Chapter XIII
Creating and Sustaining Meta-Organizational Memory: A Case Study

Susan G. McIntyre
Defence R&D Canada

ABSTRACT

The case study of the Chemical, Biological, Radiological-Nuclear, and Explosives (CBRNE) Research and Technology Initiative (CRTI), a Canadian government meta-organizational collaborative initiative, is presented. Multiple federal departments and agencies have a joint responsibility for creating a knowledge base and a national memory for the purposes of protecting the country against CBRNE threats posed by terrorists. The conditions of a meta-organization present particular opportunities and challenges for organizational learning and organizational memory. Organizational learning and knowledge management theory provide the premises for addressing these issues. An intentional knowledge management strategy has been instrumental in organizational learning, resulting in a knowledge base for a collective organizational memory. Ongoing challenges are being addressed by the strategy.

INTRODUCTION

Consider the dangers and implications of organizational memory loss during a future national security event in which many organizations would have to collaborate to protect the citizens and infrastructure of a country:

After years of international harmony and no overt terrorist activity, a credible and serious threat is received. The national security community goes into high alert and wants expert advice on how to counter and respond to the potential use of weapons of mass destruction. But, after these many years of peace, the research program that had studied these threats has been terminated for lack of perceived threat. The senior scientific experts have retired and the younger scientists have shifted their focus to new domains. The
captured knowledge of the program sits somewhere in electronic file cabinets, inaccessible to the remaining subject experts, unknown to new researchers, and in danger of disappearing altogether. Operational planners and responders use their depleted knowledge as best they can to execute their plans. But they are constrained by their limited access to what was once a solid base of expertise, knowledge and understanding of the scientific and technical details of these weapons.

This is a nightmare scenario that would be disastrous and inevitably lead to unnecessary hardship for the citizens and economy of the country. When the critical knowledge was most required, it would be lost in a cloud of national dementia. There would be no time to reacquire the necessary knowledge; it would be needed immediately. Even if it were possible to respond in time, the expense of recreating what was once known would be a waste of the original investment. This deplorable situation, its associated costs and security implications would be disastrous for the country. It is therefore, at the very least, a civil responsibility to ensure that an organizational knowledge and information strategy exists to ensure the long-term access and use of the knowledge created by the original investment.

Although such a scenario of memory loss can be excruciatingly familiar to a single research or response organization, the risk of occurrence increases exponentially when such a research program is shared across organizations. When multiple organizations collaborate in a trust-based relationship to achieve mutual objectives, but without clear ownership of results and outputs, the responsibility for organizational memory is much more tenuous. Meta-organizations, or organizations whose members are other organizations, have additional challenges in ensuring that memory loss does not occur to the detriment of their collective constituents.

The following chapter will present a case study of a Canadian government meta-organizational collaborative initiative. In this case, multiple departments and agencies have a joint responsibility for creating a knowledge base and a national memory for the purposes of protecting the country against the insidious threats posed by terrorist aspirations. It will examine how the conditions of a meta-organization present particular opportunities and challenges for organizational learning and organizational memory. It will describe how a knowledge management strategy has been instrumental in organizational learning, resulting in a knowledge base for a collective organizational memory. Challenges and potential solutions will be shared as the initiative moves into the future.

The issues to be explored in this case study are:

- Is an organization which is comprised of other organizations able to be successful in organizational learning?
- How can an organizational memory be created to protect Canada from the potential scenario described above?
- What strategies might be engaged to address these issues?

**ISSUES, CONTROVERSIES, PROBLEMS**

**Organization Learning, Memory and Knowledge Management**

Organizational memory can only develop from organizational learning. Memory and learning must be inevitably linked. Stein and Zwass (1995, p.95) defined organizational memory as “a means by which knowledge from the past is brought to bear on present activities, thus resulting in increased levels of effectiveness for the organization.” Even from their specific information technology viewpoint, Stein and Zwass recognized that memory is much more than a storehouse of information.