Chapter 5

Let’s Go Green: Towards a Taxonomy of Green Computing Enablers for Business Sustainability

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ABSTRACT

To shed light on how green computing can assist organizations in achieving improved competitive advantage and business sustainability, this chapter has two objectives. First, it aims to develop a theoretically informed taxonomy of enablers that have the potential to incentivize organizations to go green. Second, with the taxonomy as the lens of analysis, it seeks to study the adoption of green computing by two well-known technology giants, namely, Hewlett-Packard and Microsoft Corporation. The taxonomy, which was informed by the theoretical perspectives of short-termism and impression management, identifies three enablers. These include the financial enabler, the technical enabler, and the marketing enabler. Moreover, a case study method was adopted to trace the greenification journey of Hewlett-Packard and Microsoft Corporation. Contributions and implications of the study are discussed both from a theoretical point of view as well as a practical point of view.

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INTRODUCTION

The success of organizations has long been assessed solely based on corporate earnings (Laverty, 1996). At present however, an organization’s operational impact on the environment and the society has also become an important performance indicator. Riding on this paradigm shift, it has become a necessity for organizations to be both environmentally and socially responsible. This in turn can help improve their business sustainability, which refers to the ability of organizations to respond to their short-term financial needs without compromising anyone’s—the organizations themselves as well as others—ability to meet future needs (Bansal & DesJardine, 2014).

By focusing on minimizing adverse environmental and social impact, sustainable businesses seek to gain competitive business advantage. Taking a long-term view of success, they avoid decisions that increase earnings at the expense of the environment and the society. Concurrently, mainstream media outlets which are now bolstered by various social media applications, play an important role in the sustainability movement by disseminating the business practices of organizations farther and faster than ever before. Hence, organizations that refrain from sustainable practices run the risk of being strategically disadvantaged, thereby resulting in loss of customers. For example, a recent study on corporate social responsibility found that organizations that operate by protecting the interests of the society and the environment engender favorable brand attitude as well as heightened customer loyalty (Cone Communications, 2017).

Information technology represents an interesting industry to study business sustainability. On the one hand, the use of information technology has charted a meteoric rise in every sector ranging from finance and governance to disaster management and healthcare. On the other hand, the application of information technology has been coming under immense scrutiny as it contributes heavily to the global carbon footprint (Gartner, 2007; Rahman, 2016). Conceivably, information technology has become such an integral component of the modern society that it can never be abandoned completely even at the expense of becoming an environmental pollutant. The only option is to remodel it so that its adverse impact can be somewhat attenuated (Ahuja & Muthiah, 2016). This in turn calls for what is known as green computing, which refers to the practice of using information technology with little harm to the environment in particular and the society in general (Khan, Shah, & Nusratullah, 2015).
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