

Business Use of Social Media and Systemic Impact Green IT

TREO Talk Paper

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Abstract

The use of IT has some negative impact on the natural environment, which fall into three general categories. The use of IT requires energy consumption, which can be carbon-based. The manufacture of IT devices can deplete limited natural resources, such as precious metals, and the disposal of discarded IT devices can result in toxic materials in landfills. As business organizations began adopting corporate sustainability goals, many included green IT goals, notably efforts to minimize these three categories of negative environmental effects of IT. Molla et al (2008) identified five factors for Green IT: attitude, policy, practice, technology and governance.

A 2010 OECD framework suggests three levels of IT impact on the environment as direct impacts, enabling impacts, and systemic impacts. Systemic impacts include non-technological factors, such as individual behavior. A study of CSR reports from 30 IT companies that categorized the types of Green IT efforts identified in each report based on the OECD framework found relatively little efforts pertaining to systemic impacts (Deng, Ji, and Wang, 2015). Arguably, systemic impacts are increasingly important to achieving Green IT objectives as a result of several trends in business use of IT, such as practices including bring your own devices (BYOD) and cloud computing. These practices effectively minimize the institution's direct control over device acquisition and disposal, as well as energy consumption, as these decisions are now made by employees, contractors, and cloud service providers. To effect Green IT objectives, business organizations must influence the behavior of employees, contractors, and service providers. We suggest business sustainability goals require Green IT Networking, a creation of virtual communities that share common values and norms related to sustainability, methods to create and share knowledge necessary to achieving sustainability goals, and metrics or feedback to assign accountability for positive sustainable behavior.

Business leaders of organizations committed to Green IT must help shape a virtual community to support environmentally neutral IT practices, through communication of objectives, values and goals. One communication channel is the CSR report, but the primary target for these messages is the shareholder population. Communications intended to influence employees and consumers will likely require messages through social media.

Stakeholder theory suggests companies should adopt sustainability programs in response to obligations to various stakeholder communities, in addition to shareholders. A recent study of CSR from an international perspective notes that the US approach, emphasizing increased shareholder value, is influencing CSR definitions in the EU and UN, which had previously emphasized social good. Companies that communicate Green IT objectives and accomplishments only in CSR reports, without also using social media to communicate this information, are likely to silo Green IT such that limits its inclusion in sense-making, decision-making and knowledge-sharing.

Our research question asks how businesses communicate their Green IT objectives and achievements through social media, and how these messages compare with information provided in their CSR reports. Our research builds from a 2010 - 2011 three semester class project in which undergraduates sampled messages on Facebook and Twitter from selected IT companies. At that time, students found only one company used social media to communicate about its Green IT program, which was tied to an ad campaign. The use of social media, or lack of it, might suggest an exclusively cost-benefit or shareholder view of Green IT, which could inhibit third level systemic impact.