Chapter I

The Role of Information and Communication Technology in Competitive Intelligence

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ABSTRACT

This chapter discusses the role of ICT for competitive intelligence activities. To this end, it starts with an introduction to competitive intelligence. Next, it discusses possible uses of ICT for intelligence activities. In this discussion attention is paid to the use of the Internet, to general purpose ICT tools, to ICT tools tailored to one or more of the intelligence stages, and to business intelligence tools (data warehouses and tools to retrieve and present data in them). Finally, the chapter describes how organizations may select ICT applications to support their intelligence activities.
INTRODUCTION

Competitive Intelligence (CI) can be described as producing and processing information about the environment of an organization for strategic purposes (cf., Kahaner, 1997). To (re-) formulate their strategy, organizations need to collect and process information about their environment—about, for instance, competitors, customers, suppliers, governments, technological trends or ecological developments. Collecting and processing environmental information for strategic purposes is by no means something new. It has always been important. Without knowing what is going on in the environment, keeping the organization viable would be impossible. In fact, as Beer (1979) asserts, the “intelligence function” (scanning the environment in order to maintain the adaptability of a system) is a necessary function of any viable system. However, the issue of explicitly building and maintaining an intelligence function in an organization has only gained importance since the last few decades (cf., Hannon, 1997; Fleisher, 2001a). Due to the increasing complexity and dynamics of the environment the need to produce relevant “actionable” intelligence is increasing as well. Because of, for instance, increased global competition, (speed and impact of) political changes, and rapid technological developments (e.g., Kahaner, 1997; Cook & Cook, 2000; Fleisher & Blenkhorn, 2001) the need for information about the environment is more pressing than ever. As McDermott (in Hannon, 1997, p. 411) puts it, “Perhaps [CI] was inevitable, given the heightened competition that prevails now […].” Or, putting it more directly: “If you are in business, you need competitor intelligence” (Fuld, 1995, p. 1). At the same time, organizations are facing a huge amount of available data about the environment. The Internet, although a very useful source of environmental data, is growing so large that finding relevant information is hard. As many authors point out (e.g., Cook & Cook, 2000; Chen et al., 2002), this leads to the problem of information overload.

Organizations are thus faced with an increased pressure to produce relevant information about the environment and, at the same time, with an extremely large, ever-increasing amount of data about the environment. To deal with this problem, many organizations are explicitly structuring their intelligence activities. Many have, for instance, implemented so-called “competitive intelligence units” (see Prescott & Fleisher, 1991; Kahaner, 1997; Fuld, 2002; or Gilad, 1996, for examples). To structure the process of competitive intelligence, several authors (cf., Kahaner, 1997; Gilad & Gilad, 1988; Herring, 1991; Bernhardt, 1994; Fuld et al., 2002) propose an “intelligence cycle,” consisting of four stages:
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