



Taming enterprise dementia in public sector organizations

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Abstract

Purpose – The aim of this paper is to report the finding of an exploratory research project that considered how public service organizations may conquer the debilitating effects of enterprise dementia.

Design/methodology/approach – Building on the seminal research of Michael Earl, this project sought to solicit the view from the front, which in this case are the middle managers of the Canadian public service. Specifically, the aim was to determine which of Earl's schools of knowledge would be most appropriate in curbing the organizational memory loss and taming the information anxiety that are common place today.

Findings – The sample of public service middle managers overwhelmingly opted for a single strategy. The organizational school surfaced as the strategy most likely to fit respondents' perceived needs. Through collaboration, Earl's organizational school focuses on maximizing the use of social networks with a view to knowledge sharing.

Practical implications – This paper provides a compendium of knowledge strategies that may be useful for public service executives.

Originality/value – This is the first project to consider how Earl's taxonomy of knowledge strategies may be implemented in a Canadian public service environment.

Keywords Middle managers, Public sector organizations, Knowledge management, Canada

Paper type Research paper

In public and private organizations alike, executives are faced with enormous challenges as they come to the realization that their organizations *do not know what they know*. Witnessing the effects of organizational memory loss, they feel the need to act, though few appear to know what should be done. Many feel the need to develop processes to help curtail the flow of knowledge from their organizations, but they do not know what to do.

Ikujiro Nonaka, a respected expert in the domain of knowledge management, suggests that "[I]n an economy where the only certainty is uncertainty, the only sure source of lasting competitive advantage is knowledge" (Nonaka, 1998, p. 22). Though such words of wisdom are applicable to the private sector, do they truly resonate with public sector executives? Other experts suggest countless reasons for knowledge management, such as globalization (Johne, 2001; Prusak, 2001; Wilson, 2001), deregulation (Wilson, 2001), technology (Wilson, 2001), downsizing (Johne, 2001; Wilson, 2001), and information overload (Hanka and Fuka, 2000; Johne, 2001). Of these reasons to consider a knowledge management initiative, the last two seem most appropriate for government organizations.

Deciding on the way ahead is a daunting task for some executives. The aim of this paper is to consider how, in general, one may use knowledge management to combat an organizational ailment called "enterprise dementia". The vehicle for this exploration is Michael Earl's five-year research project, in which he proposes a taxonomy of the



strategies, or schools, for knowledge management. This paper compares the available schools and considers their utility *vis-à-vis* enterprise dementia. The most important lesson is the realization that the spectrum of knowledge management is extremely broad, and in fact, executives should consider all of his strategies.

The problem: enterprise dementia

A by-product of the reorganization/re-engineering trends of the late 20th century is that many public sector organizations now boast leaner structures. For example, according to the President of the Canadian Public Service, there was been a 25 percent decrease in the number of executives since 1992 (Serson, 2001). From a knowledge perspective, downsizing creates a number of new and unanticipated tribulations.

A second challenge resulting from downsizing is a loss of tacit knowledge transfer previously associated with deliberate redundancy (Nonaka and Takeuchi, 1995). The structure of many organizations in the 1980s and before catered for understudies who would mature to become the next generation. Today this concept has all but evaporated, resulting in a disappointing consequence of knowledge loss. This shortfall necessitates the rediscovery of knowledge that was once resident within an enterprise.

The corollary to this is sometimes termed “organizational Alzheimer’s”, which is “memory loss that occurs when key employees leave an organization, taking their [tacit] knowledge with them” (Galt, 2002). Research suggests that at least one-half of organizational knowledge is uncodified tacit knowledge (Horak, 2001). The departure of the human repository of this intellectual capital may take months or years of training and experience to replace – in the interim, the middle manager must somehow fill the knowledge void.

Further exacerbating the effects of this tacit knowledge loss is the vast increase in retirements that government officials expect in the next decade. A large number of public service executives will depart soon, a rising percentage of which are due to retirements. Across the public service, researchers expect some 82 percent of executives to depart in the decade 1997-2007. For the first five years of this period, the rates remain at historically average levels. However, departures, especially retirements, increase significantly from 2002 (Gorber *et al.*, 1999). Caused by the baby boomer effect, researchers expect this trend to continue until at least 2011. A more recent report suggests that 85 percent of executives are eligible to retire in the next ten years (Siegel, 2001).

If organizations wish to seal this unnecessary memory leak and decrease the information overload of managers, they should invest in some sort of knowledge management. One solution is to provide a human understudy or apprentice, perhaps through the initiation of a mentoring program, much as was the norm yesteryear. Alternatively, they may opt for one of the knowledge management solutions introduced later in this paper. The *status quo* of permitting corporate knowledge to flow freely from the organization and possibly directly to the competition is nonsensical.

Although the term “organizational Alzheimer’s” seems to be gaining in popularity, this research project seeks to prove that the term is unnecessarily pessimistic. Clearly, the analogy accurately captures the memory loss and confusion typically associated with the terribly debilitating disease: however, most physicians agree that, at present, no cure exists for Alzheimer’s. Conversely, the more general term of “dementia”, which

includes similar ailments, is very treatable. This subtle difference is especially important for this research project, as there is a cure for the disease that is called “enterprise dementia”.

For the purpose of this project, enterprise dementia comprises two closely related components:

- (1) information anxiety; and
- (2) organizational memory loss.

This relationship may go some way in explaining the unexpected and confusing results of a variety of recent research within the field of knowledge management. For example, two recent studies, completed by experts in the field, suggest that the implementation of a knowledge management program did not result in significantly less information overload (KMPG, 2000; Linden *et al.*, 2002).

A possible solution: knowledge management taxonomies

In 2001, Michael Earl published the results of a five-year study in which he articulated a taxonomy of strategies for knowledge management. Earl’s self-confessed purpose was to help guide executives on choices to initiate knowledge management projects according to the goals, organizational charter, and technological, behavioral, or economic biases (Earl, 2001). In categorizing the schools, Earl uses the three biases (technological, behavioral, and economic) as the high-order categories. Dissecting these categories further results in seven unique schools: a summary of each is shown in Figure 1.

Earl’s (2001) work is not the only project to categorize the types or domains of knowledge management. For example, Xerox researchers at their Palo Alto Research Center (PARC) facility studying knowledge management developed their own categories entitled “Ten domains of knowledge” (Xerox, 2001c). These two works provide an excellent conduit to explore the spectrum of knowledge management categorization. As the next stage was to consider each of Earl’s seven schools in this research, a brief description precedes an example of a real implementation highlighting

	Technocratic			Economic
School	System	Cartographic	Engineering	Commercial
Attribute	Technology	Maps	Processes	Income
Focus	Knowledge bases	Knowledge directories	Knowledge flows	Knowledge assets
Aim	Codification	Connectivity	Capability	Commercialization
Philosophy				

	Behavioral		
School	Organizational	Spatial	Strategic
Attribute	Networks	Space	Mindset
Focus	Knowledge pooling	Knowledge exchange	Knowledge capabilities
Aim	Collaboration	Contactivity	Consciousness
Philosophy			

Figure 1.
Earl’s schools of
knowledge management

the major advantages of the school. The Xerox findings, as well as those of others, supplement Earl's thesis by means of reinforcing his conclusions.

Technocratic

Earl (2001) classifies his first group *technocratic*, as each of the schools relies on information technology to assist knowledge workers. For example, information technology provides knowledge bases, knowledge directories, or knowledge flows. Earl (2001) suggests that three knowledge management schools should be part of this taxonomy:

- (1) systems;
- (2) cartographic; and
- (3) engineering.

The purpose of the system school is "to capture specialist knowledge in knowledge bases which other specialist or qualified people can access" (Earl, 2001, p. 218). For many, this is the essence of knowledge management – the ability to access knowledge quickly to help solve an organizational challenge. An example would be reducing the time middle managers spend searching for knowledge or information. A successful implementation of the system school may reduce or eliminate the challenges postulated by Richard Wurman (1989), who noted that a major cause of information anxiety is the uncertainty surrounding the existence of a particular piece of information.

A frequently quoted example of this systems school is Xerox's (2001b) knowledge-sharing best practice, codenamed "Eureka". Eureka helps Xerox field technicians to quickly and accurately diagnose, solve and prevent equipment problems. Eureka contains a vast database of knowledge derived from the more than one million annual service calls completed by Xerox's customer service engineers. Eureka seeks to complement the explicit knowledge contained in standard service manuals with the tacit knowledge engineers amass through experience.

Developed jointly by technicians in Xerox France and scientists at Xerox PARC, Eureka epitomizes collaboration. Together they codified the technicians' solutions to very difficult, complex and rare problems that tended to be learned from experience and passed from one technician to another through war stories. Today more than 25,000 engineers are equipped with Eureka, allowing them to quickly service customers' equipment, thereby reducing downtime and improving customer satisfaction. Although the concept sounds incredibly simple, the reality is that Eureka has saved the company more than \$10 million.

A more recent and less known example of the system school in action is Intel's Expertise Location System or ELS. The emerging domain of expertise location offers incredible potential for large organizations to begin *knowing what they know* by facilitating the finding of organization knowledge. An American Productivity and Quality Center consortium learning forum report suggested:

As organizations become more complex and more globally dispersed, and as expertise becomes more specialized, leaders are looking for methods to help employees determine where to search and find answers (American Productivity and Quality Center, 2003, p. 6).

The Intel system provides knowledge seekers with the ability to query the expertise location system for solutions to business problems. If an answer is not discovered in

the codified knowledge base the question is routed to an expert, who may be an individual to a group of experts. According to the APQC ELS report:

Once an expert answers the question, the system automatically captures and stores [codifies] the solution. In some instances, the system may push the solution out to a subscriber-base interested in the particular area of discussion (American Productivity and Quality Center, 2003, p. 26).

Key to the success of these systems is the input from experts. David Snowden, a thought leader in the sphere of knowledge management, recently articulated a third-generation model for knowledge management. Included in this new model are three heuristics, the first of which is “knowledge can only be volunteered; it cannot be conscripted” (Snowden, 2002, p. 3). This premise is why the Intel ELS and Eureka systems work so well. The experts volunteer the knowledge they are inputting to the systems and by doing so they feel an important part of the organization.

The second category – the cartographic school – is not surprising based on mapping organizational knowledge. The purpose of this school is “to make sure knowledgeable people in the organization are accessible to others for advice, consultation, or knowledge exchange” (Earl, 2001, p. 220). Finding the person who holds the particular knowledge is the key to this school. Perhaps the best analogy for this school is the yellow pages, as its main aim is the establishment of a knowledge directory that allows people to connect. Xerox describes this concept as “mapping knowledge of experts”, “so people can locate and access knowledge or expertise held by certain people in an organization” (Xerox, 2001c, p. 1). The cartographic school would likely diminish the negative effects of ineffective searching procedures postulated by Linden (2001).

Snowden suggests that “[E]xpertise location systems replace the second-generation technique of yellow pages making connections between people and communities” (Snowden, 2002, p. 10). A good example of a modified yellow page implementation of the cartographic school is Lotus’s ExpertLink (Lotus, 2001a). Rather than simply providing an automated version of the corporate directory, which may result in frustrated knowledge seekers who are unable to locate the needed knowledge, the Lotus system was designed to ensure that the most appropriate expert responds to customer queries. ExpertLink constantly monitors a number of internal systems, including Lotus’s workflow management system, Lotus’s online employee question and answer forum, and Lotus’s organizational directory. By monitoring this information, ExpertLink maintains a dynamic directory of experts. Upon receipt of a customer’s query, ExpertLink quickly and automatically routes the inquiry to the most qualified product specialist. A real benefit of this system over more traditional directories is the dynamic nature of the expert selection as these experts may change over time.

The basis of this school complements Snowden’s second heuristic of the new knowledge management generation, which is “we can always know more than we can tell, and we will always tell more than we can write down” (Snowden, 2002, p. 3). In ExpertLink-type systems it is vital that the *expert* be found to deal with customers, as the expert knows more than they are able to codify. In other words, relying solely on previously codified knowledge may only paint part of the picture.

The last in technocratic taxonomy is the engineering school, which focuses on two related concepts. The first is that “performance of business processes can be enhanced

by providing operating personnel with knowledge relevant to their task”, and second that “management processes are inherently more knowledge-intensive than business processes” (Earl, 2001, p. 221).

An example that combines Earl’s thesis with Xerox’s ideas is Novartis’s Consumer Health’s knowledge management system, designed to expedite the US Food and Drug Administration’s (FDA) submission process (Lotus, 2001b). Their DocuKnowledge Suite supports the quick creation and tendering of FDA submissions but also eliminates unnecessary repetition of the mistakes based on the experience from previous submissions. The system ensures that all submission documents are included and in the correct format, thereby reducing unnecessary delays searching for lost paper documents. The result is a best-practice solution that ensures products get to market quicker and therefore capture greater sales opportunities. The basis of the system is simple – ensuring employees know what they must do (in this case FDA submission guidelines) and to ensure they do not repeat mistakes (best practices).

Economic

A single school exists within the “economic” category, entitled the commercial school. Earl (2001) defines this school as economic because “it is overtly and explicitly concerned with both protecting and exploiting a firm’s knowledge or intellectual assets to produce revenue streams” (p. 222). Xerox (2001c) suggests that companies should understand and measure the value of knowledge and be able to leverage intellectual assets.

An acknowledged leader in this field is Dow Chemicals. In the 1990s, Dow established teams to review the value of their patents, and discovered that 25 percent of their patents had no business value. In a 2001 speech, Dow Vice President Richard Gross stated that Dow was able to reduce their patent holdings by over 10,000, resulting in a saving of \$40 million in five years. In addition, Dow was able to donate a number of patents, thereby achieving a substantial tax credit. By developing tools and processes, Gross stated that Dow was able to extract more value and generate more revenue from intangible assets.

Behavioral

The last group of Earl’s (2001) schools is the “behavioral” group, which stems from the social sciences and focuses on the creation, sharing, and use of knowledge as a resource. Concentrating on collaboration, contactivity and consciousness, many consider this group to be the people group, once again emphasizing the notion that technology is not the exclusive foundation of knowledge management.

Earl (2001) describes the organizational school as “the use of organizational structures, or networks to share or pool knowledge” (p. 223). Xerox (2001c) simply describes this domain as “knowledge sharing”. Xerox (2001a) research indicates that 42 percent of organizational knowledge is in the minds of workers and only 12 percent of corporate knowledge is in a knowledge base available for sharing within the organization. Clearly, the key to success of this school is maximizing the amount of knowledge sharing and thereby reducing the time wasted seeking knowledge.

An interesting example of this school is the cross-reference or Xref system used by Northrop Grumman. Facing the drawdown of the B-2 project, the company decided it would be necessary to “maintain profiles of staff who could be used for future B-2

projects” (American Productivity and Quality Center, 2003, p. 13). The Xref system is managed by Northrop Grumman’s knowledge management team, which “is chartered to enable the reuse of ‘what we know,’ regardless of location; [...] and collaboration across boundaries” (American Productivity and Quality Center, 2003, p. 13). Earl (2001) suggests that “an important feature of knowledge communities is that they bring together knowledge and knowers” (p. 223). This key element of the organizational school, that is connecting knowledge seekers with knowledge providers through knowledge pooling and collaboration, was the dominant model of the APQC Expertise Location Study (American Productivity and Quality Center, 2003).

The spatial school provides “a design for emergence philosophy of knowledge management [...] it centers on the use of space or spatial designs to facilitate knowledge exchange” (Earl, 2001, p. 225). Many scholars refer to this school using a water-cooler metaphor – as workers gather at the water cooler to exchange information and knowledge. In *Working Knowledge*, Davenport and Prusak (1998) argue convincingly that conversations around the water-cooler provide an opportunity for knowledge transfer (presumably tacit knowledge). They warn us of modern management practices that consider socializing wasteful or purport virtual offices as the way of the future. Alan Webber (1993) supports this thesis and believes that “[I]n the new economy, conversations are the most important form of work. Conversations are the way knowledge workers discover what they know, share it with their colleagues, and in the process create new knowledge” (p. 28). This school builds on the foundation of Snowden’s final heuristic, which is “we only know what we know when we need to know it” (Snowden, 2002, p. 3). Simply put, unless or until we understand the context of a question we are often unable to answer the question or share our knowledge.

An excellent and time proven example of the spatial school comes from the British Army, where it has long been a tradition for all officers of a regiment to meet for coffee in the morning. Like clockwork, the officers meet at 10 o’clock every day. To outsiders this may appear to simply be another case of the British class system in action: however, nothing could be further from the truth. In fact, this daily meeting allows officers to discuss current challenges and seek the advice and counsel of those more experienced. In days gone by the officers may have discussed the best way to ride or shoe a particular mare. Today, they may be discussing the complex issue of detainees of the war on terrorism. The discussions tend to revolve around difficult situations, the solutions to which remain uncoded within Army manuals. This informal exchange of knowledge is a classic transfer of tacit knowledge, a transfer of knowledge that would not transpire if the meeting did not take place in such an informal manner.

The strategic school “sees knowledge management as a dimension of competitive strategy” (Earl, 2001, p. 227). This school seeks to exploit knowledge itself as a resource. Those practising the strategic school consider knowledge, on its own, to be a strategic advantage. Earl cites examples of companies that harvest knowledge as a resource. However, this school should be considered a follow-on or mature strategy, as few organizations would be able to plan on knowledge becoming their major asset. It seems much more likely that successful knowledge management organizations will use this school once they have achieved success following one of the other schools.

A renowned case of the organizational knowledge management school metamorphosing into a strategic school is Buckman Laboratories. Buckman

Laboratories is a chemical manufacturer and distributor headquartered in Memphis, Tennessee. They sell more than 1,000 different specialist chemical products around the world whilst employing over 1,200 people. However, recently they have become more renowned for their innovative corporate knowledge management network. Today business leaders from some of the highest technology sectors visit Buckman Laboratories to learn about knowledge management.

Methodology

As exploratory research, a recent survey of Canadian Public Service middle managers included the following statement:

The < blank > school would be a good knowledge management strategy for my organization.

The aim of this question was to determine the general views of the sample with a view to sparking interest for future research. For each school a detailed description was available for those who wished additional information. Respondents were asked to rate each school using a five-point Likert scale; however, an option existed to select “N/O” for no opinion. A summary of the frequency of responses is shown in Figure 2 and Table I.

As the survey instrument was distributed using a snowball sampling technique and the sample is relatively small it was necessary to mitigate the risk of generalizing the research findings. To achieve this aim, the sample’s demographic characteristics were compared to those of a large randomly selected government middle manager sample known to be representative of the population. The representative sample was a survey of government middle managers completed in 2002 by the Canadian Public Service Commission (PSC), in which the researchers randomly selected a sample of 9,266 middle managers from the population of approximately 26,000. By the end of the survey 8,576 middle managers could be contacted and 2,650 usable responses were

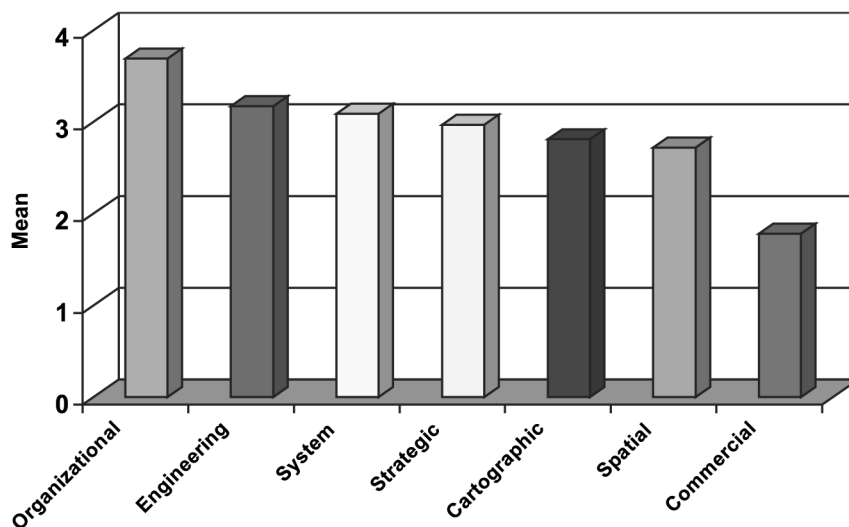


Figure 2.
Earl summary

Frequency of response – Earl	<i>N</i>	Mean	SD	N/O	1	2	3	4	5
Organizational school	88	3.69	1.21	4.5	2.3	3.4	22.7	43.2	23.9
Engineering school	88	3.17	1.32	8.0	4.5	6.8	34.1	36.4	10.2
System school	88	3.09	1.38	10.2	1.1	13.6	30.7	33.0	11.4
Strategic school	86	2.97	1.60	14.0	4.7	14.0	23.3	26.7	17.4
Cartographic school	88	2.81	1.57	13.6	10.2	9.1	27.3	28.4	11.4
Spatial school	88	2.72	1.58	17.5	8.2	8.2	26.8	28.0	8.0
Commercial	86	1.78	1.26	16.3	29.1	26.7	18.6	7.0	2.3

Table I.
Earl descriptive statistics

Notes: Cronbach's alpha = 0.744; 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree

returned, resulting in a 31 percent response rate, a confidence level of 95 percent, and a confidence interval of 1.8 (Public Service Commission, 2002). Both research projects defined a middle manager as a member of the Executive Succession or Feeder Group, which by definition includes three grades of Public Servants (Ex-minus-1, Ex-minus-2 and Ex-equivalents).

A series of null hypothesis tests, including gender ($t(2747) = 0.366$, $p = 0.7143$), education ($t(2747) = 0.659$, $p = 0.5099$), and language ($t(2747) = 0.565$, $p = 0.5724$), indicate that this sample is not statistically different from a recent large-scale PSC survey. From this finding, one may conclude that this sample is likely representative of the population. Whilst acknowledging that bias exists in all studies utilizing the snowball sampling technique, the analysis of the demographic data indicates that the sample is not statistically different from the PSC Survey. Such an important conclusion indicates that one should be able to generalize, with confidence, the finding across the population. This conclusion adds value to the findings by permitting their wider application across the Government of Canada.

The next step was to examine the data related to each of Earls's schools. A one-factor ANOVA between schools was performed to determine whether there was a significant difference between the means of the schools. The F -statistic was significant at the 0.05 critical alpha level, $F(6, 605) = 14.548$, $p = 0.0000$ (see Table II). Therefore, we may reject the null hypothesis and conclude that the difference between schools was significant. A series of *post hoc t*-tests were completed between all combinations. The most interesting *post hoc* finding is that the difference between the organizational school's mean and each other school's mean is significant at the 0.05 critical alpha level. In total, there are 12 combinations with significantly different means, six of which involve the organizational school. In other words, the organizational school was rated significantly higher than any other school, whilst the commercial school was rated significantly lower than were the others. Acceptable scale reliability was achieved with a Cronbach's alpha of 0.744

Conclusions

The most interesting conclusion surrounding the knowledge management strategies was that respondents, overwhelmingly, opted for a single strategy. Seven schools or strategies were described to the respondents and yet a single school, the organizational school, surfaced as the strategy most likely to fit respondents' perceived needs. Through collaboration, Earl's organizational school focuses on maximizing the use of

Earl's knowledge strategy	N	Mean	SD		
<i>Factor A (fixed): < blank > school would be a good knowledge management strategy for my organization</i>					
(A) Level 1: System	88	3.091	1.378		
(A) Level 2: Cartographic	88	2.807	1.567		
(A) Level 3: Engineering	88	3.170	1.315		
(A) Level 4: Commercial	86	1.779	1.259		
(A) Level 5: Organizational	88	3.693	1.207		
(A) Level 6: Spatial	88	2.716	1.583		
(A) Level 7: Strategic	86	2.965	1.605		
<i>Source of variation</i>	<i>DF</i>	<i>Sum of squares</i>	<i>Mean squares</i>	<i>F-ratio</i>	<i>Significance level</i>
A	6	177.139	29.523	14.548	0.000
Error	605	1,227.743	2.029		
Total	611	1,404.882			
<i>Post hoc least significant difference t-tests between group means^a</i>					
Factor (A) System – Factor (A) Commercial		$t(172) = 6.073$		$p = 0.000$	
Factor (A) System – Factor (A) Organizational		$t(174) = 2.804$		$p = 0.006$	
Factor (A) Cartographic – Factor (A) Commercial		$t(172) = 4.758$		$p = 0.000$	
Factor (A) Cartographic – Factor (A) Organizational		$t(174) = 4.127$		$p = 0.000$	
Factor (A) Engineering – Factor (A) Commercial		$t(172) = 6.442$		$p = 0.000$	
Factor (A) Engineering – Factor (A) Organizational		$t(174) = 2.434$		$p = 0.016$	
Factor (A) Engineering – Factor (A) Spatial		$t(174) = 2.117$		$p = 0.036$	
Factor (A) Commercial – Factor (A) Organizational		$t(172) = 8.861$		$p = 0.000$	
Factor (A) Commercial – Factor (A) Spatial		$t(172) = 4.337$		$p = 0.000$	
Factor (A) Commercial – Factor (A) Strategic		$t(170) = 5.460$		$p = 0.000$	
Factor (A) Organizational – Factor (A) Spatial		$t(174) = 4.551$		$p = 0.000$	
Factor (A) Organizational – Factor (A) Strategic		$t(172) = 3.371$		$p = 0.001$	

Table II.
Analysis of variance for
Earl's knowledge
strategies

Notes: ^aValues of p are for a two-tailed test; statistics are shown only if p is less than or equal to 0.05

social networks with a view to knowledge sharing. The commercial school, which focuses on knowledge assets and commercialization, was rated the lowest while the remaining five schools were somewhere in the middle.

The fact that a single knowledge strategy emerged as the clear preference by respondents suggests that it may be possible to develop a single knowledge strategy for government. However, it may be premature to announce such a definite finding based on this exploratory research alone. Corporate experience may suggest that a blended approach is worthy of consideration. Consider Honeywell's recently implemented system with an explicit aim "to help knowledge flows across boundaries" (American Productivity and Quality Center, 2003, p. 7), which could be described as Earl's engineering school. However, the system is also "about connecting

people across networks [Earl's cartographic school], enabling collaboration [Earl's organizational school] and getting assistance [Earl's system school]" (American Productivity and Quality Center, 2003, p. 16). The lesson is clear – some implementations will be blended systems that span the boundaries of the school espoused by Earl.

The fact that a single school was important to the respondents demonstrates the importance of that school: however, it does not demand the exclusion of others. In order to tame enterprise dementia in public service organizations a system for creating and sharing organization knowledge is essential, but this system may include components of various schools. The wise executive should consider the work of Earl with a view to determining which schools are most applicable to his or her organization. The Honeywell case demonstrates the value of considering a blended system. That said, if resource limitations only permit the pilot or implementation of a single system, then this research suggests the most advantageous school for the public service is the organizational school.

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