Chapter I

Knowledge Management for E-Business Performance: Advancing Information Strategy to “Internet Time”

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Within the last few years, the topic of knowledge management has gathered a lot of interest in the corporate sectors. Although there is no commonly agreed upon definition of knowledge management, companies, governments, institutions and organizations are demonstrating an increasing interest in the topic. The key argument of this chapter is that most current interpretations of knowledge management are relevant to the industrial world of business of the past era. Given their origin in the ‘old world’ of business, many such interpretations of knowledge management may have serious and adverse implications for information strategy of enterprises, governments and institutions.

The discussion surfaces the key assumptions about information strategy and how they need to be considered afresh given the changing assumptions about business strategy and competitive business environment. Based on this discussion, a new perspective of knowledge management is proposed followed by suggestions for the managers to effectively deploy it in the ‘new world’ of e-business. For the purpose of this article, the focus of discussion is on e-business enterprises as most observations are already evident in such organizations. However, most of the arguments, observations and conclusions are also relevant to executives interested in information strategy and business transformation for other post-industrial organizations in the twenty-first century.
DISCONNECT BETWEEN IT EXPENDITURES AND ORGANIZATIONAL PERFORMANCE

Information strategy executives observed some significant transitions over the last quarter of the twentieth century: information technology (IT) as a lever of competitive advantage, the IT outsourcing bandwagon effect characterized by consideration of information as a ‘utility’ just like electric power or phone connection, and more recently the e-everything phenomena with the emergence of Internet and electronic commerce as key factors in business and IT strategy.

While some researchers suggested the same investments in information systems would yield different benefits in competitive advantage, others, such as the IT-economist Paul Strassmann, concluded that there is no relationship whatsoever between computer expenditures and company performance. John Seely Brown, director of Xerox Parc, observed that despite investments of more than $1 trillion in technology over two decades of this era, U.S. industry had realized little improvement in the efficiency and effectiveness of its knowledge workers. The confusion between knowledge and information has caused managers to sink billions of dollars in information technology investments that have often yielded marginal results.

The disconnect between IT expenditures and the firms’ organizational performance could be attributed to an economic transition from an era of competitive advantage based on information to one based on knowledge creation. The earlier era was characterized by relatively slow and predictable change that could be deciphered and ‘controlled’ by most formal information systems. During this period, information systems based on programmable recipes for success were able to deliver their promises of efficiency based on optimization for given business contexts. Discussing the case of organizations that were slow to adapt their strategy to changing business environment, Peter Drucker has argued that such organizations were hobbled by their past recipes of success. Archetypes of such organizations have included IBM and GM that have created historical records in terms of annual corporate losses.

Another way to understand the prevailing disconnect between information technology investments and organizational performance is to reflect upon the difference between knowledge and information. The intent of this chapter is not to offer another definition in terms of semantics, but to offer a more pragmatic perspective. More specifically, knowledge is interpreted in terms of potential for action and distinguished in the following discussion from information in terms of its more immediate link with performance. This interpretation is consistent with what the information systems philosopher and professor Charles West Churchman had observed three decades ago in his pioneering work *The Design of Inquiring Systems*: “Knowledge resides in the user and not in the collection of information…it is how the user reacts to a collection of information that matters.” More recently, Nonaka and Takeuchi, the authors of the best-seller *The Knowledge-Creating Company*, have reemphasized that only human beings can take the central role in knowledge creation. They argue that computers are merely tools, however great their information-processing capabilities may be. While information generated by computer systems is not a very rich carrier of human interpretation for potential action, knowledge resides in the user’s subjective context of action based on that information.