Chapter XVII

Assessing E-Health

Nilmini Wickramasinghe
Illinois Institute of Technology, USA

Elie Geisler
Illinois Institute of Technology, USA

Jonathan Schaffer
The Cleveland Clinic, USA

Abstract

While healthcare is the biggest service industry on the globe, it has yet to realize the full potential of the e-business revolution in the form of e-health. This is due to many reasons, including the fact that the healthcare industry is faced with many complex challenges in trying to deliver cost-effective, high-value, accessible healthcare and has traditionally been slow to embrace new business techniques and technologies. Given that e-health to a great extent is a macro-level concern that has far reaching micro-level implications, this chapter first develops a framework to assess a country’s preparedness with respect to embracing e-health (i.e., the application of e-commerce to healthcare) and from this, an e-health preparedness grid to facilitate the assessment of any e-health initiative.
Taken together, the integrative framework and preparedness grid provide useful and necessary tools to enable successful e-health initiatives to ensue by helping country and/or organization within a country to identify and thus address areas that require further attention in order for it to undertake a successful e-health initiative.

Introduction

Technology has the potential to help solve many of the problems faced by developed and developing countries alike; from improving healthcare delivery to opening up commerce opportunities. The number of nations offering e-commerce solutions is increasing every year, and consequently the number of workplaces that have Internet connection for business activities has been rapidly growing worldwide. Table 1 provides three estimates of e-commerce forecasts. These projections clearly highlight the important role of e-commerce on the global economy. However, as the Secretary General of the United Nations notes in his forward to the e-commerce and development report (UNCTAD, 2002), “knowing that an instrument is powerful is not enough to ensure that it will be put to the best use. We need to understand how it works, and how and when it should be used … and maximize its power.”

Within the umbrella of e-commerce, one area, e-health, has yet to reach its full potential in many developed countries, let alone developing countries. Each country is positioned differently and has varying potential and preparedness regarding embracing e-commerce technologies generally and e-health in particular. Given the macro-level nature of many issues pertaining to the development of e-health (Alvarez, 2002), in order to be more effective in their e-health initiatives, it is important for countries to assess their potential, identify their relative strengths and weaknesses, and thereby develop strategies and policies to address these issues to effectively formulate and implement appropriate e-health initiatives. To do this effectively, it is valuable to have an integrative framework that enables the assessment of a country’s e-health preparedness. This chapter proposes to develop such a framework that can be applied to various countries throughout the globe and from this to generate an e-health preparedness grid. In so doing, we hope to facilitate better understanding of e-health initiatives and thus maximize their power.
Related Content

Using Key Performance Indicators to Reduce Perceived Perioperative Complexity and Improve Patient Workflow
www.irma-international.org/article/using-key-performance-indicators-to-reduce-perceived-perioperative-complexity-and-improve-patient-workflow/187045/

Nutritional Monitoring and Advising Information System for Healthcare Support
www.irma-international.org/chapter/nutritional-monitoring-advising-information-system/40669/

Predicting Patients' Use of Provider-Delivered E-Health: The Role of Facilitating Conditions
www.irma-international.org/chapter/predicting-patients-use-provider-delivered/28012/

An Interactive System for People Suffering from Cerebral Palsy
www.irma-international.org/article/an-interactive-system-for-people-suffering-from-cerebral-palsy/95930/

Mobile Healthcare Computing in the Cloud
www.irma-international.org/chapter/mobile-healthcare-computing-in-the-cloud/138431/