

## Chapter 8.20

# Knowledge Management in Smart Organizations

**Shirley Chan**

*The University of Hong Kong, Hong Kong*

### ABSTRACT

*This chapter looks at the deployment of appropriate information and communication technologies in helping smart organizations to manage knowledge. Taking a management perspective, smart organizations can be regarded as those that can make smart strategic decisions and put into practice such managerial principles as value creation, continual learning, embracing uncertainty, and empowerment. Making good decisions would involve gathering and synthesizing the appropriate knowledge—knowledge about the market, products, suppliers, customers, competitors, and others. Different schools of knowledge management theories and the related technologies will be discussed. The author hopes that understanding the knowledge management technologies and related practices would assist researchers and practitioners in gaining some insights into man-*

*aging the knowledge required for making smart decisions in organizations.*

### INTRODUCTION

The 21st century witnesses innovative organizational or work arrangements such as digital factory, virtual, or smart organizations. This kind of organization is like a network of independent production units working together, and is flexible and responsive to the challenges and uncertainty of the ever-changing business environment. The increasingly popular deployment of information and communication technologies facilitates these organizations in establishing unconventional work arrangements, networking with fellow co-workers or business partners, and seizing the opportunities as offered by the uncertainty in the current business climate.

Whether these organizations are forming innovative work arrangements, networking with stakeholders, or tapping into new opportunities, they are making strategic decisions in the Knowledge Age. The common thread running through such activities is knowledge—the ability to find, use, store, share, and retrieve the relevant organizational knowledge to make the right move and gain a competitive edge.

The term “smart organization” is used for organizations that are knowledge-driven, interconnected, dynamically adaptive to new organizational forms and practices, learning as well as agile in their ability to create and exploit the opportunities offered by the new economy (Filos & Banahan, 2000).

This chapter focuses on the knowledge sharing, network, and management in smart organizations. It will look closely at the management aspects of smart organizations and how knowledge management fits into the overall organizational management. Taking a management-oriented approach, the notion “smart organizations” appears to be originated from the book *Smart Organisation: Creating Value through Strategic R&D* (Matheson & Matheson, 1998). The authors consider “smart organizations” as those organizations that develop world-beating products on a continuing basis at prices that establish value leadership. They also regard “being smart” as making good decisions.

We are in the era of the Knowledge Economy. The basis of competition is “knowledge.” Mastery of the relevant, crucial, and up-to-date knowledge would enable businesses and organizations to survive well and gain a competitive edge in this age. As stated above, “being smart” means making good decisions. Making good decisions would involve gathering and synthesizing the appropriate knowledge—knowledge about the market, products, suppliers, customers, competitors, regulatory environment, and other aspects. Such knowledge, if well utilized, would facilitate

making good decisions so that the related organizations can develop world-beating products and services—befitting to be regarded as “smart organizations.”

It would therefore be imperative to look at knowledge management in the context of smart organizations. This chapter will start off by introducing to the readers the general theoretical framework and the nine principles of smart organizations as indicated by Matheson and Matheson (1998), with the focus on how knowledge could be seen as a common thread running through these nine principles. This will be followed by an elaboration of the development and theory relating to knowledge management. It will then focus on how knowledge management helps realize the potential of smart organizations by implementing each of their nine principles. The relevant knowledge management technologies will also be discussed.

## **BACKGROUND**

### **Smart Organizations**

There are different definitions of “smart organization.” Some take a broader perspective, while others may be based on a narrower context. These definitions may have some differences according to the field of approach—such as management, information technology, or human resources. A management-oriented definition of “smart organization” can be found in Matheson and Matheson (1998), which will be elaborated immediately below. This chapter focuses on knowledge management in smart organizations as seen from this management-oriented approach.

The term “smart organization” appears to be originated from the title of the book *The Smart Organisation* by David Matheson and Jim Matheson (1998). They regard smart organizations as those companies that develop world-beating

22 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/knowledge-management-smart-organizations/25352](http://www.igi-global.com/chapter/knowledge-management-smart-organizations/25352)

## Related Content

---

### Knowledge Management Systems for Emergency Preparedness: The Claremont University Consortium Experience

Murali Raman, Terry Ryan and Lorne Olfman (2006). *International Journal of Knowledge Management* (pp. 33-50).

[www.irma-international.org/article/knowledge-management-systems-emergency-preparedness/2686](http://www.irma-international.org/article/knowledge-management-systems-emergency-preparedness/2686)

### Multi-Group Moderation Analysis for Relationship between Knowledge Sharing Orientation and Business Performance

Sandeep Vijand Rayees Farooq (2014). *International Journal of Knowledge Management* (pp. 36-53).

[www.irma-international.org/article/multi-group-moderation-analysis-for-relationship-between-knowledge-sharing-orientation-and-business-performance/123397](http://www.irma-international.org/article/multi-group-moderation-analysis-for-relationship-between-knowledge-sharing-orientation-and-business-performance/123397)

### Knowledge Management in a Project Climate

Elayne Coakes, Anton Bradburn and Cathy Black (2005). *Case Studies in Knowledge Management* (pp. 130-137).

[www.irma-international.org/chapter/knowledge-management-project-climate/6168](http://www.irma-international.org/chapter/knowledge-management-project-climate/6168)

### Use of Organizational Memory Systems in a Police Organization

Denise de Cuffa, Rodrigo Kraemer and Andrea Valéria Steil (2018). *International Journal of Knowledge Management* (pp. 37-47).

[www.irma-international.org/article/use-of-organizational-memory-systems-in-a-police-organization/210685](http://www.irma-international.org/article/use-of-organizational-memory-systems-in-a-police-organization/210685)

### Knowledge Sharing: Effects of Cooperative Type and Reciprocity Level

Jaekyung Kim, Sang M. Lee and David L. Olson (2006). *International Journal of Knowledge Management* (pp. 1-16).

[www.irma-international.org/article/knowledge-sharing-effects-cooperative-type/2688](http://www.irma-international.org/article/knowledge-sharing-effects-cooperative-type/2688)