Improving Sustainable Procurement: The Role of Information Systems

Oihab Allal-Chérif, Bordeaux BEM Management School, France

ABSTRACT

Sustainability has become a central corporate concern and can determine a company’s success. The purchasing function is crucial to a firm’s sustainability policy. It drives a company’s sourcing activities and connects its internal functions to external suppliers and providers. Sustainable purchasing plays a key role in effecting a global strategy, requiring high-performance tools. Information systems can provide support services and stimulate and disseminate sustainable purchasing policies. This article combines a literature review with a qualitative study to illustrate how information systems contribute to corporate sustainable purchasing policies. Using an exploratory approach and constructivist positioning, a business-forecasting method is implemented to suggest a possible sustainable purchasing management path and a new role for information systems. A scenario is co-constructed from the responses of 12 purchasing function experts to questions about their practices and experiences, the effects of the rising wave of environmentalism, and the problems in implementing and optimizing information systems.

Keywords: Collaboration, Forecasting, Information Systems, Purchasing, Sustainability

1. INTRODUCTION

Information systems (IS) are the combination of computerized tools, human resources, and processes found in an organization to provide the right person with the right data at the right moment. IS management partially entails the ability to improve organizational performance, particularly regarding productivity (Bakos, 1987). Therefore, IS enable a leaner management of flows by reducing delays and errors, increasing reliability and responsiveness, eliminating undesirable tasks, optimizing resources, and facilitating decision making (Raymond, 2002). IS management’s strategic role in guaranteeing greater individual and collective efficiency is universally recognized (Lucas, 1975). Information and communications technology (ICT) is a pillar of corporate activity because it (1) embodies competitive advantage with its optimization of processes, introduction of a high-performance technological watch function, and improvement in knowledge management, and (2) is a tool that creates indirect competitive advantage through, for instance, the development of new killer technologies (Bernasconi, 1996).

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The idea here is that the purchasing function has a particularly significant role to play because it transforms intra-organizational information systems into integrated management programs while using the Internet and inter-organizational tools as platforms for managing supply chains and supplier relationships. Purchasing also plays a key role in companies’ overall sustainability policies and especially in ethical sourcing. Corporate responsibility implies awareness of the problems that local populations face in countries where the company wants to do business, plus a desire to help the people in question to find solutions instead of taking advantage of their unfavourable conditions to further augment corporate profitability. This is especially important given that customers are increasingly interested in the origins of the products they consume, something that strongly affects the corporate image in turn. A company that practices ethical sourcing and tries to promote good practices will be much more attractive to talented employees, investors, commercial partners, and new customers. Staff members, customer loyalty, price stability, and a good brand image should then ensure the company’s long-term survival. This study therefore focuses on the management of purchasing functions and a company’s use of information systems for sustainability purposes. The research question addressed in this article is: How can information systems contribute to corporate sustainable purchasing policies?

The article is structured as follows. The introduction presents the research question, its relevance, and the content of the article. The second section provides the theoretical foundations of the research. Purchasing management and information system management play highly strategic roles in modern companies, particularly in large multinationals because purchasing often accounts for more than half the total revenues and constitutes a main source of competitive advantage (Murtaza, Gupta, & Carroll, 2004). Information systems can be used as tactical piloting tools enabling an optimization of operational management, information flows, resource allocation, competitive and technological watching, knowledge management and sharing, internal and external collaboration, and decisional analysis (Choi & Suh, 2005). Thus, associating these two functions (IS and purchasing) creates a powerful internal coalition capable of developing processes that will advance the cause of sustainability in its economic, ecological, and social dimensions (Allal-Chérif & Favier, 2008).

2. THEORETICAL FOUNDATIONS: INFORMATION SYSTEMS SERVING THE SUSTAINABLE PURCHASING FUNCTION

Purchasing management and information system management play highly strategic roles in modern companies, particularly in large multinationals because purchasing often accounts for more than half the total revenues and constitutes a main source of competitive advantage (Murtaza, Gupta, & Carroll, 2004). Information systems can be used as tactical piloting tools enabling an optimization of operational management, information flows, resource allocation, competitive and technological watching, knowledge management and sharing, internal and external collaboration, and decisional analysis (Choi & Suh, 2005). Thus, associating these two functions (IS and purchasing) creates a powerful internal coalition capable of developing processes that will advance the cause of sustainability in its economic, ecological, and social dimensions (Allal-Chérif & Favier, 2008).

2.1. Purchasing Mutates from Cost Killing to Sustainable Value Creation

Purchasers no longer expect prices to remain just stable; they now need lower prices. The power balance has shifted because so much information is available on the web. An abun-
Bill of Services (BOS): A Managing Tool for Service Organizations
www.igi-global.com/article/bill-of-services-bos/122877?camid=4v1a

Business to Consumer E-Services: Australian Accounting Practices and their Web Sites
www.igi-global.com/chapter/business-consumer-services/43998?camid=4v1a