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PATTERNS OF IT USE, SPECIALIZED INVESTMENTS AND FIRM BENEFITS IN BUYER SUPPLIER RELATIONSHIPS

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Interorganizational relationships in networks that enable organizations to leverage resources and access expertise located beyond firm boundaries are increasingly important sources of competitive advantage. Information technologies such as EDI play a significant role in enabling the creation and maintenance of buyer-supplier networks. Studies indicate that the deployment of IT in buyer-supplier relationships creates significant advantages for focal buying firms in networks (Mukhopadhyay, Kekre and Kalathur 1995). However, the benefits to supplier firms, often termed *satellites*, from participation and use of these interfacing technologies are little understood (Iacovou, Benbasat and Dexter 1995).

We draw from transaction cost theory, theories of IT use and the emerging perspective of organizations as knowledge creating entities (Nonaka 1994) to relate IT use by *satellites* to outcomes in their relationships with the focal firm. Our results indicate that the creation of specialized, non-redeployable investments in the relationship of the *satellite* with the focal firm mediate the link between IT use and benefits. These results validate the predictions of a positive association between IT use and relationship specific investments derived from economic models of interorganizational relationships (Bakos and Brynjyolfsson 1993).

We focus on two distinct patterns of IT use: IT use for *information processing* (e.g., streamlining of activities occurring across organizational boundaries aimed at increasing the efficiency of interactions) and IT use for *learning and expertise creation* (e.g., understanding the preferences of customers, sensemaking about changes in the environment). We consider two categories of relationship specific investments by suppliers in buyer-supplier relationships — supplier investments in specialized organizational processes and supplier investments in relationship specific expertise — and examine the role of these specialized investments in mediating the link between IT use and benefits. The research model used in the study is illustrated in Figure 1. The methodology combines two field methods: qualitative data gathering from semi-structured interviews and a field survey. The data were obtained from 35 interviews of managers in the distribution channel in Canada and 160 responses to a survey of supplier firms on their relationship with a large retailer.

Preliminary analyses indicate that the patterns of IT use by satellite suppliers significantly influences the nature of specialized investments in the relationship with the focal buying firm and such investments, in turn, mediate the link between IT use and benefits.

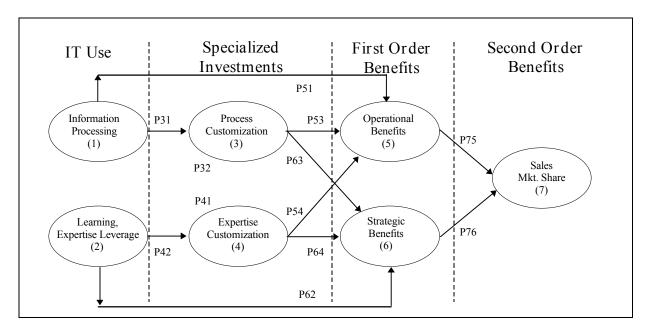
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Note: Paths P52 and P61 are omitted in the figure to minimize clutter

Figure 1. Model of IT Use, Specialized Investments and Benefits to Suppliers