economy through out India. The experts in information technology have to see that this important financial information is not hacked, stolen or misused by unauthorized users or hackers. [8]

II THE MEANS OF INFORMATION AUDIT

The Information Audit can be done using various software's available tools available and its security has to checked by considering the hardware and software used for such audits. Online Audit means use of advanced techniques to perform Information Audit activities in the Organizations'. Following are the various means by which we can perform Information Audit activities. The online audit is required to save time and money of the organization . The Security measures will also affect the auditing process. The various means of auditing techniques can be used . [6]

- 1) Use of Computer, Server, Client Machine. Internet Service Provider for Net Connectivity.
- 2) Website, Web portal or Environment of Online Audit on Net.
- 3) Use of Auditing rules and Methods Online.
- 4) Use of Accounting concepts Online.
- 5) Internet Access with High Band Width is must.
- 6) Intranet Registration and Plan of ISP.
- 7) Mobile Interface if required.
- 8) Security Measures like Fire Walls and Antivirus packages for Information related with Audit.
- 9) Online Payment Apps. For Financial Transactions and fees payment for Audit.
- 10) Web portals accepting Money transfer through their own link.

All above means are now common and are used by number of companies to perform Information Audit. The financial transactions are to be more secured and free from misuse from Internet Hackers and other negative minded people . Only problem is of awareness and lack of knowledge in Organizations and with non users of the system. Due to technological illiteracy. We can overcome this problem by conducting special sessions , seminars , role plays to educate the staff in the organizations for Information Audit and Security of the Information . People in India are now readily accepting use of E-tools for business transactions .[10]

III THE BENEFITS OF INFORMATION AUDIT [4]

The Following are the benefits for the use of Information Audit to the Business Organizations.

- 1) Cost of Auditing is very less as compared to traditional auditing method.
- 2) The time required to do the AUDIT is very less.
- 3) Reliability and security is more in such auditing transactions.
- 4) Its very easy to understand the requirements of the organization once the audit is done.
- 5) The proof for further use is available in information audit so that transactions can be traced.
- 6) Global Presence through Internet.
- 7) Wider reach and use by many interested parties.
- 8) More faith and fare practice in Audit method.
- 9) Saving Valuable time of the organization staff and management and users of the service and of citizens.
- 10) Less requirement of Personnel and Better use of facilities.

IV MAJOR ADVANTAGES OF INFORMATION AUDIT IN INDIA

The Information Audit is very beneficial to the organizations to get maximum faith of customers online . Some of the major advantages are as given below-

- 1) Saving valuable time of organization and services
- 2) Financial Saving is more in case you is such method..
- 3) Opening New Areas, increases in customers is possible.
- 4) Global Presence.
- 5) Time of Service is considerably for reduced
- 6) Cost of performing operations is reduced.

V TABLE SHOWING SECURITY THREATS FOR THE INFORMATION ON INTERNET.[5]

TABLE 1.0: SECURITY THREATS FOR THE INFORMATION ON INTERNET

SRNO.	SECURITY THREAT	AREA AFFCTING	
1	Hardware Level	It affects various Devices	
2	Server Level	It affects server	
3	Clint Level	Login , Password Changes	
4	User Level	It Affects User Authentication	
5	Database Level	It affects Data from the database	
6	File Level	Files are affected	
7	Computer Virus	Various Symptoms of the Virus affected are observed in the system.	

SOURCE:- RESEARCHERS DATA ANALYSIS

VI BARRIERS IN INFORMATION AUDIT IN INDIA

The Information Audit and Information Security is possible only when all the barriers are overcome . Some of the major hurdles are as given below- Reliable and Constant supply of Electricity [2]

- 1. Infrastructural Facilities for Internet Backbone.
- 2. Financial requirements in the initial stage are more.
- 3. Financial Provisions and support from Central Government and other auditing bodies.
- 4. Opening New Websites for performing Information Audit Sector wise .
- 5. Availability of Computer Security Experts and Programmers packages and virus cleaners.

VII FUTURE OF INFORMATION AUDIT, SECURITY AND HIGHER EDUCATION

The future of Information Audit and Information Security is very bright since Internet users are increases rapidly in India . The success of Information audit will depend on Maximum use of Internet , advanced tools techniques to perform audit transactions and information security activities . Also financial transactions. The Indian economy will have numerous benefits if maximum Organizations use this type of auditing methods. The dedicated efforts from Government will be required and awareness of organizations will also make good effect on use of e-marketing tools in India. Higher Education sector is growing and many students are aware about quality factors of the Institutes . The use of above tools and techniques at Higher educational Institutes will add to the students faith over a period of time . [8]

Scope of Higher Education for Implementing the Information Audit and Information security applications [12]

Table 1.2: Status of Higher Education (2015-16)

Type of Higher Education	Category of Uni/College/Institute	Total number
	Central University	43
	State Public University	316
	Deemed University	122
	State Private University	181
	Central Open University	1
	State Open University	13
University	Institution of National Importance	75
	State Private Open University	1
	Institutions under State Legislature Act	5
	Others	3
	Total	760
College	38498	
	Diploma Level Technical	3845
	PGDM	431
	Diploma Level Nursing	3114
Stand Alone Institution	Diploma Level Teacher Training	4730
	Institute under Ministries	156
	Total	12276

Source :-

Higher Education: Ministry of Human Resource Development, Government of India (website: http://mhrd.gov.in/statist)

From the above table it is observed that in the category of University . Maximum universities are State public University and very less in number are State Private University, Central Open University and State Private Open Universities. There is need to increase these Universities by seeing the enrollment of students in higher education sector.

VIII CONCULSION

The paper covers in brief about Information Audit and Information Security its basic concepts its advantage sand barriers The country can not be developed unless we motivate organizations to use such advance tools for information auditing. The Information Auditing and Security activities are going to increase in near future. The use of Internet is must to get benefit from other developed countries. The main drawback is awareness of English and use of technology at the grass root level regarding such transactions. The Government Local, State and at Central have to take serious efforts to create awareness and provide facilities for the same. The Authors have done decent contribution by creating the awareness and has discussed benefits of Information Auditing and Security. In future use of all these technologies will be mandatory and citizens should be ready for accepting the change for positive effect on Economy. At the higher education level and its impact on security of Information.

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