5

INNOVATION MANAGEMENT IN AN AGILE ENTERPRISE

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INTRODUCTION

This chapter looks at the key role innovation must play within an enterprise faced with uncertainty in a rapidly changing global environment. To set the scene, we briefly discuss the macro-economic trends that make innovation mandatory, not a luxury. These trends lead to fundamental changes in the nature of innovation from a purely product or service focus to continuous and holistic creativity in all aspects of business. To succeed, the enterprise becomes an “innovation engine”. This demands new management skills—skills that most of you will not have learned as, even now, they are just appearing in education curricula. You will gain insight into these “new” innovation forms through some short cases that will illustrate the seven major new attributes that successful “innovation engines” exhibit. We also discuss how, as managers, you can lead your corporate culture to support continuous and agile innovation. Finally, you will learn how innovations in innovation management itself can be used to mine the know-how, experience, and creative capacity of your organization in real time while underpinning a supportive culture.
BACKGROUND

Throughout history there have been periods of dramatic societal changes driven by major technological innovations. You certainly learned at school of the agricultural revolution with the introduction of farm-tools and crop management techniques that fundamentally changed the economics, social structure, and wealth creation of whole regions. A few hundred years later, innovations in machines, transportation, and metallurgy created the industrial revolution with enormous impact on whole nations’ workers, which again triggered a tremendous creation of wealth. Then came the computer; however, this time the potential impact was different for several reasons. The underpinning technology of computers, as succinctly captured by Moore’s Law, advanced so rapidly that individuals, companies, governments, and nations have been unable to adapt to the changes thrust upon them by each new generation of computing power. Therefore, to understand the information technology revolution, it is appropriate to break down the changes of the last thirty years or so into subtly discrete disruptions.

When the computer first entered the business world in the form of mainframes with programs and data stored on cards, enterprises implemented applications that directly substituted for repetitive human tasks such as payroll management, billing, etc. The computer was principally a productivity tool. Even when the desk-top and later, lap-top models appeared, they were used primarily for speeding up existing tasks such as sales forecasting, document and presentation preparation, etc.

It wasn’t until the last decade, when computers (and other digital devices) became connected or networked and automated search techniques were developed, that a cataclysmic shift occurred, from an emphasis on productivity to that of global knowledge sharing. We are only just beginning to understand the implications and effects of this connectivity. Let’s put some numbers around it. Although it is notoriously difficult to accurately size the Internet, any estimate provides staggering statistics. According to research from Nielsen/NetRatings in February 2003, conservatively, over 580 million people worldwide had Internet access. Extrapolating data from NUA, at the time of this writing, we can expect this number to have grown to over 700 million. At the same time the information available to these Internet users is exploding with over seven million new Web pages being added daily to the several billion that already exist, many pages linking to other archived data sources (Cyerveillance, 2000). Other estimates quote fifty million independent Web sites existing at the end of 2003 (Zakon, 2004), growing at a compound rate of 200% per year (OCLC, 2003). Google claims to regularly scan 6 billion Web pages; this may only be 1% of the total of so-called “hidden pages” that exist.