

The Knowledge Chiefs: CKOs, CLOs and CPOs

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The field of knowledge management continues to garner both academic and practitioner interest. While much has been written about the technological, social, and economic aspects of managing knowledge in organizations, little is known about the managers who lead the engagements. In the following research project, we examine the roles of three C-level executives — Chief Knowledge Officers, Chief Learning Officers, and Chief Privacy Officers, these individuals are tasked (and titled) to manage various aspects of an organization's knowledge assets. Specifically, we seek to explicate how the three kinds of Chiefs contribute to knowledge management activities of the organization. To this end, we have employed a two-stage research methodology. First, we searched for news announcements reflecting newly created CKO, CLO, and CPO positions. A thorough coding of these announcements was conducted to profile CKOs, CLOs, and CPOs. Moreover, we examined the reasons for their hiring and their expected contribution to the organization. In the second stage of the research, we conducted semi-structured interviews with a select group of CKOs, CLOs, and CPOs to gather further insights and to validate findings from the secondary data. We have discovered that the three Chiefs play distinct yet inter-related roles in knowledge management.

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Introduction

Managing organizational knowledge is a salient competency to survive in today's turbulent and intensely competitive marketplace (Grant, 1996; Davenport and Prusak, 1998; Nonaka, 1991). While this realization is pervasive among organizations today, many struggle with conducting knowledge management activities (Davenport *et al.*, 2003). It is not uncommon

to find organizations where managing knowledge is conducted in an *ad-hoc* and unsystematic manner. Consider an example, Desouza and Hensgen (2002) elaborate on why the various United States government agencies failed to process signals associated with the 9/11 attacks. Their key finding centers on the fact that there was poor movement of information and knowledge between the various agencies, leading to a failure to put the pieces of the puzzle together. In the post 9/11 era the US Government has established a new department, Department of Homeland Security (DHS), to help avoid this issue in the future. The appointment of the DHS was an overt act that puts the task of information and knowledge sharing in the hands of one government department. The DHS is tasked to be the 'knowledge and information manager' for countering terrorist threats.

Much like the DHS, private sector organizations must also manage their knowledge and information assets. As argued by Kogut and Zander (1992) the principal role of the organization is to integrate dispersed pockets of knowledge and to apply them towards organizational goal attainment. In recent times, we have seen the appointment of a number of 'Chiefs' who are tasked with this very purpose. Chief Knowledge Officers (CKOs), Chief Learning Officers (CLOs), and Chief Privacy Officers (CPOs) being the most prominent new executive titles. Each of the Chief's has a responsibility towards the knowledge assets of the organization. For example, a CPO is normally tasked with protection of knowledge assets, while a CLO focuses on helping the knowledge creators (employees) of the organizations acquire new skills and competencies. To date, the academic literature examining the role of the newly created Chiefs is scant. There is an abundance of literature examining the position of the Chief Information Officer (CIO) (Rockart, 1982; Rockart *et al.*, 1982; Benjamin *et al.*, 1985; Synnott, 1987; Applegate and Elam, 1992; Feeny *et al.*, 1992; Stephens *et al.*, 1992; Grover *et al.*, 1993; Earl and Feeny, 1994; Chatterjee *et al.*, 2001), however only a few studies have looked at the intricacies of the other Chief positions (Earl and Scott, 1999; Herschel and Nemati, 2000; Awazu and

Desouza, 2004; Desouza and Raider, 2004)¹. Earl and Scott (1999); Herschel and Nemati (2000) and Desouza and Raider (2004) studied the Chief Knowledge Officer position, while Awazu and Desouza (2004) examined Chief Privacy Officers. Each of these studies aimed to understand the intricacies of the Chief's position.

We build on these studies by taking the first steps towards systematically studying newly created Chief positions in an integrated fashion, allowing us to uncover overlaps in job roles, objectives, and other intricacies. Ours is one of the first studies to investigate the role played by CKOs, CLOs, and CPOs in managing knowledge assets of the organization. The rest of the paper is organized as follows. We will briefly discuss two views of knowledge management in organizations — the resource and the process views. These views will help us explain how each of the Chiefs contributes to the knowledge management agenda of the organization. Next, we will describe our research methodology. Following this, we elaborate on our findings and analysis. Concluding the paper is a look at areas for future research.

Knowledge Management

The literature on knowledge management is rich in both prescriptive and normative frameworks, case studies, surveys, etc (Desouza and Evaristo, 2003; Nonaka, 1991; Davenport and Prusak, 1998; Alavi and Leidner, 2001; Zack, 2003). We will not attempt to conduct a review of the literature here; however for the purposes of this paper we will briefly discuss the process and resource-based perspectives on knowledge management.

The process view segments knowledge management into a series of distinct activities ranging from acquisition and creation, storage, transfer and distribution, and application (see Davenport and Prusak, 1998; Alavi and Leidner, 2001; Desouza, 2002). The resource discourse, stemming from the literature in strategic management, is concerned with making sure organizational knowledge attains the characteristics of rareness, value, non-inimitability, and non-substitutability (see Nelson and Winter, 1982; Grant, 1991; Kogut and Zander, 1996). If organizational knowledge attains these characteristics it will help in sustenance of competitive advantages of the firm. These two discourses can be used to study knowledge management efforts in an organization. Specifically, we used the above frameworks to uncover the job peculiarities of the Chiefs. We sought to investigate which Chief was responsible for which knowledge management activity (process view) and how each Chief contributed to the various characteristics of knowledge assets (resource-based view).

Methodology

We employed a two-stage research methodology. In the first stage, we gathered PR Wire and Business Wire announcements of newly created Chief positions from the Lexis-Nexis database for the time period 1995–2003. A total of 76 relevant announcements were retrieved (see Table 1). Each announcement was then content analyzed by two researchers. Researchers were provided with a common template which was to be filled while analyzing each announcement. The template contained fields such as name of the Chief, position title, organization name, industry, gender, education, primary career, job responsibilities, etc. Findings from the content analysis were used to build profiles of the Chiefs and to understand the nature of their work and its relation to the knowledge management activities of the organization.

In stage two, we conducted semi-structured interviews with 23 Chiefs (10 CKOs, 8 CPOs, and 5 CLOs). Our intention here was to gather data from primary sources to validate the findings from the first stage of research (secondary data). These Chiefs were asked questions regarding the nature of their work and how they perceived their contributions towards the organization's knowledge management agenda. Questions were also asked to elicit critical success factors faced by the Chiefs. Each interview lasted for about 25–35 minutes and was administered over the telephone. These primary interviews, for the most part, validated our original findings. Moreover, they provided us with a significant amount of rich data compared to the findings from the secondary data analysis.

Profiles of the Chiefs

In order to study the profiles of the Chiefs, we first segregated newly created Chief positions by industry

Table 1 Number of Announcements of Newly Created CKO, CLO, and CPO Positions

Year	CKO	CLO	CPO	Total
1995	0	1	0	1
1996	1	1	0	2
1997	1	0	0	1
1998	0	1	0	1
1999	8	1	1	10
2000	6	3	19	28
2001	4	2	11	17
2002	2	2	5	9
2003	1	2	4	7
Total	23	13	40	76

(see Table 2). Then, we examined intricacies such as their educational background, primary careers, and tenure (externally within an industry and/or internally within the organization). We will now elaborate on each Chief position.

Chief Knowledge Officers

Most of the CKO appointments were made in the consulting industry (see Table 2). This is not surprising, as the life-blood of many service sector organizations, especially consulting companies, is their ability to leverage knowledge in an efficient and effective manner. A consulting firm must be able to re-use its expertise when possible, and also be able to build new knowledge assets to keep pace with economic, technology, and business changes in the marketplace.

Most CKOs possess postgraduate education in business or an allied discipline. It is common to find former academics, mainly professors in the areas of information and knowledge management, appointed as CKOs. Almost all CKOs are frequent speakers at industry and academic meetings. Several have even authored or edited scholarly and professional books.

An analysis of the background of CKOs revealed that most have a nice blend of technical and management skills. Many CKOs spent their formative years in areas such as management consulting, corporate planning, change management, customer research and marketing, human resource planning, information technology and systems, and, last but definitely not the least, knowledge management. Organizations were equally likely to promote from within for the CKO position or make an external hire for the job. In either case, the average CKO had about 10 years of experience in the industry in which the organization operates. It was surprising to find that

only one of the 23 CKOs were listed as part of the organization’s core management team.

In discussions with CKOs and through content analysis of hiring announcements we deduced four main roles of the CKO:

1. Leverage the technical infrastructure to better manage the transfer and flow of explicit knowledge assets.
2. Foster and develop social mechanisms to enable exchange of tacit know-how, skills, and abilities.
3. Manage the flow of knowledge between an organization and its business partners. Here, the goal is to view the organization in the context of one’s ‘extended enterprise’ and manage knowledge flows in activities such as outsourcing, strategic alliances, takeovers, and mergers and acquisitions.
4. A few CKOs also play roles in the management of knowledge repositories, though this is mainly handled by the CIO of the organization. The role of the CKO is to set the direction, structure, and give direction as how to manage the content in the repositories, from a logical point of view. The CIO and his team make the transfer from logical to physical designs and handles management of the repository.

Chief Learning Officers

CLO appointments were found in a wide range of industries (see Table 2), two of the most common being computer software and the consulting industry. As with CKO appointments, we feel that this is due to the fact that organizations in the computer software and consulting industries have to deal with near pervasive changes to technology and business ideologies and where there is a real need to train employees better and equip them with the latest skills, in order to help them to contribute to the knowledge and innovation of the organization.

Like their CKO counterparts, CLOs are highly educated, in certain cases even more than the CKOs. Almost half of the CLOs, in our sample, possessed doctorates, with areas of specialization in organizational psychology, human resources, or public administration. Over 70 per cent of the CLOs were drawn from academia, many of them having served in positions such as professors, lecturers, and research fellows². Due to their academic experiences, a vast majority of the CLOs have published articles, conference papers, and books. Most CLOs have their professional career origins in one of three areas — education, technology, or organizational behavior. CLOs with a background in education have experience in the areas of training and development, human capital development, and e-learning strategies. The more tech-savvy CLOs have spent efforts leveraging technology in educational settings such as schools and colleges — some of their experience

Table 2 Chiefs by Industry

Type of Industry	CKO	CLO	CPO	Total
Financial Services, Banks, & Insurance	2	1	8	11
Marketing & Advertising	2	0	7	9
Healthcare	0	0	6	6
Computer Services	1	0	0	1
Computer Hardware	0	0	3	3
Computer Software	2	3	5	10
Communications Services	2	1	4	7
Food Products	1	0	0	1
Beverages	0	1	0	1
Education	0	2	0	2
Consulting	12	3	4	19
Aerospace & Defense	1	2	0	3
Others (Information Services, Consumer Electronics, etc)	0	0	3	3
Total	23	13	40	76

includes deploying web-based courses, managing course infrastructure such as video and voice classes over the Internet. CLOs with a background in organizational behavior have experience in the areas of human resource planning, leadership training, and organizational consultants. Unlike CKOs, most CLOs are hired externally — organizations almost always choose a person from outside the organization to lead learning efforts. Moreover, almost half of the CLOs positions we examined were listed as part of the core executive team of the organization. We deduced two main roles of the CLO:

1. Managing the e-learning agenda of the organization. This includes choosing an e-learning platform, the classes, preparing a training scheduling mechanism, and encouraging employees to switch from traditional classroom training to web-based training.
2. Managing the capabilities of the organizations workforce. This includes, figuring out the knowledge possessed by each employee. Then, to see if additional training is required to increase one's competency. If so, can this be done internally or externally, thus making sure either the employee receives training, or if expertise is present in the organization, finding ways to mobilize it to the place of need.

Chief Privacy Officers

The role of the CPO is flourishing in the financial, marketing and advertising, and healthcare centers. Not a coincidence, considering the fact that these are the most heavily regulated industries in terms of information and data management. Like the other two Chiefs, the average CPO is highly educated. Almost all CPOs received postgraduate degrees and 35 per cent of the CPOs possessed doctorates. The academic backgrounds of those with a masters degree include healthcare (e.g. health administration, public health), business (MBA, economics), and computer science. At the doctorate level a vast majority of the CPOs (over 80 per cent) earned a J.D. focusing on patent and privacy litigation. Unlike the CKOs and CLOs, only a select few CPOs maintained ongoing ties with academia.

A majority of the CPOs have a primary background that is directly related to privacy issues. They worked on privacy either from a technology perspective or non-technology perspective. Specific occupations of CPOs who have a technology-related privacy background were network administrators, network security specialists, and systems engineers. Those who stemmed from the non-technology perspective held employment positions in legally-related backgrounds, such as intellectual property law, digital copyright, etc. The remainder of the CPOs had primary careers in customer service, healthcare, and marketing. We found that 11 CPOs are cited as part

of the core management team of the organization. With the recent arrival of HIPPA legislature in the United States for healthcare organizations, it is not surprising that almost all of the healthcare organizations who appointed a CPO made them part of the senior executive team. In almost all other industries, most CPOs were outside the core executive team, but they did report to one member of the executive team such as the CEO, President, or COO. The main roles of a CPO include:

1. A CPO aids other executives in addressing privacy issues related to their tasks. For example, a CIO can consult a CPO before building the next IT solution to ensure that the integrity of customer data is maintained and also that privacy standards are maintained.
2. Moreover, a CPO heads up efforts to make privacy controls and protocols more pervasive and ubiquitous in the organization. CPOs are involved in new business dealing, especially in the B2B sector where data and information exchanges are involved.
3. Last, but definitely not least, the CPO serves as the organization's PR person on privacy related issues. As such, the CPO has to be an excellent communicator between the organization and external audiences. Their main task is to increase public awareness regarding the organization's commitment to online privacy. The CPO also works with government/legislative bodies and industry leaders to develop and lead privacy issues.

Chiefs and Knowledge Management

All three Chiefs play distinct and pivotal roles in fostering an organization's knowledge management agenda. Based on our content analysis of hiring announcements and through analysis of the interviews, our findings are:

- ❖ CKOs are *mainly* responsible for leveraging *existing* knowledge resources in the firm.
- ❖ CPOs are *mainly* responsible for protecting and preserving *existing* knowledge resources of the firm.
- ❖ CLOs are *mainly* responsible for managing the knowledge generating agents of the organization. They are responsible for infusing them with new training and development, so that they can create knowledge to be managed.

To revisit the resource perspective of knowledge management — CKOs make knowledge inimitable and non-substitutable through ensuring effective and efficient usage. CLOs ensure the knowledge of the organization remains valuable by training the agents that generate knowledge. CPOs ensure knowledge is rare and valuable by ensuring its protection. Viewing the role of the Chiefs using the process perspective —

CKOs, while responsible for the overall process, are mainly concerned with the creation and application of knowledge, CLOs are concerned with the application of knowledge, and CPOs are concerned with the storage and distribution aspects.

CKOs are more likely to view technology as an option to attain knowledge management objectives, as many times they are focused on 'explicit' knowledge artifacts. Even when their attention is on mobilizing 'tacit' or sticky knowledge, they are likely to use communication-based technology such as e-mail, video conferencing, etc. as a solution. CLOs on the other hand, take a humanistic approach to knowledge management. They are more likely to use techniques such as brainstorming, break-out meetings, focus groups, etc. to mobilize employees to talk and share their knowledge. Through these mechanisms they ensure that novices have the opportunity to learn from the experts in the organization. Moreover, CLOs were more likely to bring in external aid in the form of visiting lecture series, special speaker series, etc. to help get new ideas and gain new insights on how to train and leverage the knowledge workers of the organization. A CKO was more likely to engage in a discussion with the CIO to devise ways in which technology solutions could aid in the systematizing of knowledge management. CPOs work closely with the legal team of the organization. A CPO works closely with the CKO and CLO (or their equivalent) in the organization. A CPO must also work closely with the CIO of the organization to ensure that privacy standards are met and data is protected.

We asked each of the Chiefs to enumerate the critical success factors they faced in terms of achieving their goal of managing knowledge in organizations. Here are the top three for each position:

- ❖ *For the CKO*
 - ❖ Institutionalizing knowledge sharing incentives.
 - ❖ Breaking knowledge bottlenecks in the organization that impede smooth knowledge flows.
 - ❖ Embedding knowledge into the work practices and processes.
- ❖ *For the CLO*
 - ❖ Optimally scheduling training for employees. Today, most employees don't know what training they need, as a result there is wastage and under utilization of training budgets.
 - ❖ Developing a system to track employee expertise, training, aptitude, and other interest. This will help move employees effectively and efficiently within the organization.
 - ❖ Moving to e-training programs rather than traditional out-of-office classes.
- ❖ *For the CPO*
 - ❖ Segmenting and cataloging knowledge assets of the organization to enable focused protection of assets. Currently many organizations have over-arching privacy statements that do not

pertain to all information or knowledge in the organization's midst.

- ❖ Developing protocols for internal access to knowledge assets of the organizations. Since most theft of information and knowledge occurs from within, sharpening up of internal access procedure is a big agenda item.
- ❖ Ensuring compliance to privacy standards by external stakeholders of the organization. This is a key issue as the number of outsourcing agreements increase. Moreover, ensuring compliance among subsidiaries and independent units of the organization is also important.

Conclusion

Knowledge management still remains elusive for most organizations. The newly appointed Chiefs may help an organization realize the benefits of knowledge management. In this paper, we have argued that each of the Chiefs plays a distinct yet inter-related role in the knowledge management activities of the firm. Future research can build on our initial work in a number of ways. Researchers can look at organizational factors that enable or curtail the effectiveness of Chiefs in achieving their objectives. Support from top executives can be an example. [Earl and Feeny \(1994\)](#) claimed a shared vision with a CEO is important for a CIO to add value to an organization. Also, [Feeny et al. \(1992\)](#) studied the relationship between CEO and CIO. It would be interesting to study the relationship between top executives and the three Chiefs. Market reactions for the newly created Chief positions can be analyzed. For example, [Chatterjee et al. \(2001\)](#) examined market reactions of CIO announcements by applying an event study methodology. They found that the market reacts positively to the CIO announcements. Researchers are also well advised to examine the leadership literature, in organizational behavior, and investigate issues of leader – member exchanges, group dynamics, etc. as they pertain to CKOs, CLOs, and CPOs. For example, we found that CKOs possessed a background of both information technology and business. This finding seems similar to what past literature found about CIOs ([Applegate and Elam, 1992](#)). [Stephens et al. \(1992\)](#) found that CIOs act not only as functional managers, but also as executives that aid in the strategy formulation of the organization.

[Senge \(1990\)](#) argued that the roles of leaders evolve as organizations evolve. We are sure that the portraits of the CKO, CLO, and CPO presented in this paper will need revision as we move through the knowledge and information era. We have taken the first steps towards a systematic inquiry of the roles and responsibilities of each of the Chiefs and have linked them to the process and resource perspectives of knowledge management.

Notes

1. Here 'other Chiefs' refers to other C-level executives who possess an equal position level to the CIO, e.g. Chief Knowledge Officer, Chief Learning Officer, Chief Security Officer, Chief Operation Officer, Chief Security Officer, etc.. There is a rich literature that has examined the intricacies of the Chief Executive Officer position in organizations.
2. CLOs that arrive from academia normally retain their academic appointments and serve in the positions of visiting lecturers at their universities or colleges.

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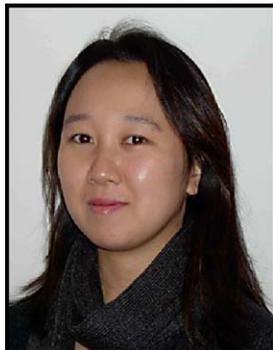
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