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Alternative innovation diffusion channels: The case of sustainable technologies

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ABSTRACT

This paper investigates alternative innovation diffusion channels among parent and subsidiary firms. Using the case of sustainable technologies as innovations, it examines the way/s that the interrelationship between organisations contributes to the diffusion of innovations.

The selection of sustainable and energy-efficient technologies as an example of innovation in this study is due to its current importance for the World. The 21 century has been characterised by increasing changes and advancements in technology and globalisation, resulting in substantial increases in global pollution, global warming, energy security, and fossil fuel depletion. To overcome the above issues, there have been considerable tendencies towards the adoption of sustainable and energy-efficient technologies in organisations. The diffusion of energy-efficient technologies is largely seen as a proper solution for some of the above major issues such as pollution, global warming, energy security, and fossil fuel depletion. However, research on the sources of the diffusion channels of sustainable and energy-efficient technologies in organisations is remarkably sparse. So, it is very unclear what the main diffusion channels of energy-efficient technologies in organisations are. Organizational Behaviour literature highlights the significant role of employees' involvement and organizational behaviour as essential sources of the diffusion of innovations in organizations. Following this school of thought, this study is an important attempt to better understand the role of the diffusion channels for innovations in organisations. Understanding how the diffusion of energy-efficient technologies in organisations takes place is expected to help organisations to better facilitate the adoption of such technologies in their environment and reduce some of the major issues of current century (e.g. global pollution, global warming, energy security, and fossil fuel depletion). Any attempt to facilitate the adoption of sustainable and energy-efficient technologies in organisations would also improve the performance (e.g. in terms of saving energy) and the image of the adopters of such energies and technologies (e.g. they become more attractive to those who are in favour of sustainable and energy-efficient technologies such as green and environmental societies). Using the diffusion of innovation theory, this study contributes to the literature on the above issues by identifying the main sources of diffusion channels for innovations in parent and subsidiary organisations. The findings highlight the interrelationship as a potential source and mechanism for the diffusion of sustainable and energy-efficient technology in organisations.

Keywords: Organizational behaviour, energy-efficient technology, diffusion of innovation, subsidiary and parent organisation