

THE IMPACT OF TECHNICAL AND SUPPLY CHAIN INTEGRATION ON INNOVATION: THE CASE OF GREEN MOTORHOMES

Firms facing environmental change respond differently to innovation pressures. Some offer entirely new products with systemic changes, others introduce products with novel components, some use both of these strategies, and some firms do neither. Moreover, some of these innovations are timely and long lived, while others are less successful, being late to market or not accepted by the market. Using an industry case study of the population of motorhome firms, we explore the determinants of innovation in a mature setting in which firms are similar in terms of size, technology, supplier access, and distribution channels. We find that supplier relationships are necessary for component innovation. We also find that technical integration, skills in both process engineering and product development, are important for systemic innovation but in different ways. Process engineering skills are a necessary but insufficient condition for systemic innovation whereas product development skills are required for timely introductions. Strong downstream relationships are necessary for long-lived innovations. To introduce both systemic and component innovation, firms require high levels of technical and supply chain integration, including close relationships with both upstream and downstream partners. Interestingly, we find that a strong downstream focus can substitute for product engineering skills, suggesting that firms may face trade offs between customer satisfaction and the speed of new model introductions.