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【原著】

Conceptualizing Knowledge Management in Professional and Non-Professional Organizations

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専門職と非専門職組織におけるナレッジマネジメントの課題

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INTRODUCTION

The contention that professional organizations face fewer challenges to knowledge creation and sharing than non-professional ones is bound up in a neo-liberal discourse that has become one of the defining features of late twentieth and early twenty first century management.

Much of this discourse can be traced back to Peter Drucker's (1959, 1993), assertions that in much of the developed world information information-centric forms of industries, facilitated by advances in information and communication technologies, are supplanting capital and labour intensive manufacturing industries, (Empson, 2001). The emergence of knowledge as the preeminent resource, and the popularization of this notion by scholars advocating a resource based view of the firm glosses over a far more complex reality however.

This paper will suggest that the lines between professional and non-professional organizations are increasingly blurred as organizations adapt to changes in their external strategic environments. It will argue therefore, that the juxtaposition of professional organizations against non-professional ones presents a false dichotomy that does not properly represent the diverse and pluralistic nature of many contemporary organizations, including universities.

Using the example of Hiroshima Bunkyo Women's University, it will illustrate the various knowledge creation and sharing challenges presented in a single organization, whose functionaries are engaged in different types of work utilizing different types of knowledge related skills. It will conclude by suggesting that instability and uncertainty in the post industrial economy privileges certain types of knowledge (and knowledge management practices) over others, and that while this presents opportunities for autonomy and self-actualization, it also raises questions about the commoditization of knowledge and control in the workplace.

DEFINING PROFESSIONAL ORGANIZATIONS

In the post capitalist economy many organizations might be regarded as professional insofar as

they utilize the skills of highly educated individuals, who possess esoteric intellectual skills rather than their manual labor. However, the very notion of 'professionalism' is complex, and contested, largely because of ambiguity surrounding the term (von Nordenflycht, 2010).

Narrowly defined, the 'professional organization' embraces firms that possess specific characteristics of exclusivity. They can be considered elitist in that they regulate entry to their areas of specialization by demanding specific and standardized educational requirements (Alvesson, 2001; Starbuck, 1992; von Nordenflycht, 2010) and resist outside judgment of their activities, favouring instead the ethical codes and standards established by peers and regulatory bodies (Giblin, 1978; Starbuck, 1992). Alvesson (2001) moreover, suggests that the homogeneity of professions such as law, medicine and accounting can be attributed to their strictly defined bases of knowledge, and the strong identities that those who work within them attain as a result of their professional activities. While this defines what a professional organization is in clear and relatively unambiguous terms, in doing so it apparently relegates other types of organizations, in all their diversity, to non-professional status, which is inherently problematic.

More significantly however, it does not recognize the complexity of the post-industrial economic landscape. Alvesson (2011) for example, notes that the status that superior knowledge and a protected field of work once provided has been diluted as classically defined autonomous professionals have become, 'managed professionals' in large firms. It is possible to argue therefore, that deregulation, technological change and the forces of globalization have, in effect eroded the status of the professional organization.

One result of this is that a more expansive definition of the professional organization has emerged in some of the academic literature, embracing a wide array of activities that rely to a significant degree on the intellectual skills of employees (Anand, Gardner & Morris, 2007; Empson, 2001; Rangachari, 2009; Teece, 2003; Winch and Schneider, 1993). According to Karreman *et al.* (2002), what defines these so called 'knowledge intensive' organizations is the education, training and expertise of their workers; the non-standardized and complex products and services that they produce; and the emphasis that they place on product, market and human resources development.

While such organizations (software consultancies and professional service firms, for example) have emerged in their own right however, many traditional manufacturing industries too have come to routinely embed high technology in their products consigning traditional Fordist style assembly lines to the dustbin of history. New types of organisations too, such as Internet retailers have emerged combining human knowledge with labour and capital to provide goods and services in unprecedented ways (Powell and Snellman, 2004; Quinn, Anderson & Finkelstein, 1996).

This broader conception of professional organizations raises as many problems as the narrower conception however, including tightly regulated pharmaceutical companies at one end of the spectrum, loosely arranged and fragmented university structures at the other, and embracing a range of management consultancy, law, accounting, design and other firms in between (Karreman,

2010; von Nordenflycht, 2010).

While a narrow definition of the 'professional organization' therefore, places a wide range of organizations (with seemingly little in common) in a 'non-professional' basket, a more expansive view, based less on self-identity and more on the application of esoteric intellectual skills, simply reverses the polarity increasing the number and type of organizations that can claim the 'professional' moniker.

What might be distilled from this discussion is that in the post capitalist economy most organizations are idiosyncratic entities with unique characteristics. This means that they defy simple categorization and do not fit easily into a simple professional, non-professional binary. Therefore this is not a sufficient basis on which to consider knowledge creation and sharing challenges.

This assertion notwithstanding, professional orientations can be conceptualized in a manner that illuminates the ways in which different types of knowledge are used, created and shared.

TYPES OF KNOWLEDGE AND ORGANIZATIONS

Blackler (1995) for example, suggests a knowledge-based organizational typology that helps bring some conceptual clarity to this argument. Drawing on Mintzberg (1980) he suggests four organizational types: professional bureaucracies, machine bureaucracies, knowledge intensive firms and adhocracies, categorizing them according to the types of problems that they focus on and their tendency towards individual or collective work processes. While these organizational types are represented more or less as standalone entities, three of them are represented in the current organizational structure of Hiroshima Bunkyo Women's University, and each of them presents slightly different knowledge management challenges.

THE PROFESSIONAL BUREAUCRACY

Mintzberg (1980) represents professional bureaucracies as organizations such as universities, schools, hospitals and craft manufacturing firms for example, that draw on the embodied knowledge and competencies of experts. These specialists are required to apply their expertise to solve relatively familiar problems in specific situations and contexts, often through face-to-face physical interactions. The emphasis here on the expertise of key human resources, corresponds with the type of work engaged in by professionals such as lawyers, doctors and accountants, to whom 'narrow' definitions of professionals might reasonably apply.

At Hiroshima Bunkyo Women's University, the professional bureaucracy is represented by academic staff in five departments, united in one faculty and supported by a centralized administrative system.

Blackler (1995) points out that a professional bureaucracy places emphasis on the roles of key individuals whose task it is to focus on solving familiar problems: in this case, the delivery of academic services to a fairly homogenous market of students, while its members accrue status from their intellectual knowledge and professional reputations.

Precisely because professional bureaucracies rely on the skills and embodied knowledge of their professionals (Blackler, 1995; Mintzberg, 1980; Lam, 2000) academic staff at Hiroshima Bunkyo Women's University have been able to work without adhering to a set of formalized and standardized work processes other than professionally agreed standards of behavior agreed within the university. They have been able to exercise a considerable degree of autonomy and independence from formal administrative structures (Mintzberg, 1980), and have not been required to answer to either their colleagues or administrators. Consequently performance and other control systems regulating their behavior have been relatively modest in nature, and because of the individualist orientation of the professional bureaucracy, knowledge creation and knowledge sharing needs have been relatively modest, relying principally on the already existing embodied knowledge of organizational members.

THE MACHINE BUREAUCRACY

Blackler (1995) compares the work and knowledge bases of professional bureaucracies with those of generally low skilled, capital, technology or labor based organizations. These 'machine bureaucracies' (Mintzberg, 1980) draw not on embodied intellectual knowledge, but knowledge embedded in rules, procedures and technologies. Such knowledge, Blackler (1995) argues combines physical, mental, interpersonal and technological skills within specific socio-structural contexts. While such entities may exist in their own right, support for professional bureaucracies is often provided by 'machine bureaucratic pockets' Mintzberg (1980: 334).

At Hiroshima Bunkyo Women's University, a relatively low-skilled clerical staff labors under the authority of the academic staff to carry out back office functions and provide necessary support to the university's academic operations, carrying out administrative functions such as enrolments, accounting, and human resource management. The work of the machine bureaucracy therefore, is largely routine and determined by legal, governmental and institutional rules and regulations, drawing limited power from its ability to compel compliance with government policy and legal regulations. The power of the administration staff is largely subordinate to faculty, which exerts formal control over operational and administrative functions through the university committee system. Therefore the locus of legitimate power is concentrated among the academic staff, while even senior clerical staff members tend to have more circumscribed roles. The one notable exception to this is at the apex of the university management structure where the autonomy of the academic staff is constrained by a senior management team comprised of both educators and administrators.

On the basis of this discussion, the university cannot be said to possess the characteristics of a

purely 'professional organization', as narrowly defined above. Nor can it truly be described as a 'knowledge intensive organization', as the application of intellectual knowledge to routine problems and functions within a very narrow range of educational activities is more evident than its application to complex problems typical of knowledge intensive firms such as software consultancies (Blackler, 1995; Karreman *et al*., 2002).

In spite of this however it must be conceded that the academic staff does possess some of the traits associated with a professional organization, namely its distinct identity (Alvesson, 2000; Schein, 2010); its workplace autonomy (Starbuck, 1992); and its tendency towards self management (Brock, 2006).

KNOWLEDGE MANAGEMENT IMPLICATIONS

In knowledge management terms however, the nature of the university contradicts much of what has been written about the inherently innovative nature of many Japanese organizations. Nonaka and Takeuchi (1995) for example have elevated the processes that occur within Japanese firms to an almost mythologized state, suggesting that a unique interplay between tacit and explicit knowledge operates outside the knowledge structures conceptualized in the Western empirical tradition allowing old knowledge to be used and new knowledge to be created. This is echoed by other knowledge management scholars (Davenport and Prusak, 1995; Ray, 2005; Ray and Little, 2005) who similarly seem to be in thrall to an idealized notion of the Japanese organization.

Such dynamicism however, is not obviously evident at Hiroshima Bunkyo Women's University, where the less glamorous model of embrained and embodied knowledge being put to work to solve routine organizational problems (Blackler, 1995) seems more relevant.

Not surprisingly therefore, to the extent that knowledge management initiatives have been actively pursued, the tendency has been towards knowledge codification strategies (Hansen *et al*., 1999). Purchases of off the shelf IT based knowledge management systems, document repositories and intranets, for example, have been made in order to standardize certain administrative processes and disseminate information about the basic functioning of the organization, while rudimentary efforts have also been made to carry out knowledge audits. However, an overall lack of training and support has mean that even these modest measures have been limited in their impact, supporting suggestions in the literature that IT based solutions alone are rarely effective ways of improving organizational performance (Storey and Barnett, 2005; Scarborough *et al*., 1999).

THE CHANGING STRATEGIC ENVIRONMENT

The resource-based view of the firm contends that knowledge is the critical resource for organizational success in the twenty-first century (Drucker, 1993; Quinn, 1992), largely because of the types of uncertainty generated by rapid change in the strategic environment. In many ways

therefore the importance of knowledge creation and sharing in the broader context of knowledge management rests on a neo-liberal view of its strategic importance (Easterby-Smith, 2011).

While such a view does not always sit easily with those involved in education (Barton and Tusting, 2005), in Japan the demands on educational organizations are particularly acute owing to an oversupply of higher education institutions and a declining birth rate. Therefore in order to attract thinning numbers of university age students, universities have cut fees, boosted marketing efforts and lowered entry standards. Simultaneously they have revised curricula and teaching methods, and begun to diversify curriculum content and modes of delivery (Goodman, 2010). The tendency of Hiroshima Bunkyo Women's University to rely on traditional organizational routines and academic offerings however, has meant that relatively few such solutions of this type have been readily adopted.

Potential catalysts for change are Japan's changing demographics and sharper competition in the higher education sector forcing senior management to search for innovative solutions to its problems, and ways of better utilizing the intellectual capacity of its staff.

However, efforts by senior management at Hiroshima Bunkyo Women's University to initiate 'turnaround' are likely to meet the type of resistance typical of 'professional organizations' unwilling to allow disruption of the organizational status quo (Rangachari, 2009). Almost certainly, the university's ability to react will be circumscribed by the fact that the locus of legitimate power resides with academic staff. Indeed, at an individual level Argyris (1998, 2001) argues, that highly skilled professionals such as academics are often poor at responding to change because their formal training and work experiences cause them to engage in single loop rather than double loop learning, preventing reflection and learning. At an organizational level the effect of this is the tendency to base future decisions on past experiences (Almeida *et al.*, 2011). Such path dependence is a serious hindrance to the university's search for new knowledge as circumstances change and new challenges emerge.

Such ideas are congruent with the those of Burns and Stalker (1961) and Kanter (1984) who suggest that hierarchies and bureaucracies, role specialization and limited cross boundary interactions are consistent with the type of stable, non-challenging strategic environment that Hiroshima Bunkyo Women's University enjoyed during the years of the Japanese economic miracle and high population growth, but les appropriate in times of turbulent change.

IMPORTING ADHOCRACY

One potential solution to this type of strategic inertia is to search outside the organization for new sources of knowledge in order to gain some of the benefits associated with the acquisition of outsider expertise, technological know-how and new products and services (Parise and Prusak, 2006).

Almeida *et al*. (2011) suggest that for such external information searches to be successful, they need to be supported by the right architecture, which in turn is highly dependent on social and cultural context.

Hiroshima Bunkyo Women's University employed a new body of staff with a significantly different culture, to provide English language related education and services. The fact that the new staff was almost all non-Japanese meant that they were largely unencumbered by either the organizational or cultural norms that constrained the actions of their Japanese counterparts (Markus and Kitayama, 1991; Mouer, 2009; Nakane, 1973). Significantly too, for the first four years of its operation, the new center was accorded independence from many of the host organization's administrative structures and was given the freedom to develop its programs and courses largely independently of the other administrative and academic systems in the university. In effect, the university imported an 'adhocracy'.

Mintzberg (1980) suggests that sophisticated innovation in organizations takes place most effectively where adhocracies play a role. Adhocracies are distinct from the professional and machine bureaucracies (and knowledge intensive firms) in that they represent the application of collective effort to the solution of novel problems (Blackler, 1995). In doing so they create their own shared understandings and cultural characteristics, which have the potential to generate new knowledge and spur on innovation. Coming together to work towards the establishment of new center, quickly generated the type or self-perpetuating mutual engagement, joint enterprise and shared repertoire associated with communities of practice (Wenger, 1999) and allowed the group to develop its own unique identity, quite separate from that of the host organization.

While communities of practice are generally regarded as being self-organizing entities, Wenger and Snyder (2001) argue that in formal contexts they can be utilized to enhance an organization's strategic capabilities. Moreover, the chances of success, they suggest, will be boosted if they contain members who are committed, passionate and intrinsically motivated to work towards a common goal and that the right conditions are fostered to enable them to flourish over time. In addition to building a strong culture of cooperation and communication, the new group was provided with managerial support, competitive salaries and rewards, and the autonomy to determine its own ways of working and organizing. Although not possessing the legitimate power of the formal departments therefore, a suitable social ecology (Gupta and Govindarajan, 2006) was provided to generate the conditions necessary for effect knowledge creation and sharing. To date, this group has shown the capacity to develop innovative educational products and services and has become actively involved in sharing its accomplishments with others through conferences and publications. Its engagement in boundary spanning activities both within and outside the organization therefore have acted as a conduit for the import of explicit knowledge, which, has been exploited and nurtured in much the way that Nonaka and Takeuchi (1995) suggest, takes place in innovative Japanese companies. This is evidenced in part by the fact that other parts of the university have begun to imitate and adopt some of the training and performance assessment practices introduced by the newcomers.

CONCLUSION

This paper has considered the contention that professional organizations face fewer challenges to knowledge creation and sharing than non-professional ones.

It has argued however, that in the post-industrial world, conceptions of organizations as being either professional or non-professional is declining in relevance. Such distinctions are being eroded by the emergence of new types of organizations that do not neatly fit into either category and that hybridization has blurred traditional distinctions between professionals and non-professionals.

Using the example of Hiroshima Bunkyo Women's University, it has argued that a stable external environment combined with certain types of professional practices can potentially lead to stagnation and inertia, even in the face of existential threats. Conversely, it has argued that essentially closed systems can be opened up to innovation if the right conditions are provided and that a common mission and sense of community can precipitate broader change, even in a relatively conservative organization.

While this reading suggests an essentially neo-liberal view, largely premised on a resource-based view of the firm, it also evokes a more sinister view of knowledge management as a means of organizational control. At Hiroshima, Bunkyo Women's University, this is represented by the erosion of autonomy for one group of 'professionals', and the emergence of a group of 'managed professionals' whose labor and skills are viewed as commodities to be utilized for the benefit of the firm. Perhaps inevitably then, in addition to exhorting the benefits of apparently progressive knowledge management practices, we should also acknowledge their inherently political nature.

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