

Dutch SMEs' Willingness to Switch to Sustainable Production Systems: An Empirical Study

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Abstract

Small and medium sized enterprises (SMEs) are able to react very quickly to changes in the market environment due to their size and flexible governance structure (Condon, 2004; Verhees et al., 2010). Unlike large corporations, SMEs are more easily inclined to switch to and/or invest in sustainable production systems (SPSs). Such systems entail the creation of goods and services using processes and systems that eliminate waste and pollution, conserve energy and natural resources, promote economic viability, ensure safety and health conditions for workers, communities, and consumers, and achieve social and creative benefits for all working people. SPSs have become a new norm in business in response to the increasing consumer, societal, and governmental concerns (Kotler, 2011; Grittenden et al., 2011). Nowadays, an increasing number of SMEs such as farmers, restaurants, and hotels world-wide raise their incomes through the premium generated from the sale of differentiated (e.g., sustainable) food products and alternative energy-based accommodation services. On the one hand, SMEs may differentiate their produce (e.g., opt for using sustainable materials, re-used materials, recycled materials, eliminate waste and pollution, and use alternative energy sources in their production processes) to better respond to the increasing demand for healthy food, to increase their production capabilities and volume, to improve the quality aspects of their products and services' operations, to alleviate poverty, and to promote regional development initiatives. Since 1990s there has been improved access of agri-food and hospitality firms to remunerative sustainable markets worldwide (Costa Pindo, 2009; Gardetti & Torres, 2017). On the other hand, while many SMEs are leading in the implementation of sustainable and circular practices, many others lack a long-term strategic mind-set and relevant information regarding their switching to SPSs (Condon, 2004).

Despite the policy initiatives aimed to gain professionalization of the market-oriented sustainable and circular chains, Dutch agri-food firms (e.g., food cooperatives) and hospitality firms (e.g., restaurants, hotel chains) that hold leading positions in the conventional food products and services markets have concerns about potential losses of either market share or competitive position, in the case that they would pursue a differentiated (sustainable) production line (Kalogeras

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Chania, Greece 27-29 June, 2022

et al., 2005). That is, such strategic decisions have a substantial impact on performance outcomes in the long-run, have a low degree of reversibility, and entail a high degree of risk (Pennings and Garcia, 2010). A question that arises is what drives the willingness of SMEs to switch to/invest in SPSs. While the existing literature has focused on explaining the influence of SMEs characteristics and societal benefits on the propensity to switch to sustainable practices, no attention has been paid to understanding the underlying factors that drive SMEs' willingness to switch to/invest in SPSs.

This paper examines the impact of SMEs' risk perceptions, risk attitudes, market orientation, level of understanding, and characteristics on their willingness to switch to/invest in SPSs. To the best of our knowledge, this is the first empirical study that focuses on the impact of latent factors of SMEs' strategic decision making with respect to the adoption of SPSs. Recognizing the dilemma of SMEs to make such a strategic decision (to opt for a SPS) since they may be confronted with unexpected market constraints and uncertainty regarding their investment outputs (Kalogeras et al., 2012), we hypothesize that several latent factors drive their willingness to switch to/invest in (or not) SPSs (Trujillo-Barrera et al., 2016).

Using measurement scales based on the psychometric literature, we empirically examine the impact of these factors on SMEs' willingness to switch to/invest in SPSs. With data from 27 in-depth interviews and 315 personal (computer-guided interviews) with SMEs in agri-food and hospitality markets in the province of Limburg, the Netherlands, we find that the risk perception of SMEs has a negative impact on their decision to switch to/invest in SPSs, while innovativeness, market-orientation, education, age, and turnover of SMEs increase the likelihood of switching to/investing in SPSs. Yet, the importance and the magnitude of the impact of these factors differ among the SMEs in the agri-food and the hospitality markets. SMEs such as hotels and restaurants seem to be more prone to take risks and engage in SPSs rather than SMEs (e.g., farmers) in the agri-food industry.

Understanding the factors that play a crucial role in the willingness of SMEs to switch/invest in SPSs may reveal insights for policy-makers and managers in the agri-food and hospitality markets, who wish to increase the likelihood of SMEs' switching to SPSs. Hence, more informed decisions regarding the design of policies and strategies to increase the adoption of sustainable production systems can be made. For example, our results indicate that the risk perception of SMEs seems to be a barrier to the adoption organic practices. Such a barrier may be removed when SMEs receive education and training on how to evaluate, manage and mitigate the potential risks when they may opt to change their production practices. In addition, governmental agencies and public policy initiatives may facilitate SMEs by providing them with a minimum return (e.g., tax allowances) for their investment in sustainable practices during a specific time window and by doing so temporarily reduce the risk adjusted cost of capital for SMEs that make the switch to SPSs.

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3rd Symposium on Circular Economy and Sustainability
Chania, Greece 27-29 June, 2022

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