



## **Chapter XV**

# **How Information Technologies Can Help Build and Sustain an Organization's CoP: Spanning the Socio-Technical Divide?**

Laurence Lock Lee  
Computer Sciences Corporation, Australia

Mark Neff  
Computer Sciences Corporation, USA

## **ABSTRACT**

*Communities of Practice (CoPs) are seen as a primary vehicle for knowledge sharing across large and disparate organizations. It is therefore expected that technology will play a critical role in enabling global CoPs. The usefulness of Information Technologies (IT) to support CoP activity in two large, but quite different, global organizations is analysed and common themes developed. BHP Billiton is one of the world's largest diversified resource companies, with a strong industrial heritage and a mix of blue and white collar workers and levels of IT literacy. CSC is one the world's leading IT service providers, with a highly IT literate staff and a relatively*

*sophisticated IT support environment. Both organizations could be considered early adopters of the CoP concept. This chapter tracks their evolution and the lessons learned along the way. The common themes arising from comparing and contrasting these two experiences mostly reflect the socio-technical challenges faced when enabling CoPs by the use of IT. In both organizations, the adoption of the newer collaborative tools is slower than anticipated, with the tried and tested face-to-face, teleconferencing and e-mail alive and well. The rule of people first, technology second is reinforced in both organizations. Technology adoption was far more successful as a response to CoP demand than a technology push. Where technologies are deployed, the level and degree of support was critical. The commitment of CoPs to a particular tool is fragile and easily lost through inconsistent performance of the technology. As well as facilitating CoPs, IT also plays an important role in developing measures and metrics for supporting CoPs as a value adding business resource. The ability to digitally track CoP activity provides an additional value-adding role for IT. While the usefulness of IT to support CoPs has largely been oversold in the past, BHP Billiton and CSC are two organizations that have persevered and learned from their respective experiences, to the extent that IT is now playing a key role in sustaining healthy and valuable CoP programmes.*

## INTRODUCTION

Communities of Practice (CoPs), as effective vehicles for knowledge sharing, are fast becoming the cornerstone of Knowledge Management (KM) programmes around the world (Wenger & Snyder, 2000). The majority of CoP “early adopters” are global organizations looking to leverage their knowledge across widely distributed organizations. With geographical separation comes the need to use technology to sustain contacts within the communities, in many cases, a “necessary evil”. The human sensitivities associated with CoPs are often not well respected by the current class of collaborative IT systems. What works and what does not will often be a case of trial and error. While the heavy use of IT is not a necessary pre-condition for successful CoPs, there is sufficient evidence now that those organizations with successful CoP programmes will make better use of technology than those that do not. Leading organizations like Buckman Laboratories, BP, the World Bank, IBM, Schlumberger and Xerox all make effective use of IT systems to support their CoPs (Collison & Parcell, 2001; Edmundson, 2001; Lesser & Storck, 2001; Fulmer, 2000; Pan, 1998).

This chapter describes the experiences of two “CoP early adopter” companies in BHP Billiton (BHPB) and Computer Sciences Corporation (CSC).

17 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/information-technologies-can-help-build/25432](http://www.igi-global.com/chapter/information-technologies-can-help-build/25432)

## Related Content

---

### Expert Group Knowledge Triggers: When Knowledge Surfaces

Hanna Dreyer, Gerald Robin Bownand Martin George Wynn (2020). *International Journal of Knowledge Management* (pp. 1-17).

[www.irma-international.org/article/expert-group-knowledge-triggers/255129](http://www.irma-international.org/article/expert-group-knowledge-triggers/255129)

### Organizational Culture for Knowledge Management Systems: A Study of Corporate Users

Andrew P. Ciganke, En Maoand Mark Srite (2008). *International Journal of Knowledge Management* (pp. 1-16).

[www.irma-international.org/article/organizational-culture-knowledge-management-systems/2717](http://www.irma-international.org/article/organizational-culture-knowledge-management-systems/2717)

### Integrating Knowledge Management with Programme Management

Jill Owen (2008). *Knowledge Management: Concepts, Methodologies, Tools, and Applications* (pp. 2605-2622).

[www.irma-international.org/chapter/integrating-knowledge-management-programme-management/25284](http://www.irma-international.org/chapter/integrating-knowledge-management-programme-management/25284)

### Challenges and Opportunities for Innovation in Teaching and Learning in an Interdisciplinary Environment

Alina Mihaela Dima (2013). *Knowledge Management Innovations for Interdisciplinary Education: Organizational Applications* (pp. 347-365).

[www.irma-international.org/chapter/challenges-opportunities-innovation-teaching-learning/68334](http://www.irma-international.org/chapter/challenges-opportunities-innovation-teaching-learning/68334)

### Negotiating Knowledge Gaps in Dispersed Knowledge Work

Rashmi H. Assudani (2011). *International Journal of Knowledge-Based Organizations* (pp. 1-21).

[www.irma-international.org/article/negotiating-knowledge-gaps-dispersed-knowledge/55598](http://www.irma-international.org/article/negotiating-knowledge-gaps-dispersed-knowledge/55598)