



## **Chapter XIII**

# **Transforming Small Businesses into Intelligent Enterprises through Knowledge Management**

Nory B. Jones  
University of Maine Business School, USA

Jatinder N. D. Gupta  
University of Alabama in Huntsville, USA

## **ABSTRACT**

*As small businesses struggle to survive in the face of intense competitive pressures, an emerging strategy to help them involves using knowledge management tactics to harness their intellectual capital and improve their sustainable competitive advantage. This chapter discusses the issues involved with the transformation of small businesses into intelligent enterprises via knowledge management tools and strategies. However, because a “build it and they will come” approach usually leads to failed initiatives, this chapter further addresses the issues of how small businesses can successfully incorporate adoption and diffusion theories to help them effectively transform themselves into successful learning organizations or intelligent enterprises. Finally, a case study from one small business is presented to validate some of the theories.*

## INTRODUCTION

In the last decade, the importance of knowledge as a source of sustainable competitive advantage has gained widespread acceptance. Business practitioners and academics alike recognize that what is “between the ears” (Tiwana, 2000) of their employees represents the source of creativity and innovation that nourishes and sustains the organization. Furthermore, the ability to harness the intellectual capital in an organization probably represents the most important aspect relating to the creation of an intelligent enterprise.

However, most research on the topic of knowledge management (KM) and intellectual capital has focused on larger organizations. Because small businesses account for a major portion of the total number of businesses, jobs, and growth in many world economies (Wong & Radcliff, 2000), we need to understand the impact of knowledge management on small businesses as well. We need to understand the correlation between knowledge management practices, the ability of a small business to transform itself into an intelligent enterprise and any resulting performance or competitive improvements KM may provide.

The fact that small businesses impact world economies is well documented. In the United States, The U.S. Small Business Administration’s “Small Business Economic Indicators for 1999 (2001) states, “Small businesses continued to employ more workers than large companies; they employed 68.2 million people in 1999 or 58% of the private-sector workforce.” In Australia, there are about 951,000 small businesses in the private nonagricultural sector, employing 3.1 million people (Shaper & Raar, 2001). Kolle (2001) similarly states, “SMEs are the backbone of what makes Hong Kong special in world trade.” Small and medium sized enterprises (SMEs) similarly account for a large percent of businesses and are responsible for the net job creation in many economies (Wong & Radcliffe, 2000).

However, the failure rate for small businesses is staggering. According to Dun & Bradstreet reports, “Businesses with fewer than 20 employees have only a 37% chance of surviving four years (of business) and only a 9% chance of surviving 10 years” (Holland, 1998). Why are small businesses so susceptible to failure? According to Wong & Radcliffe (2000), “SMEs must contend with challenges that are not as pressing in large organizations. First, they are susceptible to ‘resource poverty’ in technology and recruitment. They are also susceptible to external forces such as competition and changes in government regulations. They often have limited access to capital and money markets and sometimes are forced to make critical decisions without the aid of internal specialists.” In addition, if knowledge is concentrated in a few key employees, the company becomes vulnerable to resource deprivation if these people leave and take their valuable knowledge with them.

Because a “build it and they will come” approach to knowledge management usually does not work, this chapter also discusses and integrates the concepts of adoption and diffusion of innovations with knowledge management theories to help transform a small business into an intelligent enterprise. It does so by presenting the results from the study of one small business. The ultimate goal of this chapter is to provide small businesses with some consistent theories and practices that may help improve their competitiveness in a turbulent world.

10 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/transforming-small-businesses-into-intelligent/24250](http://www.igi-global.com/chapter/transforming-small-businesses-into-intelligent/24250)

## Related Content

---

### Holistic Approach to Align ICT Capabilities with Business Integration

M. Rabaey, H. Trompand K. Vandenborre (2007). *Adaptive Technologies and Business Integration: Social, Managerial and Organizational Dimensions* (pp. 160-173).

[www.irma-international.org/chapter/holistic-approach-align-ict-capabilities/4234](http://www.irma-international.org/chapter/holistic-approach-align-ict-capabilities/4234)

### Forecasting Emerging Market Indexes with Neural Networks

Steven Walczah (2004). *Neural Networks in Business Forecasting* (pp. 80-101).

[www.irma-international.org/chapter/forecasting-emerging-market-indexes-neural/27245](http://www.irma-international.org/chapter/forecasting-emerging-market-indexes-neural/27245)

### Supplier Selection by Extended TOPSIS to Obtain the Ideal Compromise Solution in Group Decision Making

Mohammad Azadfallah (2017). *International Journal of Business Analytics* (pp. 71-85).

[www.irma-international.org/article/supplier-selection-by-extended-topsis-to-obtain-the-ideal-compromise-solution-in-group-decision-making/181784](http://www.irma-international.org/article/supplier-selection-by-extended-topsis-to-obtain-the-ideal-compromise-solution-in-group-decision-making/181784)

### A Novel Approach for the Customer Segmentation Using Clustering Through Self-Organizing Map

Debaditya Barmanand Nirmalya Chowdhury (2019). *International Journal of Business Analytics* (pp. 23-45).

[www.irma-international.org/article/a-novel-approach-for-the-customer-segmentation-using-clustering-through-self-organizing-map/226971](http://www.irma-international.org/article/a-novel-approach-for-the-customer-segmentation-using-clustering-through-self-organizing-map/226971)

### A Novel Approach for the Customer Segmentation Using Clustering Through Self-Organizing Map

Debaditya Barmanand Nirmalya Chowdhury (2019). *International Journal of Business Analytics* (pp. 23-45).

[www.irma-international.org/article/a-novel-approach-for-the-customer-segmentation-using-clustering-through-self-organizing-map/226971](http://www.irma-international.org/article/a-novel-approach-for-the-customer-segmentation-using-clustering-through-self-organizing-map/226971)