

# Preface

## TOWARD AN UNDERSTANDING OF ORGANIZATIONAL MEMORIES

### The Challenge

Much has been written about how organizations create and exchange knowledge to achieve a competitive advantage. To date most researchers have concentrated on the present and how organizational leaders may use knowledge to create value today. This book builds on the many great works in the knowledge management domain; however, it is unique in that the focus will be on what leaders should be doing now (or soon) to ensure the next generation of organizational leaders *know what they knew*.

The following is a real-world example of why this area of research is important; there are many more reasons articulated in the pages ahead. During an interview on CBS News on September 11, 2006, New York Fire Department Deputy Fire Chief John Norman described the unfathomable loss of life of the Department's Special Operations Command five years earlier. On that tragic day, September 11, 2001, Special Operations Command lost 95 men – totaling 1600 years of experience. This is simply unimaginable when one considers this specialized unit pioneered techniques for urban rescue and terrorist attacks. Surely, it would be impossible to reconstitute the unique and vital knowledge of these brave men. Au contraire, Norman's team proved that they had plans in place to quickly rebuild their team and once again become the best in world. Five years later the knowledge loss was virtually unnoticeable as the team responded to 50 calls (Pitts, 2006).

This story is not meant to demean the heartbreaking loss of very brave men, but rather it is to commemorate the outstanding leadership, courage, and culture of a team that would not give up. Fortunately, most organizations do not have to suffer the tragic loss that Norman described, but perhaps we can learn from their tragedy. Virtually all organizations must deal with organizational memory loss to varying degrees. Could your organization rebuild from such devastation?

Regrettably, organizational memory loss is not new, consider:

*One horrible day 1,600 years ago, the wisdom of many centuries went up in flames. The great library in Alexandria burned down, a catastrophe at the time and a symbol for all ages of the vulnerability of human knowledge. The tragedy forced scholars to grope to reconstruct a grand literature and science that once lay neatly cataloged in scrolls.* (E. Linden, 1991)

The message is clear; organizations must develop a strategy to maintain the intellectual capital that makes them unique. To be sure, most organizations cannot capture all of their tacit and explicit knowledge; however, that is not necessary and perhaps not even desirable. Rather organizational leaders must put in place the tools and techniques to ensure that mission critical knowledge is maintained for the next generation.

The term *organizational memory* is used to describe the preservation of enterprise knowledge – it is equally applicable to public, private, or not-for-profit organizations. As is often the case when the business and academic worlds converge, there is no consensus of the exact meaning of the term organizational memory. Many executives intuitively understand the term, though, few agree on the exact definition.

To begin the debate, the following definition was included in the call for chapters for this book: “Organizational memory is the body of knowledge, past, present, and future, necessary to achieve the strategic objectives of an organization. Enabled by technology, leadership, and culture, organizational memories include repositories of artifacts, communities of people, and organizational knowledge sharing processes, which focus on achieving the organizational vision.” Many other definitions are included in the chapters ahead; however, we need not worry about the lack of consensus, but rather, on the solution to the organization woe.

## Organizational Memory Loss

The premise of this book is that, in general, building organizational memories creates a sustainable competitive advantage. More specifically, I argue that if executives know what their organizations knew in the past, they will be better prepared to make well-informed decisions. In turn, these knowledge-based decisions will ensure the organization is better at whatever it is that it does. In short, understanding the past will help guide organizations into the future.

So why is it that organizations “forget what they knew”? Perhaps if we can answer this question we will, collectively, be more capable of building organizational memories to aid future leaders. There are a variety of issues that contribute to this organizational malady, many of which are considered in detail in the chapters ahead. However, it seems prudent to consider how the tenets of organizational forgetting make possible the building of organizational memories. The literature is rich in this domain and the scope of brief introduction precludes an extensive review – for a more detailed review consider the works of de Holan & Phillips, 2004; Govindarajan & Trimble, 2006 and Kwiatkowski, Duncan, & Shimmin, 2006. With a view to building a foundation from which we may examine organizational memories, this terse review will focus on two of the four components of organizational forgetting articulated by Pablo de Holan and his colleagues (de Holan, Phillips, & Lawrence, 2004).

According to de Holan et al. (2004), there are two modes of forgetting, *intentional* or *accidental*. Likewise, they suggest there are two sources of knowledge, *from existing stock* and *newly innovated*. Combining the two premises, results in matrix that describes the four categories of organizational forgetting that de Holan et al. (2004) discovered in their research. The four quadrants of this matrix provide an

Table 1. Forms of organizational forgetting (de Holan et al., 2004, 47)

<i>Source of Knowledge</i>	From Existing Stock	<b><i>Memory Decay</i></b>	<b><i>Unlearning</i></b>
	Newly Innovated	<b><i>Failure to Capture</i></b>	<b><i>Avoiding Bad Habits</i></b>
		Accidental	Intentional
		<i>Mode of Forgetting</i>	

excellent framework to consider how managers may wish to consider the application of organizational forgetting. For our purposes the *accidental mode* will be of most interest.

*Memory decay* is the accidental loss of existing organizational knowledge. To better understand the implications, it may be worth reviewing what we mean by the term knowledge. One of the most accepted definitions of *knowledge* is the one proposed by Davenport and Prusak in their seminal work *Working Knowledge: How Organizations Manage What they Know*, “Knowledge is a fluid mix of framed experience, values, contextual information, expert insight that provides a framework for evaluating and incorporating new experiences and information” (1998, 5). From an organizational point of view, managers must consider the impact or consequences of failing to maintain the existing store of experience, values, contextual information, and expert insight.

As Davenport and Prusak so eloquently remind us, “In organizations, it [knowledge] often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms” (1998, 5). The implication of their suggestion is that we must consider both the explicit and tacit forms of knowledge that may be accidentally forgotten. In other words, this is not simply an exercise in trying to codify all existing knowledge. Perhaps one of the best examples of memory decay is the finding that the National Aeronautics and Space Administration (NASA) have *lost* the knowledge necessary to travel to the moon. It appears that NASA lost the only set of blueprints for a critical component of the rocket used to carry astronauts to the moon. However, the loss of this explicit knowledge is not the only problem as some observers suggest that even if NASA had the codified knowledge to build another rocket, no one possesses the tacit knowledge necessary to fly the Saturn rocket (Petch, 2001).

In his book “Lost Knowledge” author David DeLong discusses the drivers of lost knowledge and suggests that NASA’s loss may have been the result of an aging population and the complexity of their knowledge (2004). Clearly, the former was part of the problem in the moon example as most of the engineers, scientists, and indeed astronauts involved in the 1960s and 1970s Apollo project have long since retired. Managers must start looking forward rather than backwards. Of course, there will be retirements – there will also be deaths, terminations, transfers, and a variety of other reasons for employees and their knowledge departing. Although the spike in retirements associated with the baby boomers is making executives take notice, the reality is not a new problem, nor is it a challenge that will diminish in the future. In terms of building organizational memories we should consider the *future value*, positive or negative, of forgetting what was known.

Described as “failing to incorporate new knowledge into the broader organizational memory,” *failure to capture* is the second category of accidental organizational forgetting (de Holan et al., 2004, 48). Much like memory decay, this is an unintentional act and once managers are aware of the consequences of not capturing the knowledge then steps may be taken to remedy the situation. To a large degree, the solution to both the memory decay and failure to capture challenges lies in understanding the enablers of organizational memories and developing the processes to eliminate the accidental forgetting that is common place in many organizations – this is the focus of this book.

## Information Anxiety

As important as accidental forgetting may be, it is not the only reason executives should consider building organizational memories. A separate, but sometimes related, organizational ailment is information anxiety. The broad issue of information anxiety and its effects on individuals and organizations has been studied since at least 1605. Possibly the first mention of this challenge was in Sir Francis Bacon’s book entitled “The Advancement of Learning” (Bacon, 1915). It was nearly 400 years until the term information anxiety emerged in the popular press as the title of Richard Wurman’s best-selling book

(1989). Wurman defined *Information Anxiety* as “the black hole between data and knowledge,” a definition that attracted the attention of many business leaders as many were struggling with the challenges of organizational memory loss.

According to Wurman, the five components of information anxiety are:

1. Not understanding information
2. Feeling overwhelmed by the amount of information to be understood
3. Not knowing if certain information exists
4. Not knowing where to find information
5. Knowing exactly where to find the information, but not having the key to access it (Wurman, 1989, p. 44)

Other research supports Wurman’s general construct, for example, the authors of Gartner Research’s Information Overload Survey concluded there are four information issues affecting competition: siloed information; too much information; un-indexed information; and ineffective searching procedures (A. Linden, Ball, Arevalo, & Haley, 2002). In a second report, Linden suggests there are seven drivers of information overload: quantity; relevance; redundancy; information illiteracy; unqualified information; distraction by the obvious and the glossy; and business models struggling (A. Linden, 2001). Kirsh (2000) related four causes of what he calls *cognitive overload*, which are too much information supply, too much information demand, and the need to deal with multi-tasking and interruption, and the inadequate workplace infrastructure to help reduce metacognition.

Two empirical studies linked Wurman’s concept of information anxiety to organizational memory loss (Allison, 2006; Girard, 2005a). In both cases the findings were similar, the study respondents reported *Accessing Information*, Wurman’s latter category, as the most troubling component of information anxiety. In other words, the respondents knew exactly where to find a particular piece of information but they were unable to access it. In terms of building organizational memories this finding is extremely significant. There is little sense investing in organizational memory systems if the repositories of artifacts, communities of people, and organizational knowledge sharing processes are not available to those who need them most.

## Enterprise Dementia

When the two closely related components of *Information Anxiety* and *Organizational Memory Loss* coexist in an organization, the result is *Enterprise Dementia*. The convergence of these debilitating conditions is often apparent in organizations which have undergone downsizing, reorganization, or other major human capital or structural changes. Common to many of these organizations are brittle organizational structures with little deliberate redundancy. For a more detailed explanation of the phenomenon see Girard, 2005b, 2006.

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 studies, completed by experts in the field, suggest that the implementation of a knowledge management program did not result in significantly less information overload (A. Linden et al., 2002; Parlyby, 2000). A KPMG study found that 65% of respondents with a knowledge management program suffered from information overload whilst 69% of respondents without a knowledge management program suffered from information overload – hardly the vast improvement promised by so many gurus. The Gartner Research study actually reported a 50% increase in information overload in knowledge management enabled organizations (A. Linden et al., 2002).

Our brief analysis of enterprise dementia and its subcomponents of organizational memory loss and information anxiety highlight the requirement for action. This review reinforces the need for executives to consider how they can best preserve their organizations knowledge, in easily accessible manner, with a view to eliminating enterprise dementia. In the following section, there is an overview of the chapters penned by leading researchers and practitioners in the field. Each chapter adds to the body of knowledge in the organizational memory domain and offers organizational leaders actionable words of wisdom.

## The Wisdom of Many

This book is particularly unique in several distinct ways. First, this is one of the very first academic collections to consider what leaders should be doing today to ensure the preservation of intellectual capital for the next generation. Second, the book considers organizational memories in the broadest possible way. To be sure, some will question the breadth and depth of the domain as articulated by the authors. Third, this book includes chapters from a diverse group of interested parties; this diversity is geographic, linguistic, professional, and experiential.

The book is organized into 15 chapters based on our definition of organizational memories. The first five chapters consider the enablers of organizational memories, specifically technology, leadership, and culture. The next five chapters focus on the components of organizational memories, which include repositories of artifacts, communities of people, and organizational knowledge sharing processes. The final five chapters examine organizational memories in action or more specifically how executives may use the enablers and components to achieve their organizational vision.

### Section I: The Enablers of Organizational Memories

In **Chapter I**, Peter Stoyko describes how organizational culture is both a “vessel” for preserving organizational memory and a force that conditions the way organizational memory is managed by other means. Stoyko argues that the goal of managers should be the creation of a learning-oriented culture while avoiding the politicization of culture.

In **Chapter II**, Nick Bowersox suggests business practices over the past decade have been tainted with corporate restructuring strategies such as downsizing, reorganizations, and job redesigns. With the hopes of increasing efficiency, gaining productivity, and reducing costs, many companies have participated in such efforts. He explores the paradoxical relationship between downsizing (brain-drain) and building organizational memory (brain-gain).

In **Chapter III**, Prescott Ensign and Nicholas Robinson argue that a trusting corporate culture predicated on values that emphasize sharing and encourage interactions amongst stakeholders at all levels spawns knowledge sharing activities and leads to the development of robust organizational memory reserves. Prescott and Nicholas demonstrate that having the proper systems and processes in place and fostering a culture that values sharing should help organizations to develop and use latent knowledge reserves.

In **Chapter IV**, Jerry Westfall discusses a revision of the SECI model originally based on Japanese organizational culture into a model based on American organizational culture. Jerry suggests that by converting the model to a culturally relevant one that it can be better used as a foundation for understanding organizational knowledge transfer thereby improving organizational memories.

In **Chapter V**, Parissa Haghirian explores a recent surge in empirical research surrounding knowledge transfer within multinational corporations. Parissa suggests cultural aspects involved in the transfer and communication of corporate knowledge within multinational corporations seem to have been overlooked. In attempt to fill the gap, Parissa presents a comprehensive intercultural knowledge transfer model and



identifies which aspects of national culture hinder and which aspects foster an effective transfer of knowledge.

## Section II: The Components of Organizational Memories

In **Chapter VI**, Patrice Dunckley and Suzanne Roff-Wexley provide practical techniques that individuals and organizations can use to maximize knowledge transfer efforts. They offer easily-executable solutions that leaders can teach to fill the gaps that often go unnoticed. Influenced by sense-making, storytelling, psychology, and visual mapping, Patrice and Suzanne offer tools and provide coaching for using the tools throughout the chapter.

In **Chapter VII**, Haris Papoutsakis explains how *Knowledge Sharing Networks* play an important role in preserving organizational memory by supporting the flow of organizational knowledge within a firm. Haris demonstrates how the use of groupware permits “anytime, anyplace” collaboration within the organization.

In **Chapter VIII**, Raul Abril and Ralf Müller argue that case study research is appropriate for developing lessons learned and that an inductive methodology can be used to generate hypotheses. These hypotheses are validated through an analysis of their *Goodness of Fit* into learning related business questions. Raul and Ralf argue that a common understanding should be achieved before organizational learning influences decisions and/or actions.

In **Chapter IX**, Jerry Westfall discusses an employee’s ability to remember what they knew or have learned due to training presentations. Jerry is specifically concerned with the transition from the externalization phase to the combination phase of the SECI model. The motivation is to design explicit training materials that enhance employee recall and lead to overall improvement of our organizations.

In **Chapter X**, María de los A. Martín and Luis Olsina, articulate a case-based organizational memory ontology to support better decision making. The goal of the high-level ontology is to support organizational knowledge exchange with semantic power, and facilitate the reuse, interoperability and automatic processing by agents.

In **Chapter XI**, Juha Kettunen analyses how strategic management is integrated with budgeting in cities using the Balanced Scorecard approach. Juha shows how the electronic collaborative technologies can support strategic planning, implementation and preservation of organizational knowledge.

## Section III: Organizational Memories in Action

In **Chapter XII**, Kimiz Dalkir reviews three case studies that illustrate how organizational memories can be created, preserved, and made available for future reuse in NPOs. Kimiz suggests a proposed typology that can be used to characterize organizational memory models and systems that are best suited to different types of NPOs, which will vary with respect to main features such as organizational maturity, size, and complexity.

In **Chapter XIII**, Susan McIntyre presents the case study of a Canadian government meta-organizational collaborative initiative. An intentional knowledge management strategy has been instrumental in organizational learning, resulting in a knowledge base for a collective organizational memory. Susan describes the ongoing challenges being addressed by the strategy.

In **Chapter XIV**, David and Alex Bennet begin with a brief discussion of the basic concepts related to the unconscious life of an organization, then address specific aspects of knowledge, learning, and memory, developing a language and framework for comprehending their application to organizations. Organizational memory is then considered in light of a rapidly changing, uncertain environment.

In **Chapter XV**, Michael Sutton introduces the research domain of knowledge management educational programs and issues associated with the preservation of knowledge about these programs. Sutton concludes with an imperative suggesting the critical need to immediately collect and preserve all significant knowledge artifacts comprising curriculum, courses, and instruction associated with past, current, and future knowledge management educational programs.

## REFERENCES

- Abril, R. M., & Müller, R. (2009). Lessons Learned As Organizational Project Memories. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Allison, M. P. (2006). *The effects of quality improvement high-performance team membership on information anxiety*. Unpublished Ph.D., Touro University International, United States -- California.
- Bacon, F. (1915). *The advancement of learning*. London: Dent.
- Bennet, D., & Bennet, A. (2009). Associative Patterning: The Unconscious Life of an Organization. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Bowersox, N. (2009). Downsizing and Building Organizational Memory: A Paradoxical Relationship Between “Brain-Drain” and “Brain-Gain”. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Dalkir, K. (2009). Organizational Memory Challenges Faced by Non-Profit Organizations. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Boston, Mass: Harvard Business School Press.
- de Holan, P. M., & Phillips, N. (2004). Remembrance of Things Past? The Dynamics of Organizational Forgetting. *Management Science*, 50(11), 1603-1613.
- de Holan, P. M., Phillips, N., & Lawrence, T. B. (2004). Managing Organizational Forgetting. (Cover story). *MIT Sloan Management Review*, 45(2), 45-51.
- DeLong, D. W. (2004). *Lost knowledge: Confronting the threat of an aging workforce*. Oxford, New York: Oxford University Press.
- Dunckley, P., & Roff-Wexley, S. (2009). Valuing a Multiplicity of Views: How to Tap Informal Networks to See the (W)hole. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Ensign, P. C., & Robinson, N. P. (2009). Effective Stakeholder Knowledge Sharing for Effective Organizational Memory. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Girard, J. P. (2005a). Combating information anxiety: A management responsibility. *Organizacijų Vadyba: Sisteminiai tyrimai*, 35(1), 65-79.
- Girard, J. P. (2005b). Taming enterprise dementia in public sector organizations. *International Journal of Public Sector Management*, 18(6), 534-545.

- Girard, J. P. (2006). Where is the Knowledge we have lost in Managers? *Journal of Knowledge Management*, 10(6), 22-38.
- Govindarajan, V., & Trimble, C. (2006). How Forgetting Leads to Innovation. *Chief Executive*, (216), 46.
- Haghirian, P. (2009). Knowledge Transfer within Multinational Corporations - An Intercultural Challenge. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Kettunen, J. (2009). The Collective Process and Memory of Strategic Management In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Kirsh, D. (2000). A few thoughts on cognitive overload. *Intellectica (Revue de l'association pour la recherche cognitive)*, 30(1), 19-51.
- Kwiatkowski, R., Duncan, D. C., & Shimmin, S. (2006). What have we forgotten -- and why? *Journal of Occupational & Organizational Psychology*, 79(2), 183-201.
- Linden, A. (2001). *Information not yet at your fingertips? Here's why.* (Research Note): Gartner Research.
- Linden, A., Ball, R., Arevalo, W., & Haley, K. (2002). *Gartner's survey on managing information* (Research Note): Gartner Research.
- Linden, E. (1991, September 23). Lost Tribes, Lost Knowledge. *Time Magazine*, 138.
- Martin, M. d. I. A., & Olsina, L. (2009). Added Value of Ontologies for Modeling an Organizational Memory. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- McIntyre, S. (2009). Creating and Sustaining Inter-Organizational Memory. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Papoutsakis, H. (2009). Organizational Knowledge Sharing Networks. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Parlby, D. (2000). *Knowledge management research report 2000*. London: KPMG Consulting.
- Petch, G. (2001). The cost of lost knowledge. Retrieved September 23, 2006, from <http://www.destinationkm.com/print/default.asp?ArticleID=513>
- Pitts, B. (2006, 11 September). FDNY: The Next Generation. *CBS News*, from <http://www.cbsnews.com/stories/2006/09/11/eveningnews/main1999146.shtml>
- Stoyko, P. (2009). Organizational Culture and The Management of Organizational Memory In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Sutton, M. (2009). A Manifesto for the Preservation of Organizational Memory Associated with the Emergence of KM Educational. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.
- Westfall, J. (2009a). Revising the SECI Model for American Organizational Culture. In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.



Westfall, J. (2009b). Will You Recall What You Knew? In J. P. Girard (Ed.), *Building Organizational Memories: Will You Know What You Knew?* Hershey, PA: IGI Global.

Wurman, R. S. (1989). *Information anxiety*. New York: Doubleday.

*John Girard*

*Minot State University, USA*

*John Girard, PhD is an associate professor at Minot State University where he is the lead professor for knowledge management. John teaches graduate and undergraduate management courses and conducts research examining the relationships existing between information anxiety, organizational memory loss, and contemporary knowledge management theories. In 2004, whilst acting as director of knowledge management at National Defence Headquarters in Ottawa, he accepted an associate professorship at Minot State University, retiring at the rank of Lieutenant-Colonel. John is an award-winning researcher who speaks regularly on the subject of knowledge management and how enterprises may reap the benefits of creating and exchanging organizational knowledge. He has spoken in the US, Canada, Europe, Asia, Africa, Australia, and South America at such events as KM World, APQC's Knowledge Management Conference, the World Congress on Intellectual Capital, KM Australia, and many others events – see [www.johngirard.net](http://www.johngirard.net).*