

Chapter 1.3

The Competitive Forces Facing E-Health

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ABSTRACT

Superior access, quality, and value of healthcare services has become a national priority for healthcare to combat the exponentially increasing costs of healthcare expenditure. E-Health in its many forms and possibilities appears to offer a panacea for facilitating the necessary transformation for healthcare. While a plethora of e-health initiatives keep mushrooming both nationally and globally, there exists to date no unified system to evaluate these respective initiatives and assess their relative strengths and deficiencies in realizing superior access, quality and value of healthcare services. Our research serves to address this void. This is done by

focusing on the following three key components: 1) understanding the Web of players (regulators, payers, providers, healthcare organizations, suppliers, and last but not least patients) and how e-health can modify the interactions between these players as well as create added value healthcare services, 2) understand the competitive forces facing e-health organizations and the role of the Internet in modifying these forces, and 3) from analyzing the Web of players combined with the competitive forces for e-health organizations we develop a framework that serves to identify the key forces facing an e-health and suggestions of how such an organization can structure itself to be e-health prepared.

INTRODUCTION

E-health is a broad term that encompasses many different activities related to the use of the Internet for the delivery of healthcare service. Healthcare professionals are extending the use of the Internet to include a source of evidence-based consumer information as well as to facilitate the research of protocols for healthcare delivery, accessing laboratory and medical records, and performing second opinion consults (Sharma & Wickramasinghe, 2005; Sharma, Wickramasinghe, Xu, & Ahmed, 2006). Moreover, the Internet is being used by patients to become more knowledgeable about health practices as seen from their questions to their physicians (Gargeya & Sorrell, 2005).

Although, a relatively new term and unheard of prior to 1999, e-health has now become the latest “e-buzzword” used to characterize not only “Internet medicine,” but also virtually everything related to computers and medicine (Sharma et al., 2006; Von Lubitz & Wickramasinghe, 2006). The scope and boundary of e-health, as well as e-health organizations, is still evolving. However one can only imagine it will grow rapidly especially given that governments in both U.S. and Europe, and organizations such as WHO (World Healthcare Organization) are advocating that e-health be on the top of all healthcare agendas and an integral component of any healthcare delivery initiative (Von Lubitz et al., 2006).

Given the growth and variety of e-health initiatives, it becomes important to examine the forces affecting these initiatives and factors leading to the success of e-health. To date, little research examines metrics of measurement pertaining to e-health initiatives or their economic value. What are the forces of competition affecting e-health? Are the competitive forces constrained by external considerations? Is the issue of competition an appropriate concern for e-health? If so, what are the strong and weak competitive forces? We argue that analysis of these forces would lead us to understand the long-term sustainability of any e-health initiative.

TRADITIONAL COMPETITIVE FORCES

The starting point for understanding the competitive forces facing any e-health initiative lies in understanding the fundamentals of traditional competitive forces that impact all industries and then how the Internet as a disruptive technology has impacted these forces.

The strategy of an organization has two major components (Hendersen & Venkatraman, 1993). These are 1) formulation--making decisions regarding the mission, goals, and objectives of the organization and 2) implementation--making decisions regarding how the organization can structure itself to realize its goal and carryout specific activities. For today's healthcare organizations the goals, mission, and objectives all focus around access, quality, and value and realizing this value proposition for healthcare then becomes the key (Wickramasinghe, Fadlalla, Geisler, & Schaffer, 2005). Essentially, the goal of strategic management is to find a “fit” between the organization and its environment that maximizes its performance (Hofer, 1975). This then describes the market-based view of the firm and has been predominantly developed and pushed by the frameworks of Michael Porter. The first of Porter's famous frameworks is the generic strategies (Porter, 1980).

The use of technology must always enable or enhance the businesses objectives and strategies of the organization. This is particularly true for 21st Century organizations where many of their key operations and functions are so heavily reliant on technology and the demand for information and knowledge is so critical. A firm's relative competitive position (i.e., its ability to perform above or below the industry average is determined by its competitive advantage). Porter (1980) identified three generic strategies that impact a firm's competitive advantage. These include cost, focus, and differentiation. Furthermore, Porter himself notes that two and only two basic forms of competitive advantage typically exist:

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