

VALUE SYSTEM SPECIFICATION: DEFINING AND CLASSIFYING TYPES OF ORGANIZATIONAL AND INTERORGANIZATIONAL RESEARCH

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INTRODUCTION

Much research has been conducted on the “supply chain” over the past decade. However, that research has struggled to provide a unified definition of the phenomenon studied [Mentzer et al. 2001, Cooper et al. 1997]. Unfortunately, without such a unified definition, the phenomenon cannot be studied effectively [Mentzer et al. 2001, Rutner and Langley 2000]. This paper provides some definitional history, re-introduces some criteria already established in the literature that will help to distinguish between elements of the phenomenon, expands those criteria with requirements based on interorganizational management systems thinking as presented in this paper, and suggests terms that allow for distinction and specification of the phenomenon for interpretation purposes.

THE “SUPPLY CHAIN” CONCEPT

As the business and academic communities jointly began to discover the need for

interorganizational concept development and a “process / systems” managerial perspective, the marketing, logistics, purchasing, and operations disciplines began conceptualizing interorganizational applications, some of which evolved as the “supply chain.” The disciplines do not see the phenomenon from the same application focus, and those differences between general discipline interpretations suggest some complementary theoretical contributions to the totality of the “supply chain” concept.

In order to provide structure for clarifying the conceptual confusion between the disciplines, Mentzer et al. [2001, p. 2] developed criteria to assist with understanding the “supply chain.” This attempt to classify the concepts provides a more accurate interpretation of the phenomenon. They suggest three levels of “supply chain” considerations including: the “basic supply chain,” “extended supply chain,” and the “ultimate supply chain.” Those definitions are as follows:

A **basic supply chain** consists of a company, an immediate supplier, and an immediate customer directly linked by one or more of the upstream and downstream flows of products, services, finances, and information.

An **extended supply chain** includes suppliers of the immediate supplier and customers of the immediate customer, all linked by one or more of the upstream and downstream flows of products, services, finances, and information.

An **ultimate supply chain** includes all the organizations involved in all the upstream and downstream flows of products, services, finances, and information from the ultimate supplier to the ultimate customer.

SUGGESTED SUBCATEGORIES OF RESEARCH

In order to more effectively assess the state of organizational and interorganizational research and conceptualization, we offer “subcategories” to assist with definitional and research clarification. The first set of research category differentiation is based on functional inclusion in research design, and is termed *intraorganizational* research. Research focusing strictly on either

operating aspects or transaction creation elements of a *single* firm would be classified as “operations / marketing / purchasing / value chain” research. A second area of classification includes research involving only two parties in a supplier / customer exchange. This research classification we offer as “channels” research. In this setting, the unit of analysis for the conduct of the research is the joint assessment of the supplier and customer in a dyad.

In addition, Mentzer et al. [2001] and Bowersox et al. [2002] suggest in their definitions of “supply chain management” that there be a requirement of coordination between the parties. We propose four levels of “Interorganizational Management.” They include: non-managed systems, coordinated systems, cooperative systems, and collaborative systems. We propose that these distinctions be differentiated on two dimensions: the trust between the parties, and the commitment of the parties to the relationship. Therefore, if parties have limited trust in each other and have limited commitment to each other, then that system would be classified relationally as a *non-managed system*. If one or more of the parties trusts other parties and allows influence of their decisions in a leader / follower relationship, then that could be classified as a *coordinated system*. In a *cooperative system*, parties make decisions in a unified manner because their individual goals are common on key interorganizational issues. Finally, a *collaborative system* is one where the parties view the goals of the system as being paramount to their own organization goals, and therefore are willing to accept the shared costs and benefits of the unified strategic vision of all parties.

VALUE SYSTEM RESEARCH

We suggest another category of the interorganizational research phenomenon that takes the nature of investigation to the next level of contribution. We call the concept evolving from

this method the “value system,” which is based on the concept of the value system as introduced conceptually by Porter [1985]. We propose that four criteria be established to meet the characteristics of the “value system.” The first is that the objective should be to maximize value creation for the “end user” of the product or service. Second, in order for value to ultimately be created, the parties must fully understand the contributions of various functional inputs in the creation of the value added benefits for the “end user.” Therefore, research of the value system phenomenon must include both elements affecting the creation of the transaction and relationship between the parties (i.e., the marketing and purchasing activities of all of the firms involved), as well as the elements of the operations (i.e., various forms of production, distribution and transportation activities) that create the actual physical characteristics and availability of the product. Third, a distinction must be made between product and service systems. The final requirement of the “value system” is the expectation of collaboration between the parties involved in system exchange. The distinction between coordination and collaboration is that in coordination each firm places their individual goals as their paramount objective evolving from the relationship and will make decisions concerning interaction with the supplier or customer in a consistent manner.

RESEARCH CRITERIA FOR STUDYING THE VALUE SYSTEM

The criteria used to classify the types of phenomenon involved in interorganizational relationships are listed as follows:

1. The study of the “Value System” must start with the “end user” and elicit specification of customer value and inputs concerning supplier relationships that influence the buying decisions up stream in the value system.
2. The study of the “Value System” must be of product flows or guaranteed service flows (transactional services are a part of the value system, but they support the product flows).

3. The study of the “Value System” must include research of elements within each party’s operational activities (operations / logistics), as well as its transaction creation activities (marketing and purchasing).
4. The study of the “Value System” must include **at least** five parties (with a minimum structure of 3 continuous product exchange parties starting with the “end user”), and two service parties that support the flows between the product exchange parties.
5. Research of the phenomenon requires a longitudinal methodology for assessment of the collaboration between the parties.

Based on the criteria specifying what a value system should be, we suggest that the following definitions be adopted for the value system and the research process of the value system:

The Value System.

The Value System is the totality of all firms that integrate both transaction and operations outputs for the purpose of working in a collaborative manner for the creation of a product that is consumed by an end user.

The Research Process of the Value System.

The conduct of investigation of a minimum of five transacting firms (three levels of product based value added firms, and two service providers linking all of those product based firms) starting with the firm transacting with the end user (the end user can be one of the five if the end user represents a traditional business activity) and moving sequentially “up-stream” as far as possible. Elements of the investigation must include assessment of relationship collaboration, activities related to transaction creation between each of the parties, and elements of each firm’s operational activities.

CONCLUSION

The purpose of this paper is to present a structure and visualization of the criteria necessary to define the distinction between various interorganizational phenomena that are a significant part of competitive discussion in industry and academe. Table 1 provides the classification of and specifications for the research types we propose.

Table 1

Research Type Specifications			
Type	Subtype	# of Firms	Characteristics
Intraorganizational	Operations	1	-Operating aspects
	Marketing/ Purchasing	1	-Marketing or transaction aspects, may include transaction costs
	Value Chain	1	-Both operating and transaction aspects
Channels		2	-Focus on activities and relationships between firms
Supply Chain	Non-managed	>2	-Limited trust and commitment
	Coordinated	>2	-One or more parties trust other
	Cooperative	>2	-Parties make decisions in unified manner -Common goals on key issues
	Collaborative	>2	-Goals of system paramount to all parties -Willingness to share costs and benefits
Value System		>4	-Starts with end user -Studies product/service flows -Includes both operational and transactional Activities -Requires longitudinal study

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