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OPEN INNOVATION IN THE HIGH-TECH FIRMS: EVIDENCE FROM THE BIOTECHNOLOGY INDUSTRY

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Abstract

Open innovation is based on a different knowledge landscape, with a different logic about the sources and uses of ideas. It implies that firms increasingly rely on external sources of innovation by emphasizing these ideas and resources. Recently, really good ideas are coming from outside the organization, especially in the high-tech industry. Using datasets from the UK biotechnology industry, this paper explores a firm's willingness to participate in open innovation. The results indicate that trust and IT infrastructure lead firms to participate in open innovation, while commitment and switching costs hinder participation. Although the level of knowledge for firms to share increases with the level of trust between the firms, high switching costs protect the knowledge exposure in open innovation. This research broadens the study of open innovation by applying the concept as a medium of knowledge transfer in the biotech industry.

Keywords: Commitment, IT infrastructure, knowledge transfer, open innovation, switching costs, trust