Chapter 1.12
Information Technology (IT) and the Healthcare Industry: A SWOT Analysis

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ABSTRACT

The healthcare industry is under pressure to improve patient safety, operate more efficiently, reduce medical errors, and provide secure access to timely information while controlling costs, protecting patient privacy, and complying with legal guidelines. Analysts, practitioners, patients and others have concerns for the industry. Using the popular strategic analysis tool of strengths, weaknesses, opportunities, and threats analysis (SWOT), facing the healthcare industry and its adoption of information technologies (IT) are presented. Internal strengths supporting further industry investment in IT include improved patient safety, greater operational efficiency, and current investments in IT infrastructure. Internal weaknesses, however, include a lack of information system integration, user resistance to new technologies and processes, and slow adoption of IT. External opportunities including increased use of the Internet, a favorable national environment, and a growing call for industry standards are pressured by threats of legal compliance, loss of patient trust, and high cost of IT.

INTRODUCTION

The healthcare industry faces many well-recognized challenges: high cost of operations, inefficiency, inadequate safety, insufficient access

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to information, and poor financial performance. For years, many have called for a fundamental change in the way healthcare is delivered. And while there is yet no clear picture of what this change will be, many believe a paradigm shift in healthcare is imminent and that information technology (IT) is the catalyst.

Increasingly, IT is seen as a way to promote the quality, safety, and efficiency of healthcare by bringing decision support to the point of care, providing vital links and closing open loop systems, and allowing routine quality measurement to become reality. IT can not only reduce operating costs, but IT can also ensure a reduction in the number of medical errors. IT in the healthcare industry provides new opportunities to boost patient confidence and reinforce patient trust in caregivers and healthcare facilities. With health insurers feeling pressure from all directions (new regulations, consumers, rising medical costs), IT is an even more important asset for carriers (Balas, 2000).

When compared to other information intensive industries, healthcare organizations currently invest far less in IT. For many years, the healthcare industry has experienced only single digit growth in terms of IT investment (Gillette, 2004). As a result, current healthcare systems are relatively unsophisticated compared to those in industries such as banking or aviation. With the many issues and variables surrounding healthcare's IT investment, a framework for better understanding of the current situation is needed before more improvements and enhancements can result. This article draws upon a comprehensive framework from the strategic planning literature to compile and summarize the major issues facing IT and the healthcare industry.

METHODOLOGY

By categorizing issues into strengths, weaknesses, opportunities, and threats, SWOT analysis is one of the top tools and techniques used in strategic planning (see Glaister & Falshaw, 1999). SWOT assists in the identification of environmental relationships as well as the development of suitable paths for countries, organizations, or other entities to follow (Proctor, 1992). Valentin (2001) suggests SWOT analysis is the traditional means for searching for insights into ways of crafting and maintaining a fit between a business and its environment. Other researchers (see Ansoff, 1965; Porter, 1991; and Mintzberg, Ahlstrand, & Lampel, 1998) agree SWOT provides the foundation to gather and organize information to realize the desired alignment of variables or issues. By listing favorable and unfavorable internal and external issues in the four quadrants of a SWOT analysis, planners can better understand how strengths can be leveraged, realize new opportunities, and understand how weaknesses can slow progress or magnify threats. In addition, it is possible to postulate ways to overcome threats and weaknesses (e.g., Hofer & Schendel, 1978; Schnaars, 1998; Thompson & Strickland, 1998; McDonald, 1999; and Kotler, 2000).

SWOT has been used extensively to aid in understanding a variety of decisions and issues including: manufacturing location decisions (Helms, 1999); penetration strategy design for export promotions and joint ventures (Zhang & Kelvin, 1999); regional economic development (Roberts & Stimson, 1998); entrepreneurship (Helms, 2003); performance and behavior of micro-firms (Smith, 1999), and strategic planning (Khan & Al-Buarki, 1992). Hitt, Ireland, Camp, and Sexton (2001) suggest that identifying and exploiting opportunities is part of strategic planning. Thus, SWOT analysis is a useful way to profile the general environmental position of a new trend, technology, or a dynamic industry.

By using SWOT analysis, it is possible to apply strategic thinking toward the implementation of IT in healthcare. By examining the internal and external factors interacting both for and against IT in healthcare, healthcare providers and supply

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