Chapter 27 Evidence-Based Best Practices Collections

Forrest Shull

Fraunhofer Center for Experimental Software Engineering, USA

Raimund Feldmann

Fraunhofer Center for Experimental Software Engineering, USA

Michelle Shaw

Fraunhofer Center for Experimental Software Engineering, USA

Michelle Lambert

Consultant

Category: Social Aspects of Knowledge Management

INTRODUCTION

For capturing and transferring knowledge between different projects and organizations, the concept of a *Best Practice* is commonly used. A similar but more general concept for knowledge capturing is often referred to as a *Lesson Learned*. Both best practices and lessons learned are frequently organized in the form of knowledge collections. Such collections exist in many forms and flavours: From simple notes on a white board, to paper file collections on a shelf, to electronic versions filed

DOI: 10.4018/978-1-59904-931-1.ch026

in a common folder or shared drive, to systematically archived and standardized versions in experience and databases, or even specific knowledge management systems.

In the past few decades, many organizations have invested much time and effort in such specific knowledge collections (e.g., databases, experience repositories) for best practices and/or lessons learned. The driving force behind all these activities is to disseminate knowledge about proven solutions to their workforce. Ultimately, the goal is to avoid mistakes and improve the overall workflow and processes to possibly save money and gain a competitive advantage.

Although originally such collections were confined to a single organization, lately, portal solutions and online repositories that draw knowledge from across organizations have become more

popular. These wider-scale systems need to carefully organize and contextualize the information they offer, so as to offer the most relevant content and thereby encourage users to actively apply the practices and lesson learned. Supplying evidence about successful applications of the best practices and lessons learned has become a crucial success factor for such portal-based collections. A simple best practice / lesson learned listing, without any supporting evidence, does not encourage decision makers to use the collection as a source of valuable information. Consequently, collections without detailed application context and evidence descriptions often fail to promote the wide-spread use and adoption of the offered content, and end up as "data cemeteries," to which information is written but rarely read.

BACKGROUND

Senge (1995) identifies knowledge as the fourth factor of production and one of the most important assets for any kind of organization, independent of its domain or products. As a result, each organization should strive to continuously learn and improve, by identifying its knowledge assets and systematically collecting, organizing and disseminating them. According to Garvin (1998, pp. 52–53) the building blocks of such learning organizations are "systematic problem solving, experimentation with new approaches, learning from their own experience and past history, learning from the experiences and best practices of others, and transferring knowledge quickly and efficiently throughout the organization." In this list, best practices are explicitly mentioned as one method of knowledge documentation and transfer, especially over organizational boarders. To achieve these goals, public collections of such best practices (e.g., in the form of web-portals) are in demand.

A best practice is commonly understood to be a well-proven, repeatable, and established technique, method, tool, process, or activity that is more certain in delivering the desired results. According to the American Society of Quality, a best practice is "a superior method or innovative practice that contributes to the improved performance of an organization, usually recognized as 'best' by other peer organizations". These descriptions indicate that a best practice typically has been used by a large number of people or organizations and / or over a long time, with significant results that are clearly superior over other practices. A lesson learned, in contrast, usually consists of documentation of a one-time event and hence, is often missing a solid understanding of the background and its foundation. Ideally, the repeated successful demonstration of a lesson learned will eventually produce a best practice.

Because of the uncertain and varying definitions of the term "best practice," some authors, such as Harrison (2004), advocate "restricting use of the term best practice" and suggest the use of terms like "effective practice" or "good practice" instead. This nomenclature also addresses the fact that neither a best practice nor a lesson learned can always be seen as a silver bullet. Sometimes, different best practices can even seem to be conflicting. (For example, in the software development domain, both agile approaches and process-centric approaches have been advocated as "best" practices although these approaches are at opposite ends of the spectrum concerning how formally processes are defined.) Such seeming contradictions are due to the fact that any practice often results in improved performance in only some contexts, while the same practice may be inappropriate or even harmful in other contexts. Hence, unwanted and sometimes even hazardous outcomes may occur when a best practice is applied in the wrong context due to missing information in the description.

6 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/evidence-based-best-practices-collections/48978

Related Content

Building Successful Knowledge Cities in the Context of the Knowledge-Based Economy: A Modern Strategic Framework

Emmanouil Ergazakis, Kostas Ergazakisand Kostas Metaxiotis (2010). *Knowledge-Based Development for Cities and Societies: Integrated Multi-Level Approaches (pp. 17-41).*

www.irma-international.org/chapter/building-successful-knowledge-cities-context/41683

Perceived Innovative Teaching Procedures in Higher Education From Students' Perspectives From a Sentiment Analysis Approach

Ernesto D'Avanzo, Miltiadis Demetrios Lytras, Jose Picatoste, Isabel Novo-Cortiand Paola Adinolfi (2018). Enhancing Knowledge Discovery and Innovation in the Digital Era (pp. 126-147).

www.irma-international.org/chapter/perceived-innovative-teaching-procedures-in-higher-education-from-students-perspectives-from-a-sentiment-analysis-approach/196508

Document Search Practices

Karen L. Corral, Ryan C. LaBrieand Robert D. St.Louis (2008). *Knowledge Management: Concepts, Methodologies, Tools, and Applications (pp. 1464-1472).*

www.irma-international.org/chapter/document-search-practices/25191

Knowledge Management in the Dark: The Role of Shadow IT in Practices in Manufacturing

Shahper Richter, Lena Waizenegger, Melanie Steinhueserand Alexander Richter (2019). *International Journal of Knowledge Management (pp. 1-19).*

www.irma-international.org/article/knowledge-management-in-the-dark/225474

Emphasizing User Participation in Business Processes

Giorgio Bruno (2014). *International Journal of Knowledge-Based Organizations (pp. 8-21)*. www.irma-international.org/article/emphasizing-user-participation-in-business-processes/117731