



CHIEF INFORMATION OFFICER AND THEIR CHANGING ROLE AS INFORMATION CUM TECHNO-MANAGEMENT PROFESSIONALS: BRIEF OVERVIEW

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Abstract:

Information Profession is one of the important professions responsible for information infrastructure building or development. The development and modernization in management and its interaction with information brings many professions; popular in contemporary world. Information Officer is a kind of professional where modernization is supported by IT & Computing tools. Among the information officers, the head or apex professional is called Chief Information Officer (CIO). The popularity of CIO and the term is increasing day by day in business and corporate space. Chief Information Officer (CIO) is treated as corporate information professional who lies on several technologies for handling information and also for technology management. This paper is talks about information professionals especially about Chief Information Officer (CIO). Paper is also illustrated some aspects of Chief Information Officer (CIO) as technology professional or Chief Computer Officer. The contemporary role of CIO may vary in organization to organization and few aspects in this context have been mentioned.

Key Words: Chief Information Officer (CIO), Technology Management, Technology Professionals, CIO, CTO, Information Professionals, Information Science, Technology and Engineering, Business Informatics, CEO & Information Scientist

Introduction:

Chief Information Officer (CIO) is the apex information professional in any kind of Business and Corporate Houses. The Chief Information Officer (CIO) may work with various tools, techniques, and technologies or may run organization depending upon organizational need. The role of Chief Information Officer (CIO) is differs country to country, organization to organization. The Chief Information Officer (CIO) of big MNC's in IT Company may vary from Chief Information Officer (CIO) of a Tea Company located in Darjeeling. Chief Information Officer (CIO) is traditionally deemed as responsible for the several information activities such as information collection, selection, organization, processing, management in addition to dissemination. This information handling may differs institute to institute. Information Officer and Chief Information Officer (CIO) in many organizations treated as same. Some of the CIO works as leader among many information professionals; where as in small organization or in some cases where information not treated as main factor may handle by only CIO or one Information Administrator. Chief Information Officer (CIO) mainly adopts tools, technologies which are deals with computing and information technology. Chief Information Officer (CIO) may also treat as Chief Technology Officer (CTO) in many cases, due to several tools and technology uses. The prestige and fame is considered as valuable in most of the MNC's in today's age (See: Fig: 1).

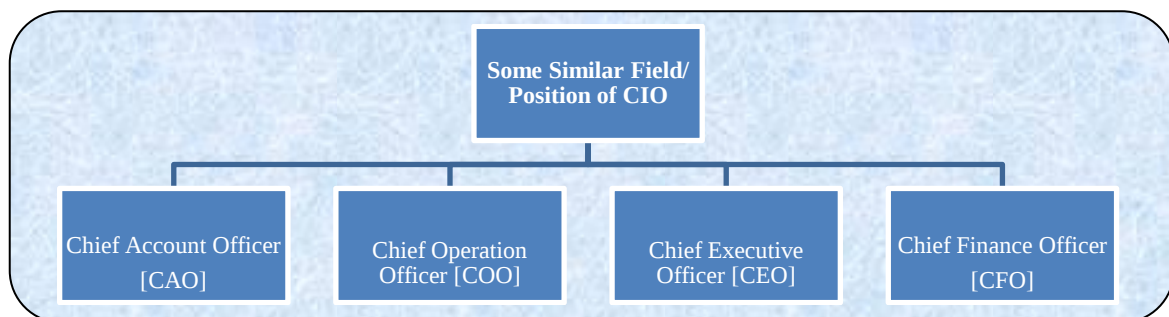


Figure 1: Depicted some common Executive positions in MNC's and corporation

Objective:

The main aim and objective of this study is includes:-

- ✓ To learn about Chief Information Officer (CIO) and their role;
- ✓ To differentiate Information Scientist and Chief Information Officer (CIO);
- ✓ To find out changing role of Chief Information Officer (CIO) in corporate houses;
- ✓ To find out most advance educational programme for Chief Information Officer (CIO);

- ✓ To find out emerging tools, technologies needed for Chief Information Officer (CIO);
- ✓ To find out issues of Chief Information Officer (CIO).

Chief Information Officer (CIO): Basics:

Chief Information Officer (CIO) is a kind of post which is established in the line of Chief Executive Officer, Chief Operation Officer, Chief Technology Officer and so on. Chief Information Officer (CIO) is fundamentally responsible for information activities such as information processing and management. Chief Information Officer (CIO) is the person who collect, select, organization, processing, management, dissemination. However, depending upon size of the organization the Chief Information Officer (CIO) may handle some of the information professionals to handle such information activities. Chief Information Officer (CIO) typically reports to the CEO, COO, CFO. Information Technology and its application in Information Profession have changes the entire arena of Chief Information Officer (CIO) profession. Chief Information Officer (CIO) and its prominence have been raised greatly as Information Technology has become a more important part of business. Chief Information Officer (CIO) plays a vital role in technology and information development. Chief Information Officer (CIO) is responsible for audit related to information and IT and also responsible for report generation and Decision Support Systems control.



Figure 2: Depicted some advanced skill requirement of CIO in today's age

Chief Information Officer (CIO): Traditional Role and Duties:

Traditionally task of information Professionals and Chief Information Officer (CIO) are considered as same; which includes information collection, selection, organization, processing, management and dissemination. Some role and duties are as follows

- ✓ Chief Information Officer (CIO) is responsible for traditional information channels and form creation and development;
- ✓ Helps in information generation and management;
- ✓ Uses documentation and similar techniques to avail information;
- ✓ To make communication between one department to another or inter departmental communications;
- ✓ To prepare report generation and control;
- ✓ To prepare and control information flow and provide information to the management;
- ✓ To help strategic management and operation.

Chief Information Officer (CIO) and Job Zone:

Chief Information Officer (CIO) is needed for several organization and institutes which including private and governmental, non profit and profit making, small or large, professional and service oriented. Chief Information Officer (CIO) and the job also sometimes used interchangeably with CTO, although they have some differences. Fundamentally today's Chief Information Officer (CIO) are responsible for process and practice supporting the flow of information but technology transfer treated as main job of CTO. Chief Information Officer (CIO) treated as one of the important job position for the student and degree holders in Computer Science, Information Science, Information Technology, Management Studies, Information Studies, and Information Systems and so on. The MNC's are the main recruiters of Chief Information Officer (CIO) position. Academic institute however also recruits Information Officer; but their nature is differs from conventional business house based CIO job position.

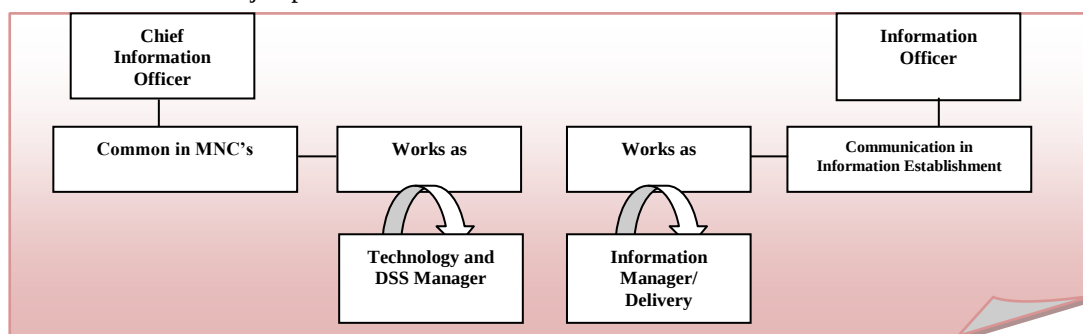


Figure 3: Depicted main work nature or job functionalities of CIO and Information Officer

Chief Information Officer (CIO): Changing Role and Tasks:

The role and task of Chief Information Officer (CIO) is changing time to time and also varies organization to organization. In some organization the Chief Information Officer (CIO) may be a member of the executive board of the organization. Today Chief Information Officer (CIO) professionals are responsible for analysis and modification of existing business process. Though for this work, they identify and exporting the enterprise knowledge resource. In most of the cases Chief Information Officer (CIO) are responsible for the technology management. Thus they have to do several activities such as Database Administration, Web Administration, Communication Management, Image Administration, and Security Systems Management and so on (See Fig:2).

Even in some of the organization they need to manage and handle finance to some extent, where Chief Information Officer (CIO) is creating and monitoring business value from IT asset, to the point. Today Chief Information Officer (CIO) is responsible for information administration with computers and thus overall computer hardware and software management also fall under the category of Chief Information Officer (CIO). In some of the organization in house communication; communication among the organization done by the sophisticated Network Management and practically in many cases Computer Network management treated as one of the important activity of Chief Information Officer (CIO). Various types of textual, numerical data and its safety is today many ways fall under the supervision of Chief Information Officer (CIO) and thus, Data Administration and Management is also important activity of CIO. The Usability Engineering and HCI management are also full under the work under the Chief Information Officer (CIO); where use of clear website creation, management and up-to dateness play an important role.

Today Chief Information Officer (CIO) also responsible for many activities such as Business Technology, Management, the security of an organization is also handle by the today's Chief Information Officer (CIO). The web security, information security is also important job also need to manage by CIO. Data collection, alter and upto dateness of data is also important aspect of Chief Information Officer (CIO).

Another way that, the Chief Information Officer (CIO) role is changing is an increased focus on service management. Thus, technology management and its role as management of information is also important aspects of Chief Information Officer (CIO). The changing role in diagrammatic way depicted in Fig-3.

Chief Information Officer (CIO) and Emerging:

There are several tools and technologies are now a adopt by the Chief Information Officer (CIO) such as Database Administration, Web Technology, Multimedia Technology, Usability Engineering, HCI and HID, Software Technology, Hardware Technology and so on.

Apart from these, some other technologies such Business Intelligence Systems, Enterprise Resource Planning, Business Analytics, Data warehousing, Data Mining, SAP and so on. The traditional Chief Information Officer (CIO) works on several technical aspects such as indexing, abstracting, cataloguing, classification and some other traditional tools.

Chief Information Officer (CIO) and Appropriate Qualification for them:

Still there is no specialization or special qualification in typical of CIO's in general. Still subject such as Computer Science, Information Technology, Information Science, Information Systems basically fulfils the aim and objective of Chief Information Officer (CIO) student and Degree holder of such discipline is basically recruited by the MNC's and Executive train them according to organization need. In such above mentioned programme also such techniques and technologies are there like- Database Technology, Multimedia Technology, Web Technologies, HCI, Usability Engineering and so on.

So, apart from these, Computing and Hardware Technologies play an important role in these curriculums. However, in these programmes fundamentals gradients such as information and knowledge are not available. Thus, most of the company and organization provide in-house training about the aspects of information and knowledge for better information utilization. Where, information and knowledge and its role are included.

Information Science is actually combination of Information Studies, Information Technology and Computing, Management Studies, Cognitive Science and Psychology, and some other knowledge gradients; thus Information Science students if opt for Chief Information Officer (CIO); job then he/she would be able in several aspects which are basically need to handle by Chief Information Officer (CIO). However, apart from Information Science, Information Studies Information Systems may be wonderful tool for CIO professional. Out of Information Systems and Information Studies, Information Systems are far better for CIO position as this course is incorporated with hardware, computing, information and managing technology. And whereas Information Studies is a mainly deal with information Fundamentals and information management. Thus it is helpful for traditional Chief Information Officer (CIO) job. The main problem in CIO recruitment is that, organizations are still not fully concentrated about the benefit of Information Science and Information Studies and these programmes are not so much popular around the world. Thus, corporate houses recruits IT and Computing graduates and make them ready for technocratic information professionals.

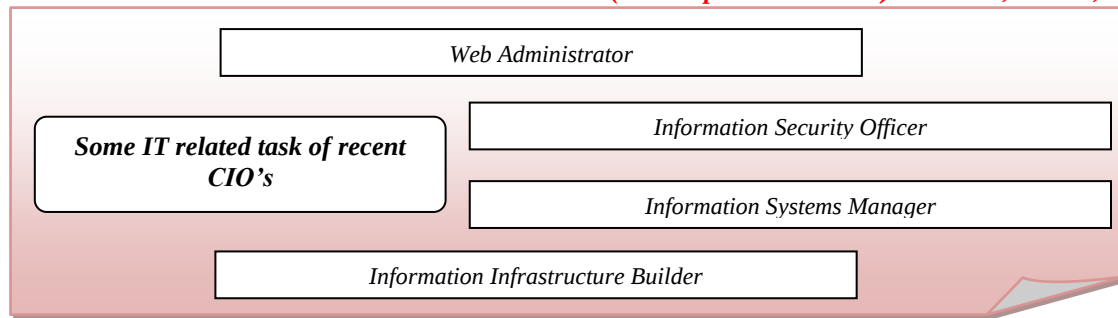


Figure 4: Showing some allied and related domain of CIO

Findings:

- ✓ Typically Chief Information Officer (CIO) are treated as information professional but today they are treated as Technology Management;
- ✓ Database, Networking, Web Administration, Systems Administration treated as main job of CIO;
- ✓ Still for CIO, Technical Degrees are preferred by the by the companies which includes management, computing, IT, Software Engineering and so on;
- ✓ CIO and their role differ organization to organization.

Suggestion:

- ✓ Each and every type of organization may adopt CIO for better Information Management as well as on Information fundamentals;
- ✓ CIO are also able in Technology Management and Computing; thus one CIO in small organization may serve as several professionals task;
- ✓ It is better to start Information Systems, Information Science degree holders in universities for next generation Information Professionals.

Conclusion:

Chief Information Officer (CIO) is an important job position in the corporate houses and business firms. The main differences between Chief Information Officer (CIO) and Information scientist is that, Information Scientist are mainly deals with information Processing and Management with the help of tools and computing. Chief Information Officer (CIO) also additionally deals knowledge management for better decision supports system, report generation and business solution. Thus, in many organizations CIO works also for CTO. So in one post or professional both job aspects are possible to deal.

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