

## A FRAMEWORK FOR MANAGING KNOWLEDGE GAPS

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**Abstract.** This article provides a framework for managing knowledge gaps in a decision-making context. Understanding the concept of managing knowledge gaps is harder than understanding the concept of managing the knowledge, which is more tangible. Such a task is made simpler, however, by acknowledging the different sets of skills needed, allowing organisations to allocate, develop, or exercise appropriate processes (within recognised frameworks of content, strategy and infrastructure). Importantly, the adoption of a common framework, while not necessarily changing how business is conducted, allows knowledge managers to communicate clearly, removing ambiguity that may occur when using natural language. After discussing the contextual issues, this paper discusses the characteristics of content gaps, ways to express these gaps, ways to express the strategy gaps, and ways to express the infrastructure gaps. Finally, an example is presented in a commercial context.

### INTRODUCTION

Knowledge management is a burgeoning field which, thanks to established practices, is relatively straightforward. Unfortunately, gaps will distort the validity of an enterprise's knowledge, and management of these holes is currently conceptually more difficult than management of the knowledge itself.

A key to management is to define and measure the appropriate entities. This paper provides a framework for managing knowledge gaps, one that can be used to provide definition.

A broad literature search revealed extremely little on frameworks and terminology; little enough that the development of a useful framework can be considered a greenfield activity. Any discussions on knowledge gaps are usually at the macro level, discussing the differences in the general knowledge levels between the 'haves' and 'have nots' (however that may be defined in the context of the discussion).

The Australian Standards [2] and Australian Defence Force (ADF) Doctrine [4] embody collective wisdom on knowledge management. The doctrine also provides some insight into managing the gaps from a procedural perspective. However, any current discussions are distorted by the use and abuse of natural language—proponents cannot agree on the meaning and scope of terminology.

Haider [8] proposed a taxonomy based on categories of knowledge (physical capital, intellectual capital, relationship management, social capital, and cultural capital), although this is applied in the context of 'organizational knowledge'. Braunstein [7] lectures on knowledge gaps within the framework of exploitation and exploration.

Both Haider's and Braunstein's approaches are not incompatible with the framework described in the paper. Haider's taxonomical view is orthogonal, while the broad approach of Braunstein is refined by this paper's proposal.

The framework herein uses content, strategy and infrastructure to support a wide range of uses, not just in terms of those organisations that want to enrich their own knowledge, but also for those organisations and entities that act as knowledge providers for a broader community. Nevertheless, prior to any meaningful discussion, knowledge

gap management must be placed in the proper context, that of knowledge management, information and decision making (command and control). (In a military context, 'decision making' is a significant part of the 'command and control (C2)' function and the terms 'decision-maker' and 'command' (or 'commander') can be used interchangeably in this article.)

After discussing the contextual issues, this paper discusses the characteristics of content gaps, ways to express these gaps, ways to express the strategy gaps and ways to express the infrastructure gaps. Finally, an example is presented in a commercial context.

### THE KNOWLEDGE MANAGEMENT CONTEXT

Before discussing the management of knowledge gaps, proponents must understand what knowledge management is, and the importance of the contextual environment.

As stated at the Canadian Royal Roads University website [1]: 'Knowledge management (KM) is a relatively new term for a very old challenge. KM supports knowledge capture, creation, sharing, storage, retrieval, and applying this knowledge to progress towards organizational, community, or personal goals. We use KM strategies, perspectives, or tools to help with real-life problems and opportunities such as innovation, communications, decision support, and succession planning.'

The Australian Standard [2] acknowledges two principal benefits of undertaking knowledge management: to improve productivity and organisational efficiency, and to promote innovation.

Knowledge gap management (KGM) should be viewed as a adjunct to knowledge management (KM). KGM can be linked to decision-making, innovation and succession planning; the primary benefit of KGM is to ensure that enough knowledge is available for the effective conduct of a business or operation.

### Environment

Any enterprise (and hence decision making) is conducted in some contextual environment; which may be defined and understood differently under different circumstances. Definition of this environment is very important in defining the bounds of any knowledge management system; the

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