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A Typology of Interorganizational Relationships: Implications for IS Design

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Abstract

We are currently witnessing an explosion in the number and variety of interorganizational relationships reported in the business press that are often described using buzzwords such as 'partnership' and strategic alliance'. Unfortunately, theory lags practice in the examination of this phenomenon that is increasingly becoming the model for success in many industries. From the perspective of Transaction Cost Economics, a dominant theoretical anchor, these interorganizational relationships are considered to fall between the well described extremes of market exchange and hierarchically controlled exchanges and belong to a less understood type termed the 'hybrid' (Clemons, Reddi, Row 1993, Hennart 1994). Information Technology (IT) is often the fundamental enabler of these non traditional forms of organizing (Quinn 1992) and a theoretical understanding of the phenomenon is indispensable to enable the effective exploitation of IT capabilities in such relationships.

In an exploratory study to derive a process based understanding of interorganizational relationships in the distribution channel, we find evidence that interorganizational relationships can be classified into four distinct types. The four types differ significantly in the processes of operational control and boundary management as well as in the nature of information exchange and the role of information technologies. The results provide a greater understanding of action in interorganizational relationships and have implications for the design of interorganizational information systems (IOS).

Introduction

The number of significant interorganizational relationships where independent firms cooperate to carry out complex functions is increasing and such arrangements significantly contribute to performance in many contexts (Kanter et. al. 1992). In many instances, the innovative use of information technologies (IT) is central to the creation and the management of these relationships (Venkatraman 1994). There is significant anecdotal evidence of the success of exemplary relationships e.g. the Quick Response initiative between Walmart and P&G and the logistics outsourcing relationship between Laura Ashley and Fedex Logistics. However, IS researchers and practitioners need to look beyond the hype and examine key processes in such relationships to derive fundamental insights on nature of managerial action in collaborative interorganizational relationships. These insights can then form the basis for more informed efforts to design effective interorganizational systems (IOS). As a first step, we conducted an exploratory study of management processes in ongoing relationships between interdependent firms.

Methodology

We studied supplier-retailer relationships in the distribution channel, a context characterized by significant interdependence between suppliers and retailers in meeting the needs of consumers. We conducted semi-structured interviews of managers in eight relationships between a leading retailer in Canada and firms supplying products sold by the retailer through their retail stores. The relationships involved a range of products: lawn and garden equipment, softgoods, sports equipment and men's and women's apparel. Data were collected in 27 interviews with key managers at both the retailer and supplier firms on the nature of

management processes, the type of information exchanged and the nature of IT support required for the relationship. We encouraged informants to provide specific details of initiatives that had improved their ability to work with the other firm, the processes that were key to performance in the relationship and the enablers and barriers to effectiveness in the relationship. Each of the interviews lasted approximately an hour and a half.

Analysis and Results

The comments of the managers were content coded and the actions described by them were classified into different categories of management processes. An analysis of the data indicates systematic variations in management processes in different relationships. For instance, risk management strategies in some relationships were intended to minimize risk e.g. through the establishment of clearly articulated acceptance tests and periodic supplier audits. In other instances, risks management strategies were more subjective and designed to encourage exploration, consonant with a view of action in the relationship as comprising experimentation to enable organizational learning.

We interpreted such variations in management processes as arising from underlying differences in the way interorganizational relationships were viewed and assessed by practitioners. Based on the variation in management processes reflected in the data, we propose the existence of four types of interorganizational relationships that are implicitly distinguished and managed distinctly. We label these 'Transactional Exchange', 'Performance Contract', 'Special Relationship' and 'Strategic Relationship' to reflect the predominant orientation of action in relationships. The management processes in the four types of interorganizational relationships are indicated in Table 1.

Discussions

The four types of interorganizational relationships presented are idealized coherent configurations of action by managers in the management of relationships. In our data, we did not find evidence of any relationship conforming to the ideal form as individual relationships exhibited processes characteristic of multiple ideal types.

Our data suggest that the four types of relationship differ in the management processes for operational control, boundary management and information management. Our results also suggest a contingency framework for the choice of relationship type in meeting the challenges of managing in varying circumstances. Our observations are that Transactional Exchanges are appropriate where the product/service requirements are clearly defined e.g. in the supply of standard, regulation-compliant hockey pucks. Performance Contracts are appropriate where the nature of the outcomes are well understood but the competencies to be deployed and the processes involved cannot be unambiguously specified. For instance, the retailer has a performance contract with a leading chain store catering to the youth market to operate a 'store within a store' for the retailer in the 'Young Men's' department. Special Relationships are indicated when two parties can achieve global efficiencies through end to end integration of individual firm processes. For instance, the retailer and a leading mattress supplier worked together to create a 'Quick Response' supply process that streamlines related processes across both firms, reducing delivery time from 4 days to under 24 hours. Strategic Relationships are indicated when firms leverage complementary resources to create a unique capability for the combination e.g. the development of a new product or a unique service.

Variations in management processes and information exchange across relationship types suggest differences in IOS features required to support each type suitably. Transactional Exchanges that are largely efficiency oriented need to be supported by automation of interfirm interfaces, e.g. through EDI that enables orders and shipment information to be exchanged using industry standard formats. On the other hand, Special Relationships where performance depends on the effective management of global end-to-end processes require IOS to support interfirm coordination to synchronize complementary processes across

both firms. For instance, suppliers indicate that the ability to access the retailer's point-of-sale data to dovetail their production schedules and initiate materials procurement is a key enabler of performance in such relationships. IOS to support Performance Contracts need to provide tools for collaborative action. For instance, an apparel supplier indicated that the ability to share interpretations of the upcoming season with the retailer's fashion coordinator is important in evolving color combinations to complement the retailer's offerings in related products. IOS in Strategic Relationships need to support the exchange of rich information by senior management and probably incorporate specialized technologies to enable unique processes in the relationship.

The study provides empirical support for the intuitive argument that the design of IOS need to be sensitive to the context of the interorganizational relationship. Our data point to the need to incorporate flexibility into IOS so that they can provide varying levels of support for activities in managing different types of interorganizational relationships. This conclusion is reinforced by anecdotal information on the counter-productive results of attempts to mandate a uniform approach to managing all supplier relationships by the large retailer.

The small number of supplier relationships examined and the focus on supplier relationships of one large retailer limit the generalizability of the study. This paper represents an initial effort to evolve a mutually exclusive and collectively exhaustive process-based taxonomy of interorganizational relationships to provide a framework for effective IT design.

	Market Exchange	Performance Contract	Special Relationship	Strategic Relationship
Relationship Focus	Exchange Efficiency e.g. Lowest price, favorable terms	Operational efficiencies, Exploiting economies of scale and scope	Achieving global efficiencies e.g. through process integration	Deploying unique capabilities
Performance Indicators	Compliance with contract terms	Contracted outcome compliance	Process metrics, best-practice benchmarks	Achievement of business goals
Risk Management	Acceptance testing	Process/outcome reviews, Creation of service quality standards	Continuous improvement	Experimentation, learning
CSFs	Efficient market search, negotiation	Effective outcome indicators	Process redesign	Exploiting synergy and specialized expertise
Relationship Responsibility	Account management	Project management	Process management	Managing stakeholder value, Senior management involvement
Accountability	Contractual	Functional	Process	Value

Assumption	accountability	accountability	accountability	accountability
Nature of Information Exchange	Market information, prices, trends, terms	Goal/outcome related, contextual information	Process indicators, Synchronization information	Unstructured exchange of strategic plans, sensitive information
Information Technology Support	Generic Interfacing technology e.g. EDI for ordering, advance shipment notices	Structured MIS, Project Management Tools, Groupware	IT support for integrated boundary crossing processes, shared databases, Customized Applications	Integrated IT infrastructure, Collaboration tools, Desktop videoconferencing
Exemplar	Supplier providing hockey pucks, lowest cost vendor selected, strict conformance to PO terms mandated	Supplier manages 'Young Men's Apparel' area of store, responsible for ordering, stocking and displaying merchandise, overall revenue/profit target	Mattress supplier manufactures products 'just-in-time' for delivery to residence within 24 hours of customer order at retail store	Appliance supplier manufacturing National Brand and Retailer's House Brand appliances, active participant in retailer's brand management and strategy formulation and execution activities

Table 1: Management Processes in the Four Types of Interorganizational Relationships

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