

## Chapter I

# An Introduction to Inter-Organizational Information Systems with Selected Bibliography

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### **Abstract**

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*One of the important roles of information technology is to permit firms to manage organizational interdependence. Over the past two decades, the concept of inter-organizational information systems (IOISs) has emerged as a strategic tool for achieving competitive advantages and IOISs have been a major research theme. Many well-known examples of information systems that provide competitive advantages discussed in the literature are those of IOISs. This chapter provides the readers with a brief overview of foundational concepts, definitions, and the information technology infrastructure of IOIS. Finally, the chapter systematically classifies the IOIS literature of 192 bibliographic items into 10 subspecialties. Therefore, along with this survey of 192 bibliographic items, readers are referred to Ngai and Wat's recent survey (Ngai & Wat, 2002) to comprehend the big picture of IOISs.*

## Introduction

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In 1989, researchers at MIT's Center for Information Systems refocused the issue of the organizational impact of information technology. After reviewing abundant theories that had been proposed, Rockart and Short (1989) argued that information technology's most important role is permitting firms to manage organizational interdependence:

*For more than two decades, the question of what impact information technology (IT) will have on business organizations has continued to puzzle academics and practitioners alike. Indeed, in an era when the business press has widely disseminated the idea that IT is changing the way business operates and the way they relate to customers and suppliers, the question of technology's impact on the organization itself has gained renewed urgency. (p. 7)*

*We will argue here that information technology (IT) provides a new approach to one of management's oldest organizational problems: that of effectively managing interdependence. Our fundamental thesis is that a firm's ability to continuously improve the effectiveness of managing interdependence is the critical element in responding to new and pressing competitive forces.*

Over the past two decades, the concept of the inter-organizational information system (IOIS) has emerged as a tool for achieving competitive advantages. The IOIS has been a major research topic. Many well-known examples of information systems that provide competitive advantages discussed in the literature (Porter & Millar, 1985) are those of IOISs. The purpose of this chapter is to provide readers with the foundational concepts and a brief overview of the IOIS literature. There are few guideposts that help students and researchers understand the current state of the IOIS, partly due to the fuzzy definitions of the IOIS and the complex and evolving nature of the IOIS information technology infrastructure. For example, private network-based traditional electronic data interchange (EDI) and Internet-based EDI are examples of IOIS technologies. To study Internet-based EDI, researchers and students also need to understand ongoing changes in foundational telecommunication technologies, standards for encapsulating messages, cheaper alternative message transport mechanisms created by combining the Web, XML, and Java, and other protocols. Ideally, a comprehensive literature survey should include all these topics. However, the breadth and depth of IOIS-related topics may make it almost impractical.

Nevertheless, there is a strong need for a survey of the literature in the IOIS area. Although the introductory chapter may not be a comprehensive literature survey, I hope that this will serve a purpose of guiding researchers and students to the exciting and expanding area of academic inquiry.

The critical component of an IOIS is, needless to say, the information systems component. To organize the vast amount of IOISs literature, the chapter presents the definition of an IOIS first and attempts to systematically classify the IOISs literature into several subspecialties. Throughout this book, the terms inter-organizational systems (IOSs) and inter-organizational information systems (IOISs) are used interchangeably.

An inter-organizational information system (IOIS) is a system that contains one or more other systems of trading partners. Each system has its own structures, subsystems, strategies, technologies, and goals. An IOIS is a supra-system that consists of information systems of trading partners. Each system pursues its own goal while pursuing the supra-system's goals. An IOIS is built on the cooperative relationships among trading partners. While these two goals are consistent with each other, the cooperative relationships continue to exist and, consequently, so the IOIS exists, to achieve the goals of the supra-systems. The IOISs manage cooperative ventures between otherwise independent agents (Kumar & Van Dissel, 1996). The IOS-enabled partnerships and alliances make it possible to seek business opportunities via new organizational and market relationships.

## Definition

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We begin with the review of various definitions. In addition to inter-organizational systems, some other terminologies were suggested, including multiorganizational systems, inter-organizational information sharing systems, etc.

*An IOS is “an automated information system shared by two or more companies” (Cash & Konsynski, 1985, p. 134).*

*The multiorganizational system is an information system that links one or more firms to their customers or their suppliers and facilitates the exchange of products and services (Bakos, 1991).*

*The essential requirement for an inter-organizational information sharing system is a computer-based, electronic link between the two organizations that automates some element of work, such as order editing, inventory*

*status checking, or, minimally, transaction transfer, that would previously have been performed manually or through other media, such as the mail. (Barrett, 1986-1987, p.6)*

*An IOS is a network-based information system (IS) that extends beyond traditional enterprise boundaries. With an IOS permitting information access to other organizations, the organizational boundaries are redefined and extended to the extent that a firm’s value chain needs to be redesigned (Hong, 2002).*

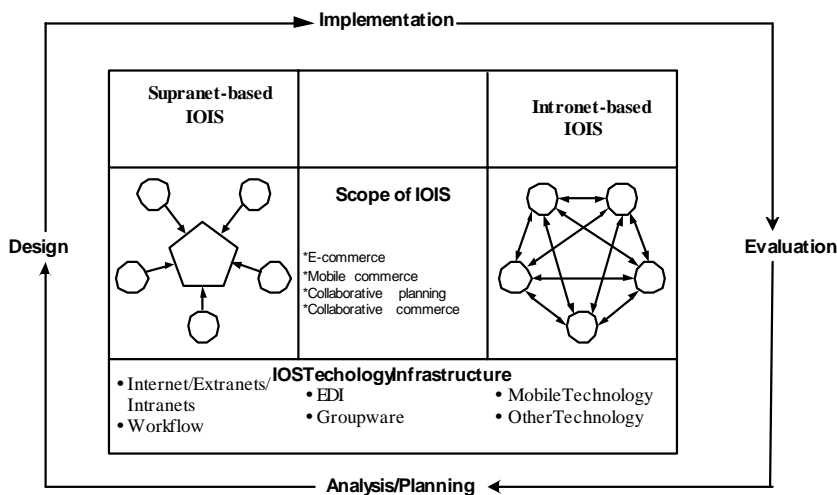
*An IOS is the information and communication technology that transcends organizational boundaries (Applegate, McFarlan, & Mckenney, 1996; Cash & Konsynski, 1985; Kumar & Van Dissel, 1996).*

*According to Vlosky, Wilson, and Vlosky (1997, p. 75), the IOSs are “electronic buyer–seller information exchanges that are implemented to facilitate business transactions and increase efficiency, competitiveness and profitability for participating companies.”*

Based on the reviews of several definitions, the IOIS is defined as follows:

*An inter-organizational system (IOS) is an information and management system that transcends organizational boundaries via electronic linkages*

Figure 1: IOIS management framework



*with its trading partners to share data, information, and business applications, provide the capabilities of electronic transactions including buying and selling goods and services, and facilitate communications and decision making for the purpose of increasing efficiency, effectiveness, competitiveness, and profitability for participating organizations. The electronic linkage is established by the Internet, extranets, intranets, groupware, electronic data interchange (EDI), workflow systems, mobile communication technologies, and other information and communication technologies.*

The definition here is a broad one that encompasses systems that support supply chain management, electronic commerce, mobile commerce, and collaborative commerce activities. This book aims to provide readers with a framework for IOIS management (Figure 1), which is comprised of the management of the IOIS technology infrastructure and the ongoing process of IOIS analysis/planning, design, implementation, and evaluation.

One issue involved in this definition of an IOIS is the fuzzy distinction between the IOIS and electronic commerce (e-commerce). Electronic commerce is defined in Laudon and Laudon (2004) as follows:

*The process of buying and selling goods and services electronically with computerized business transactions using the Internet, networks, and other digital technologies. It also encompasses activities supporting those market transactions, such as advertising, marketing, customer support, delivery and payment. (p. 24)*

Other authors (Kalakota & Whinston, 1997; Turban, King, Lee, & Viehland, 2004) agreed on the narrow definition given above but expanded it by adding several more dimensions. For example, the expanded definition by Turban and others is reproduced here.

Electronic commerce (EC) can be defined from the following perspectives:

- **Communications** - From a communications perspective, EC is the delivery of goods, services, information, or payments over computer networks or through any other electronic means.
- **Commercial (trading)** - From a commercial perspective, EC provides the capability of buying and selling products, services, and information on the Internet and via other online services.

- Business process - From a business process perspective, EC is doing business electronically by completing business processes over electronic networks, thereby substituting information for physical business processes (Weill & Vitale, 2001, p. 13).
- Service - From a service perspective, EC is a tool that addresses the desire of governments, firms, consumers, and management to cut service costs while improving the quality of customer service and increasing the speed of service delivery.
- Learning - From a learning perspective, EC is an enabler of online training and education in schools, universities, and other organizations, including businesses.
- Collaborative - From a collaborative service perspective, EC is the framework for inter- and intraorganizational collaboration.
- Community - From a community perspective, EC provides a gathering place where community members can learn, transact, and collaborate.

We believe that the broad definition of e-commerce may need to be reexamined. Perhaps, the definition is too extravagant to justify it. I can hardly agree with the notion that e-commerce is an enabler of online education at universities. There is no doubt that inter-organizational business activities have been and will continue to be further accelerated in the future. The research in this area will be further intensified. As an academic discipline becomes a coherent and substantive field, we need to build a cumulative research tradition in which definitions and concepts are shared (Keen, 1980). In doing so, consensus building is a first step among academics and practitioners in regard to definitions of the foundational terms and subspecialties to be researched in that field. As any academic discipline becomes a mature field of study, there should be a shared and agreed-upon set of definitions, topics, concepts, and subspecialties.

Supply chain management requires the extensive use of IOISs in the process of procuring raw materials, transforming them into intermediate and finished products, and distributing the finished products to retail outlets and customers. The IOISs help participating organizations in the supply chain forecast customer demand, plan production and inventory, track shipments, and communicate with trading partners.

The core of an IOIS is to support daily transactions of buying and selling by providing electronic catalogs and other databases on the Internet and electronic payment tools in a secure business environment. A recent innovative application of IOIS support is in the area of designing, developing, manufacturing, and managing products through their life cycles with trading partners collaboratively. This is an extended application of supply chain management of the IOIS and the

CPFR (collaborative planning, forecasting, and replenishment) system. Developed in 1998, the CPFR system enables trading partners to improve business processes, customer service, and inventories. The growth of CPFR has created a demand for e-business software products to address and support collaborative commerce activities (Anonymous, 2002).

Collaborative commerce is the use of information technologies to manage product life cycle management (PLM), supplier relationship management (SRM), supply chain management (SCM), and customer relationship management (CRM), jointly by the collaborating organizations. Using workflow and other collaboration tools such as groupware, all key stakeholders can collaborate in the product life cycle, from inception (concept) through design, introduction of a salable item, and eventual product retirement (Brown & Sappenfield, 2003).

## **Classification Of IOIS Research**

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As discussed earlier in the chapter, the definition of an IOIS in this book is a broad one that encompasses systems that support electronic commerce, supply chain management, mobile commerce, and collaborative commerce activities. Depending on the definitions (narrow versus broad), there may be fuzzy distinctions between an IOIS and electronic commerce. While preparing the introductory chapter, a paper on literature review and classification of 275 electronic commerce research papers was published in 2002 by Ngai and Wat (2002). Due to the broad definition of e-commerce adopted by Ngai and Wat, a substantial portion of bibliography is overlapped, and therefore, we decided not to include that overlapped bibliography of 275 articles published between 1993 and 1999 in this chapter. The bibliography of 185 items in this chapter consists of books, journal articles, conference proceedings, doctoral dissertations, and case studies. Therefore, along with this survey of 185 bibliographic items, readers are referred to Ngai and Wat (2002) to comprehend the big picture of an IOIS. Ngai and Wat did an excellent job of compiling the literature on introduction/foundational concepts of IOISs and e-commerce and technological issues, including network security issues. (Please note that for the numbers in brackets, complete reference information is included at the end of this chapter.)

### **1. Foundational**

#### *Introduction to IOISs*

- Introduction to EC [4, 79, 100, 156, 181, 192]

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- General introduction to an IOIS [9, 87]
- Electronic integration in various industries [54, 191]

### *Objectives of an IOIS*

- Transforming boundaries, relations, and markets [7, 20, 28, 66, 77, 87, 176]
- Strategic control to influence behavior in the extended enterprise [12, 87]
- Operational efficiencies [87, 170]
- Interdependent benefits [30, 149]
- Collaboration and cooperation [14, 93]
- Information sharing [11, 88]
- Competitive advantages [19, 33, 38, 75, 87, 113, 114, 132, 177]
- The economics of switching costs [30]
- Global economic development [103]

### *Typology for an IOIS*

#### Categorization by

- Technological and organizational dimensions [75]
- Purposes, participants, and functions [75]
- Inter-organizational interdependence [90, 93]
- The linkage of participants' roles [72]

## **2. Technology Infrastructure**

### *Extranets*

- IOIS infrastructure [127]
- Introduction to extranets [6]

### *EDI (Electronic Data Interchange)*

- EDI introduction [48, 51, 57, 89]
- EDI impact on just-in-time (JIT) shipments [81, 164] and delivery performance [1], business process improvement [15], and inventory and financial performance [44]
- EDI implementation [135, 145, 155, 157]
- Risks, challenges, and vulnerability of EDI [10, 107, 150]
- Identifying antecedents of user satisfaction with EDI [78]

- EDI audit and control [64, 102]
- Determinants of EDI implementation and diffusion [67, 101, 143]
- Strategic value of EDI [13, 35, 37, 68, 122, 152, 162, 184]
- EDI use in selected industries [43, 45, 50, 86, 110, 126, 154, 160, 165, 166, 178]

*Enterprise Resource Planning (ERP) Systems [18]*

*Delegation Technologies [47, 87]*

*Workflow Systems and Collaborative Technologies*

- Modeling workflows crossing organizational boundaries [82, 173, 174, 185]
- Using mobile agents to manage IOIS workflow [105]
- An IOIS workflow support using XRL (Extensible Routing Language) [92]
- Workflow interoperability model (the monitor-nested model) [91]
- Workflow overview and research issues [167]

### **3. Design and Development of IOISs**

*Incentives for IOIS Development*

- Process redesign [37, 80]

*Five Levels of IOIS Participation [11]*

*IOIS Strategic Planning Framework [61]*

- Planning and implementation systems of development projects [120]
- Alliance or alone? How to build an IOIS [169]
- Challenges during the development of an IOIS [22]

*User Participation in the IOIS Development [23, 25, 63]*

*Developing a Requirements Engineering Method for IOIS [56]*

### **4. Implementation of an IOIS**

- Lessons learned from implementing an IOIS [16, 128, 182]

- Critical success factors [24, 53, 60, 97, 129, 134, 163, 187]
- Adoption model [59, 76, 151]

## **5. Management of an IOIS**

### *Framework*

- A multidisciplinary framework [96]

### *Issues that Impact IOIS Management*

- Collaboration issues-IOISs are created by long-term business arrangements regulated by contract, including EDI, EFT, and Internet services. Collaboration involves economic, strategic, social [3, 94], and management [93, 189] issues [46, 117, 121].
- Organizational issues include relationships among participants [115, 133]; size of the firm and resources availability [49, 140], including skilled personnel [49, 142]; management style, such as leadership behavior [52, 147], and existence of communication channels [125]; and relationship satisfaction gap between buyer and seller and how to close this gap [180, 188].
- Technology issues [95, 190]
- Others-Influence of the external environment on the IOIS [186], the political economy of information exchange politics and property rights in the development of an IOIS [71]

## **6. Evaluation of an IOIS**

- Multicriteria decision analysis approach [141]
- Modeling inter-organizational procedures and effectiveness [17, 161]
- Cost and benefit analysis [39, 60, 98, 116, 144, 171]
- A preliminary theory of IOIS effectiveness: A comparative study of four community mental health systems [137]

## **7. Examples of IOIS Applications**

The following industries reported IOIS applications:

- Cotton [106]
- Airline reservation systems [31, 42, 73]
- Grocery chains [34]
- Hospital supply [179]

- Hong Kong TradeLink [83]
- Singapore TradeNet [84]
- Semiconductor [65]
- Automotive Network eXchange [85, 119]
- Japan airlines [29]
- Health care [109, 130]
- Construction [21]
- McKesson drug company: Economost [40]
- Supply chain management [136]
- Inter-Organizational DSS [118, 139]
- Use of an IOIS to support the outsourcing of logistics activities to third-party firms [104], environmental management [158], and design [74]

### **8. Case Study of an IOIS**

- KHDS Vision 2000 engine factory [108]
- Inter-organizational technology transfer [58]
- The electronic virtual laboratory (Link.Net) [146]
- Trust, power, and the IOIS: The case of the electronic trading community Translease [2]
- From EDI to Internet commerce: The BHP steel experience [26]

### **9. Impact of an IOIS**

- Production and logistical management [168]
- Inventory performance [183] and cycle time reduction [129]
- The property and casualty insurance market [99]
- International banking [172, 175]
- Process and structure in buyer and seller exchange [159]
- Supply chain management [27, 70, 124, 131, 138]
- On-time performance in U.S. air cargo [55]
- Market structure and corporate strategies [111]

### **10. Miscellaneous**

- Agent-mediated inter-organizational business process coordination [69]
- Competitive growth of an IOIS [62, 148]

- Production of collective action in an alliance-based IOIS [182]
- The antecedents of an IOIS [153]
- Performance, interdependence, and coordination in business-to-business electronic commerce and supply chain management [36]
- Supplier-affiliated extended supply chain backbone [41]
- Networks and network structures for public policy and management [112]
- Cooperative and competitive strategies in an IOIS [32]
- Industrial networks: A new view of reality [5]

## Conclusion

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This chapter provides readers with a brief overview of foundational concepts and definitions. The chapter also systematically classifies the IOIS literature of 192 bibliographic items into 10 subspecialties. Therefore, along with this survey of 192 bibliographic items, readers are referred to Ngai and Wat's recent survey (Ngai & Wat, 2002) in order to comprehend the big picture of IOISs.

## References

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- Anonymous. (2002). Another boost for CPFR. *Frontline Solutions*, 3(12), 51–52.
- Anonymous. (2003, November 13). EDI and As2 'Can Live Together'. *Supply Management*, 8, 13.
- Applegate, M. L., McFarlan, F. W., & Mckenney, J. L. (1996). *Corporate information systems management: Text and cases* (4th ed.). Chicago: Irwin.
- Bakos, J. Y. (1991). Information links and electronic marketplaces: The role of interorganizational information systems in vertical markets. *Journal of Management Information Systems*, 8(2), 31–52.
- Balasubramanian, S., Peterson, R. A., & Jarvenpaa, S. L. (2002). Exploring the implications of M-commerce for markets and marketing. *Academy of Marketing Science Journal*, 30(4), 348–361.
- Barrett, S. S. (1986–1987). Strategic alternatives and inter-organizational system implementation: An overview. *Journal of Management Information Systems*, 3(3), 5–16.

- Barshney, U., & Vetter, R. (2001). Recent advances in wireless networking. *IEEE Computer*, 33(6), 100–103.
- Brown, M., & Sappenfield, D. (2003). Collaborative commerce: Not dead yet. *Intelligent Enterprise*, 6(4), 20–25.
- Bushaus, D. (2000). Trade the ANX way. *InformationWeek*, 776, 93–97.
- Cash, J. I., Jr., & Konsynski, B. R. (1985). IS redraws competitive boundaries. *Harvard Business Review*, 63(2), 134–142.
- Gaskin, J. E. (2000, February 21). Enterprise applications—Groupware gets thin—A new generation of thin-client products proves that Web groupware can scale across an enterprise network. *InternetWeek*, 45.
- Greenemeier, L. (2001, November 12). Tile manufacturer turns to Internet-based EDI system. *InformationWeek*, 79.
- Hayes, M., Hulme, G. V., Kontzer, T., Whiting, R., & Colkin, E. (2002, October 14). Top of the week: News scan. *InformationWeek*, 32.
- Hong, I. B. (2002). A new framework for interorganizational systems based on the linkage of participants' roles. *Information & Management*, 39(4), 261–270.
- Kalakota, R., & Whinston, A. B. (1997). *Manager's guide to electronic commerce*. Reading, MA: Addison-Wesley.
- Keen, P. G. W. (1980). MIS research: Reference disciplines and a cumulative tradition. In E. R. McLean (Ed.), *Proceedings of the First International Conference on Information Systems* (pp. 9–18). Philadelphia, PA.
- Kumar, K., & Van Dissel, H. G. (1996). Sustainable collaboration: Managing conflict and cooperation in Interorganizational systems. *MIS Quarterly*, 20(3), 279–300.
- Laudon, K. C., & Laudon, J. P. (2004). *Management information systems: Managing the digital firm* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
- Liebrecht, D. (1999). A TCP/IP-based network for the automotive industry. *America's Network*, 103(7), 67–69.
- Margulius, D. L. (2002, April 22). Workflow meets BPM. *InfoWorld*, 24, 64–65.
- Ngai, E. W. T., & Wat, F. K. T. (2002). A literature review and classification of electronic commerce research. *Information & Management*, 39(5), 415–429.
- Nunamaker, J. F., Jr., Vogel, D. R., Heminger, A., Martz, W. B., Jr., Grohowski, R., & McGoff, C. (1989). Experiences at IBM with group support systems: A field study. *Decision Support Systems*, 5(2), 183–196.

- Phoosuphanusorn, S. (2003, November 5). Visa to launch mobile commerce; Technology may be introduced in 2005. *Knight Ridder Tribune Business News*, p. 1.
- Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review*, 63(4), 149–160.
- Riggins, F. J., & Rhee, H.-S. (1998). Toward a unified view of electronic commerce. *Communication of the ACM*, 41(10), 88–95.
- Rockart, J. F., & Short, J. E. (1989). IT in the 1990's: Managing organizational interdependence. *Sloan Management Review*, 30(2), 7–17.
- Turban, E., King, D., Lee, J. K., & Viehland, D. (2004). *Electronic commerce 2004: A managerial perspective*. Upper Saddle River, NJ: Pearson Education, Inc.
- Vlosky, R. P., Wilson, D. T., & Vlosky, R. B. (1997). Closing the interorganizational information systems relationship satisfaction gap. *Journal of Marketing Practice*, 3(2), 75–82.
- Weill, P., & Vitale, M. R. (2001). *Place to space: Migrating to e-business models*. Boston, MA: Harvard Business School Press.
- Wheeler, B. C., Dennis, A. R., & Press, L. I. (1999). Groupware comes to the Internet: Charting a new world. *The DATA Base for Advances in Information Systems*, 30(3–4), 8–21.
- Zimmerman, A. (2003, November 21). B-2-B—Internet 2.0: To sell Goods to Wal-Mart, get on the Net. *Wall Street Journal*, p. B1.

## Numbered References

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1. Ahmad, S., & Schroeder, R. G. (2001). The impact of electronic data interchange on delivery performance. *Production and Operations Management*, 10(1), 16–30.
2. Allen, D. K., Colligan, D., Finnie, A., & Kern, T. (2000). Trust, power and Interorganizational information systems: The case of the electronic trading community Translease. *Information Systems Journal*, 10(1), 21–40.
3. Alter, C. (1990). An exploratory study of conflict and coordination in interorganizational service delivery systems. *Academy of Management Journal*, 33(3), 478.
4. Applegate, L. M., Holsapple, C. W., Kalakota, R., Radermacher, F. J., & Whinston, A. B. (1996). Electronic commerce: Building blocks of new business opportunity. *Journal of Organizational Computing and Electronic Commerce*, 6(1), 1–10.

5. Axelsson, B., & Easton, G. (1992). *Industrial networks: A new view of reality*. London; New York: Routledge.
6. Baker, R. H. (1997). *Extranets: The complete sourcebook*. New York: McGraw-Hill.
7. Bakos, J. Y. (1991). Information links and electronic marketplaces: The role of interorganizational information systems in vertical markets. *Journal of Management Information Systems*, 8(2), 31–52.
8. Bakos, J. Y. (1991). A strategic analysis of electronic market place. *MIS Quarterly*, 15(3), 295–310.
9. Bakos, Y., & Brynjolfsson, E. (1987). *Interorganizational information systems*. Unpublished Ph.D. thesis, Massachusetts Institute of Technology, Cambridge, MA.
10. Barrett, M. I. (1999). Challenges of EDI adoption for electronic trading in the London insurance market. *European Journal of Information Systems*, 8(1), 1–15.
11. Barrett, S., & Konsynski, B. R. (1982). Interorganizational information sharing systems. *MIS Quarterly*, 6(Special Issue), 93–105.
12. Barrett, S. S. (1986–1987). Strategic alternatives and inter-organizational system implementation: An overview. *Journal of Management Information Systems*, 3(3), 5–16.
13. Benjamin, R., DeLong, D., & Scott-Morton, M. (1990). Electronic data interchange: How much competitive advantage? *Long Range Planning*, 23(1), 29–40.
14. Bensaou, M. (1997). Interorganizational cooperation: The role of information technology—An empirical comparison of U.S. and Japanese supplier relations. *Information Systems Research*, 8(2), 107–124.
15. Bhatt, G. D. (2001). Business process improvement through electronic data interchange (EDI) systems: An empirical study. *Supply Chain Management*, 6(2), 60–73.
16. Boddy, D. (2000). Implementing interorganizational IT systems: Lessons from a call centre project. *Journal of Information Technology*, 15(1), 29–37.
17. Bons, R. W. H., Lee, R. M., Wagenaar, R. W., & Wrigley, C. D. (1995). Modeling inter-organizational trade procedures using documentary petri nets. In T. Mudge, B. D. Shriver, H. El-Rewini, & J. F. Nunamaker, Jr. (Eds.), *Proceedings of the 28th Hawaii International Conference on System Sciences, January 28, 1995, Wailea, HI* (pp. 189–198), Wailea, HI. Washington, DC: IEEE Computer Society Press.

18. Buxmann, P., & König, W. (2000). *Inter-organizational cooperation with SAP systems: Perspectives on logistics and service management (SAP Excellence)*. Heidelberg: Springer-Verlag.
19. Cash, J. I., Jr., & Konsynski, B. R. (1985). IS redraws competitive boundaries. *Harvard Business Review*, 63(2), 134–142.
20. Cash, J. I., McFarlan, W. F., McKenney, J. L., and Applegate, L. M. *Corporate Information Systems Management: Text and Cases (3rd Ed)*, R.D. Irwin, Homewood, IL, 1992.
21. Castle, C. M. (1999). *Construction project networks: A study of Internet-based Interorganizational information systems in the building industry*. Unpublished dissertation: Doctor of Design, Harvard University, Cambridge, MA.
22. Cavaye, A. (1997). Challenges during the development of transnational information systems. *Journal of Information Technology*, 12(2), 99–106.
23. Cavaye, A. L. M. (1995). Participation in the development of interorganizational systems involving users outside the organization. *Journal of Information Technology*, (10), 135–147.
24. Cavaye, A. L. M., & Cragg, P. B. (1995). Factors contributing to the success of customer oriented interorganizational systems. *The Journal of Strategic Information Systems*, 4(1), 13–30.
25. Cavaye, A. M. (1995). Participation in the development of inter-organizational systems involving users outside the organization. *Journal of Information Technology*, (10), 135–147.
26. Chan, C., & Swatman, P. M. C. (2000). From EDI to Internet commerce: The BHP Steel experience. *Internet Research: Electronic Networking Applications and Policy*, 10(1), 72–82.
27. Chandra, M., Cherian, J., & Saharia, A. (1995). Control and efficiency in distribution channels: The impact of inter-organizational systems. In M. K. Ahuja, D. F. Galleta, & H. J. Watson (eds.), *Proceedings of the First Americas Conference on Information Systems* (pp. 279–281). Pittsburgh, PA: Association for Information Systems (AIS).
28. Charan, R. (1991). How networks reshape organizations for results. *Harvard Business Review*, 69(5), 104–115.
29. Chatfield, A. T., & Bjørn-Andersen, N. (1997). The impact of IOS-enabled business process change on business: Transformation of the value chain of Japan Airlines. *Journal of Management Information Systems*, 14(1), 13–40.

30. Chismar, W. G., & Meier, J. (1989). *The economics of switching costs in Interorganizational systems*. Honolulu, HI: PRIISM, Pacific Research Institute for Information Systems and Management.
31. Chismar, W. G., & Meier, J. (1992). A model of competing interorganizational systems and its application to airline reservation systems. *Decision Support Systems*, 8(5), 447–458.
32. Choudhury, V. (1991). *Cooperative and competitive strategies in inter-organizational information systems*. Unpublished Ph.D. dissertation, University of California–Los Angeles, Los Angeles, CA.
33. Choudhury, V. (1988). Sustaining competitive advantage with interorganizational information systems. In *Proceedings of Hawaii International Conference on System Sciences—21* (pp. 44–51). Washington, DC: IEEE Computer Society Press.
34. Clark, T. H., Croson, D. C., & Schiano, W. T. (2001). A hierarchical model of supply-chain integration: Information sharing and operational interdependence in the U.S. Grocery Channel. *Information Technology and Management*, 2(3), 261–288.
35. Clark, T. H., & Lee, H. G. (1996). EDI enabled channel transformation: Extending business process redesign beyond the firm. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12, 1996* (pp. 54–67). Moderna Organizacija Kranj, Bled, Slovenia.
36. Clark, T. H., & Lee, H. G. (2000). Performance, interdependence and coordination in business-to-business electronic commerce and supply chain management. *Information Technology and Management*, 1(1/2), 85–105.
37. Clark, T. H., & Stoddard, D. B. (1996). Interorganizational business process redesign: Merging technological and process innovation. *Journal of Management Information Systems*, 13(2), 9–29.
38. Clemons, E. (1986). Information systems for sustainable competitive advantage. *Information & Management*, (11), 131–136.
39. Clemons, E. K., & Kleindorfer, P. R. (1992). An economic analysis of interorganizational information technology. *Decision Support Systems*, 8(5), 431–446.
40. Clemons, E. K., & Row, M. (1988). Mckesson Drug Company: A case study of Economost—A strategic information system. *Journal of Management Information Systems*, 5(1), 36–50.
41. Conway, D. G. (2000). Supplier affiliated extended supply chain backbones. *Information Systems Frontiers*, 2(1), 57–64.

42. Copeland, D. G., & McKenney, J. L. (1988). Airline reservation systems: Lessons from history. *MIS Quarterly*, 12(3), 353–370.
43. Crum, M., Premkumar, G., & Ramamuthy, K. (1996). An assessment of motor carrier adoption, use and satisfaction with EDI. *Transportation Journal*, 35(4), 44–57.
44. Droge, C., & Germain, R. (2000). The relationship of electronic data interchange with inventory and financial performance. *Journal of Business Logistics*, 21(2), 209–231.
45. Dupuy, C. A., & Vlosky, R. P. (2000). Status of electronic data interchange in the forest products industry. *Forest Products Journal*, 50(6), 32–38.
46. Eagle, B. W., Marchewka, J. T., & Icenogle, M. L. (1996). Issues of stability and management of interorganizational systems within U.S.–China joint ventures. *The Journal of Computer Information Systems*, 36(3), 116.
47. Elofson, G. S., & Konsynski, B. R. (1991). Delegation technologies: Environmental scanning with intelligent agents. *Journal of Management Information Systems*, 8(1), 37–62.
48. Emmelhainz, M. A. (1990). *Electronic data interchange: A total management guide*. New York: Van Nostrand Reinhold.
49. Ettl, J. E. B., & W.P. O’Keefe, R. D. (1984). Organization strategy and structural differences for radical versus incremental innovation. *Management Science*. 30(6), 682–695.
50. Fearon, C., & Philip, G. (1999). An empirical study of the use of EDI in supermarket chains using a new conceptual framework. *Journal of Information Technology*, 14(1), 3–21.
51. Ferguson, D. M., Hill, N. C., & Hansen, J. V. (1990). Electronic data interchange: Foundations and survey evidence on current use. *Journal of Information Systems*, 81–91.
52. Feyerherm, A. E. (1993). *The influence of leadership behavior on participants’ interpretive schemes in interorganizational systems*. Unpublished thesis (Ph.D.), University of Southern California.
53. Finnegan, P., & Golden, W. (1996). Key success for late adopters of interorganizational systems: A non-technical perspective from Irish organizations. In *Proceedings of the 29th Annual Hawaii International Conference on System Sciences* (pp. 377–386), Wailea, HI. Washington, DC: IEEE Computer Society Press.
54. Forster, P. W. (2001). Electronic integration in the air cargo industry: An information processing model of on-time performance. *Transportation Journal*, 40(4), 46–59.

55. Forster, P. W. (2000). *The performance impact of interorganizational information systems: An empirical study on on-time performance in U.S. air cargo*. Unpublished Ph.D. dissertation, University of California–Irvine, Irvine, CA.
56. Fowler, D. C., & Swatman, P. A. (1996). Experiences in developing a requirements engineering method of multi-organisational systems. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings* (pp. 1–12), Bled, Slovenia, June 10–12, Moderna Organizacija Kranj, Bled, Slovenia.
57. GEISCO (General Electric Information Services). (1985). *Introduction to electronic data interchange: A primer*. Bridgeport, CT: General Electric Company.
58. Gibson, D. V., & Harlan, G. T. (1995). Inter-organizational technology transfer: The case of the NSF Science and Technology Centers. In T. Mudge, B. D. Shriver, H. El-Rewini, & J. F. Nunamaker, Jr. (Eds.), *Proceedings of the 28th Hawaii International Conference on System Sciences, January 28, 1995, Wailea, HI* (pp. 661–670). Washington, DC: IEEE Computer Society Press.
59. Grover, V. (1993). An empirically derived model for the adoption of customer-based Interorganizational Systems. *Decision Sciences*, 24(3), 603–640.
60. Grover, V. (1990). *Factors influencing adoption and implementation of customer-based interorganizational systems*. Unpublished Ph.D., University of Pittsburgh, Pittsburgh, PA.
61. Gupta, A. (1995). A stakeholder analysis approach for interorganizational systems. *Industrial Management & Data Systems*, 95(3), 3–10.
62. Gutierrez, T. L. (1990). *Competitive growth of interorganizational systems: A cross-industry comparison*. Unpublished M.S. thesis, Massachusetts Institute of Technology, Cambridge, MA.
63. Hallberg, N., Pileman, S., & Timpka, T. (1998). Participatory design of inter-organizational systems: A method approach. In *Proceedings of the Fifth PDC—Participatory Design Conference* (pp. 129–136), Computer Professionals for Social Responsibility, Seattle, WA.
64. Hansen, J. V., & Hill, N. C. (1989). Control and audit of electronic data interchange. *MIS Quarterly*, 13(4), 403–413.
65. Hart, P., & Estrin, D. (1991). Inter-organization networks, computer integration, and shifts in interdependence: The case of the semiconductor industry. *ACM Transactions on Information Systems*, (9), 370–417.

66. Henderson, J. C., & Venkatraman, N. (1993). Strategic alignment: Leveraging information technology for transforming organizations. *IBM Systems Journal*, 32(1), 4–16.
67. Hendon, R. A., & Nath, R. (2001). Partner congruence in electronic data interchange (EDI)-enabled relationships. *Journal of Business Logistics*, 22(2), 109–127.
68. Hendon, R. A., Nath, R., & Hendon, D. W. (1998). The strategic and tactical value of electronic data interchange for marketing firms. *The Mid-Atlantic Journal of Business*, 34(1), 53–73.
69. Hofmann, O., & Bodendorf, F. (2000). Agent mediated inter-organizational business process coordination. In R. Trappl (Ed.), *Proceedings of European Meetings on Cybernetics and Systems Conference, April 15, 2000, Vienna, Austria* (pp. 615–620), Austrian Society for Cybernetic Studies, Vienna.
70. Holland, C. P. (1995). Cooperative supply chain management: The impact of interorganizational information systems. *The Journal of Strategic Information Systems*, 4(2), 117–134.
71. Homburg, V. (2000). The political economy of information exchange politics and property rights in the development and use of interorganizational information systems. *Knowledge, Technology, & Policy*, 13(Part 3), 49–66.
72. Hong, I. B. (2002). A new framework for interorganizational systems based on the linkage of participants' roles. *Information & Management*, 39(4), 261–270.
73. Hopper, M. D. (1990). Rattling sabre—New ways to compete on information. *Harvard Business Review*, 118–125.
74. Huang, J. (1997). *Interorganizational information systems in design*. Unpublished thesis (Doctor of Design), Harvard University.
75. Johnston, H. R., & Vitale, M. R. (1988). Creating competitive advantage with interorganizational information systems. *MIS Quarterly*, 12(2), 153–165.
76. Johnston, R. B., & Gregor, S. (2000). A theory of industry-level activity for understanding the adoption of interorganizational systems. *European Journal of Information Systems*, 9(4), 243–251.
77. Johnston, R. B., & Lawrence, P. R. (1988). Beyond vertical integration—The rise of the value-adding partnership. *Harvard Business Review*, 66(4), 94–101.
78. Jones, M. C., & Beatty, R. C. (2001). User satisfaction with EDI: An empirical investigation. *Information Resources Management Journal*, 14(2), 17–26.

79. Kalakota, R., & Winston, A. B. (1996). *Frontiers of electronic commerce*. Reading, MA: Addison-Wesley.
80. Kambil, A., & Short, J. E. (1994). Electronic integration and business network redesign: A roles-linkage perspectives. *Journal of Management Information Systems*, 10(4), 59–73.
81. Kekre, S., & Mukhopadhyay, T. (1992). Impact of electronic data interchange on quality improvement and inventory reduction programs: A field study. *International Journal of Production Economics*, (28), 265–282.
82. Khosrowpour, M. (Ed.) (2002). *Collaborative information technologies*. Hershey, PA: IRM Press.
83. King, J., & Konsynski, B. (1990). Hong Kong Tradelink: News from the Second City (p. 14). Cambridge, MA: Harvard Business School.
84. King, J., & Konsynski, B. (1990). Singapore Tradenet: A tale of one city (p. 17). Cambridge, MA: Harvard Business School.
85. Kisiel, R. (2002). Anxebusiness links with Japan Group. *Automotive News*, 26.
86. Klein, S., & Schad, H. (1996). The introduction of EDI systems in health-care supply chains: A framework for business transformation. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 28–53). Moderna Organizacija Kranj, Bled, Slovenia.
87. Konsynski, B. R. (1993). Strategic control in the extended enterprise. *IBM Systems Journal*, 32(1), 111–142.
88. Konsynski, B. R., & McFarlan, W. F. (1990). Information partnerships—Shared data, shared scale. *Harvard Business Review*, 114–120.
89. Kreuwels, C. M. A. (1992). Electronic data interchange: An introduction and examples of its structural impact. *Production Planning and Control*, (3), 381–392.
90. Kronen, J., & Loebecke, C. (1996). Cooperation information systems (CIS)—Typology and illustrative examples. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 203–219). Moderna Organizacija Kranj, Bled, Slovenia.
91. Kuechler, W., Jr., Vaishnavi, V. K., & Kuelchler, D. (2001). Supporting optimization of business-to-business e-commerce relationships. *Decision Support Systems*, 31(3), 363–377.

92. Kumar, A., & Zhao, J. L. (2002). Workflow support for electronic commerce applications. *Decision Support Systems*, 32(3), 265–278.
93. Kumar, K., & Van Dissel, H. G. (1996). Sustainable collaboration: Managing conflict and cooperation in interorganizational systems. *MIS Quarterly*, 20(3), 279–300.
94. Kumar, R., & Crook, C. W. (1996). Educating senior management on the strategic benefits of EDI. *Journal of Systems Management*, 42–47.
95. Kumar, R., & Crook, C. W. (1997). Using information technologies to enhance industry effectiveness: The case of the textile industry. In *Cases in the management of information technology*. Hershey, PA: Idea Group Publishing.
96. Kumar, R. L., & Crook, C. W. (1999). A multi-disciplinary framework for the management of inter-organizational systems. *The DATA BASE for Advances in Information Systems*, 30(1), 22–37.
97. Kurnia, S., & Johnston, R. B. (2001). The need for a procedural view of interorganizational systems adoption. *Communication Abstracts*, 24(5), 591–738.
98. Larson, P. D. (1994). An empirical study of inter-organizational functional integration and total costs. *Journal of Business Logistics*, 15(1), 153–169.
99. Lee, B. T. (1993). *The adoption and impact of inter-organizational information systems: An empirical study of the property and casualty insurance market*. Unpublished dissertation, thesis (Ph.D.), UCLA, Los Angeles, CA.
100. Lee, H. G., & Clark, T. H. (1996). Impacts of the electronic marketplace on transaction cost and market structure. *International Journal of Electronic Commerce*, 1(1), 127–149.
101. Lee, S., Han, I., & Park, J. S. (2000). Effects of organizational characteristics on EDI implementation in Korea. *Telecommunications Systems*, 14(1–4).
102. Lee, S., & Han, I. (2000). The impact of EDI controls on the relationship between EDI implementation and performance. *Information Resources Management Journal*, 13(4), 25.
103. Levinson, N. S. (1994). Interorganizational information systems: New approaches to global economic development. *Information & Management*, 26(5), 257–263.
104. Lewis, I., & Talalayevsky, A. (2000). Third-party logistics: Leveraging information technology. *Journal of Business Logistics*, 21(2), 173–185.

105. Liberman, M., & Ersdorf, W. L. (1997). Using mobile agents to support Interorganizational workflow management. *Applied Artificial Intelligence*, 11(6), 551–572.
106. Lindsey, D., Cheney, P. H., Kasper, G. M., & Ives, B. (1990). Telcot: An introduction of information technology for competitive advantage in the cotton industry. *MIS Quarterly*, 14(4), 347–357.
107. Lobet-Maris, C. (1993). EDI: Risks and vulnerability in the new inter-organizational systems. In J. Berleur, C. Beradon, & R. Laufer (Eds.), *Facing the challenge of risks and vulnerability in an information society, Proceedings of an IFIP/Working Group 9.2 Working Conference, May 1993, Namur, Belgium* (pp. 131–144). Amsterdam; New York: North-Holland.
108. Loebbecke, C. (1996). Innovative IT-based logistics—A case study of KHDS Vision 2000 Engine Factory. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 123–141). Moderna Organizacija Kranj, Bled, Slovenia.
109. Luke, R. D., Begun, J. W., & Pointer, D. D. (1989). Quasi firms: Strategic Interorganizational forms in the health care industry. *Academy of Management Review*, 14(1), pp. 9–19.
110. Maingot, M., & Quon, T. (2001). A survey of electronic data interchange (EDI) in the top public companies in Canada. *INFOR*, 39(3), 317–332.
111. Malone, T. W., & Benjamin, R. I. (1987). Electronic markets and electronic hierarchies: Effects of information technology on market structure and corporate strategies. *Communications of the ACM*, 30(6), 484–497.
112. Mandell, M. P. (2001). *Getting results through collaboration: Networks and network structures for public policy and management*. Westport, CT: Quorum Books.
113. McFarlan, F. W. (1984). Information technology changes the way you compete. *Harvard Business Review*, 62(3), 98–103.
114. McFarlan, F. W., McKenney, J. L., & Pyburn, P. (1983). The information archipelago—Plotting a course. *Harvard Business Review*, 61(1), 145–156.
115. McKinney, V. R. (1998). *The role of the partner relationship in interorganizational systems*. Unpublished dissertation, thesis (Ph.D.), University of Texas at Arlington, Arlington, TX.
116. Meier, J. (1990). *A formal analysis of costs and benefits of interorganizational systems*. Unpublished Ph.D. dissertation, University of Hawaii, Honolulu, HI.

117. Meier, J. (1995). The importance of relationship management in establishing successful interorganizational systems. *The Journal of Strategic Information Systems*, 4(2), 135–148.
118. Meier, J., & Sprague, R. H., Jr. (2001). The evolution of interorganizational systems. *Journal of Information Systems*, (6), 184–191.
119. Messmer, E., & Greene, T. (2001). VPN woes force shift at giant e-commerce Net. *Network World*, pp. 1, 13.
120. Mokhtar, S., & Kasimin, H. (1998). Inter-organizational information system in the planning and implementation systems of development projects. In C. Avgerou (Ed.), *Proceedings of the Fifth International Federation of Information Processing Working Group 9.4 Conference on Implementation and Evaluation of Information Systems in Developing Countries, February 5* (pp. 222–233), IFIP, London.
121. Moritz, P. H. (1986). *Interorganizational collaboration in multihospital systems: An analysis using the intriligator interorganizational relationships (IOR) model*. Unpublished Ph.D. dissertation, University of Maryland, College Park, MD.
122. Mukhopadhyay, T., Kekre, S., & Kalathur, S. (1995). Business value of information technology: A study of electronic data interchange. *MIS Quarterly*, 19(2), 137–156.
123. Ngai, E. W. T., & Wat, F. K. T. (2002). A literature review and classification of electronic commerce research. *Information & Management*, 39(5), 415–429.
124. Nidumolu, S. (1989). The impact of inter-organizational systems on the form and climate of seller–buyer relationships: A structural equations modelling approach. In *Proceedings of the Tenth International Conference on Information Systems* (pp. 289–304), Boston, MA.
125. Nilakanta, S., & Scamell, R. (1990). The effect of information sources and communication channels on the diffusion of innovation in a data base development environment. *Management Science*, 36(1), 24–40.
126. O’Callaghan, R., J., KANFMANN P.J., and Konsynski, B. R. “Adoption Correlates and Share Effects of Electronic Data Interchange Systems in Marketing Channels,” *Journal of Marketing Research* (56), 1992, pp. 45–56.
127. Park, K. H., & Favrel, J. (1997). An inter-organizational information system infrastructure for extended (or virtual) enterprises. In J. Kim (Ed.), *Intelligent manufacturing systems—International Federation of Automatic Control Workshop, July 4, Seoul, Korea* (pp. 43–48). Oxford; New York: Pergamon Press.

128. Payton, F. C. (2000). Lessons learned from three interorganizational health care information systems. *Information & Management*, 37(6), 311–322.
129. Payton, F. C. (1997). *Uncovering the critical factors in the implementation process of interorganizational health care information systems*. Unpublished dissertation: thesis (Ph.D.), Case Western Reserve University, Cleveland, OH.
130. Payton, F. C., & Ginzberg, M. J. (2001). Inter-organizational health care systems implementations: An exploratory study of early electronic commerce initiatives. *Health Care Management Review*, 26(2), 20–32.
131. Petersen, G. (1989). Opportunities and challenges for IES in sales and marketing are substantial and growing. *Industrial Engineering*, 21(5), 52–55.
132. Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review*, 63(4), 149–160.
133. Premkumar, G., & Ramamurthy, K. (1994). The impact of inter-organizational relationships on initiation of inter-organizational systems. In *Proceedings of the Annual Meeting—Decision Sciences Institute* (pp. 843–845), Decision Sciences Institute, Honolulu, HI.
134. Premkumar, G., & Ramamurthy, K. (1995). The role of interorganizational and organizational factors on the decision mode for adoption of interorganizational systems. *Decision Sciences*, 26(3), 303–336.
135. Premkumar, G., Ramamurthy, K., & Nilakanta, S. (1994). Implementation of electronic data interchange. *Journal of Management Information Systems*, 11(2), 157–186.
136. Premkumar, G. P. (2000). Interorganization systems and supply chain management: An information processing perspective. *Information Systems Management*, 17(3), 56–69.
137. Provan, K. G., & Milward, H. B. (1995). A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, 40(1), 1–32.
138. Provan, K. G., & Skinner, S. (1989). Interorganizational dependence and control as predictors of opportunism in dealer–supplier relations. *Academy of Management Journal*, 32(1), 202–212.
139. Raghunathan, S. (1999). Interorganizational collaborative forecasting and replenishment systems and supply chain implications. *Decision Sciences*, 30(4), 1053–1071.
140. Rai, A., & Howard, G. S. (1993). An organizational context for case innovation. *Information Resource Management Journal*, 6(3), 21–34.

141. Raina, S. (1997). *Multi-criteria decision analysis approach to evaluation of interorganizational systems*. Unpublished Ph.D., University of Alabama.
142. Ramamurthy, K., & Premkumar, G. (1995). Determinants and outcomes of electronic data interchanges diffusion. *IEEE Transactions on Engineering Management*, 42(4), 332–351.
143. Ramamurthy, K., Premkumar, G., & Crum, M. R. (1999). Organizational and interorganizational determinants of EDI diffusion and organizational performance: A causal model. *Journal of Organizational Computing and Electronic Commerce*, 9(4), 253–285.
144. Rasch, R. H., & Hansen, J. V. (1997). A design approach for analyzing interorganizational information systems. *Annals of Operations Research*, (72), 95–102.
145. Ratnasingam, P. (2001). Inter-organizational trust in EDI adoption: The case of Ford Motor Company and PBR Limited in Australia. *Internet Research*, 11(3), 261–268.
146. Redwood, M., Vigo, K., Dawe, R., & Hastings, J. (1996). Link: The electronic virtual laboratory. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI-IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 113–122), Moderna Organizacija Kranj, Bled, Slovenia.
147. Reich, B. H., & Benbasat, I. (1990). An empirical investigation of factors influencing the success of customer-oriented strategic systems. *Information Systems Research*, 1(3), 325–347.
148. Riggins, F. J. (1993). *The growth of interorganizational systems in the presence of network externalities and unequal interdependent benefits*. Carnegie Mellon University, PA.
149. Riggins, F. J., & Mukhopadhyay, T. (1994). Interdependent benefits from interorganizational systems: Opportunities for business partner re-engineering. *Journal of Management Information Systems*, 11(2), 37–57.
150. Riggins, F. J., & Mukhopadhyay, T. (1999). Overcoming EDI adoption and implementation risks. *International Journal of Electronic Commerce*, 3(4), 103–123.
151. Riggins, F. J., Mukhopadhyay, T., & Kriebel, C. H. (1994). Optimal policies for subsidizing supplier interorganizational system adoption. *Journal of Organizational Computing*, 5(3), 295–326.
152. Rochester, J. B. (1989). The strategic value of EDI. *I/S Analyzer*, 27(8), 1–14.

153. Sabherwal, R., & Vijayasarathy, L. R. (1994). An empirical investigation of the antecedents of telecommunication-based interorganizational systems. *European Journal of Information Systems*, 3(4), 268–283.
154. Salam, A. W. (1994). Electronic data interchange and corporate EFT: A survey. *TMA Journal*, 14(3), 59–61.
155. Saunders, C. S., & Clark, S. (1992). EDI adoption and implementation: A focus on interorganizational linkages. *Information Resource Management Journal*, 5(1), 9–19.
156. Senn, J. A. (2000). Business-to-business e-commerce. *Information Systems Management*, pp. 23–32.
157. Senn, J. A. (1992). Electronic data interchange: The elements of implementation. *Journal of Information Systems Management*, (9), 45–53.
158. Shaft, T., Sharfman, M., & Swahn, M. (2001). Using interorganizational information systems to support environmental management efforts at ASG. *Journal of Industrial Ecology*, 5(4), 95–115.
159. Sharma, P. (2000). *The effects of interorganizational systems on process and structure in buyer seller exchange*. Unpublished Ph.D. dissertation, University of Nebraska–Lincoln, Lincoln, NE.
160. Sheombar, H. S. (1992). EDI-induced redesign of Co-ordination in logistics. *International Journal of Physical Distribution and Logistics Management*, 22(8), 4–14.
161. Siegel, G. B., Clayton, R., & Kooor, S. (1990). Modeling interorganizational effectiveness. *Public Productivity & Management Review*, 13(3), 215.
162. Sokol, P. K. (1989). *EDI: The competitive advantage*. New York: McGraw-Hill.
163. Soliman, K. S. (2000). *Determining the critical factors affecting the adoption decision of Internet-based interorganizational information systems*. Unpublished Ph.D. dissertation, University of Memphis, Memphis, TN.
164. Srinivasan, K., Kekre, S., & Mukhopadhyay, T. (1994). Impact of electronic data interchange technology on JIT shipments. *Management Science*, 40(10), 1291–1304.
165. Sriram, V., & Banerjee, S. (1994). Electronic data interchange: Does its adoption change purchasing policies and procedures? *International Journal of Purchasing and Materials Management*, (30), 31–40.
166. Stern, L. W., & Kaufmann, P. J. (1985). Electronic data interchange in selected consumer goods industries: An interorganizational perception. In R. Buzzel (Ed.), *Marketing in an Electronic age* (pp. 52–74). Boston, MA: Harvard Business School Press.

167. Stohr, E. A., & Zhao, J. L. (2001). Workflow automation: An overview and research issues. *Information Systems Frontiers*, 3(3), 281–291.
168. Strzelczak, S. (1996). EDI, IOS and BPR impact on computer-aided production and logistical management. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 68–77), Moderna Organizacija, Kranj, Slovenia.
169. Suomi, R. (1991). Alliance or alone? How to build interorganizational information systems. *Technology Analysis & Strategic Management*, 3(3), 211–234.
170. Suomi, R. (1988). Inter-organizational information systems as company resources. *Information & Management*, (15), 105–112.
171. Talalayevsky, A., & Hershauer, J. C. (1997). Coordination cost evaluation of network configurations. *Journal of Organizational Computing and Electronic Commerce*, 7(2&3), 185–199.
172. Toppen, R., Smits, M., & Ribbens, P. (2000). Effects of two inter-organizational systems to settle cross border Euro payments between financial institutions in Europe. In R. H. Sprague, Jr. (Ed.), *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences, Maui, HI* (p. 181). Washington, DC: IEEE Computer Society Press.
173. van der Aalst, W. (2000). Loosely coupled interorganizational workflows: Modeling and analyzing workflows crossing organizational boundaries. *Information & Management*, 37(2), 67–75.
174. van der Aalst, W. M. P. (1999). Interorganizational workflows. *Systems Analysis, Modeling, Simulation*, 34(3), 335–368.
175. Veith, R. H. (1980). *The interorganizational impact of computerized information processing networks: The case of international banking*. Unpublished thesis (Ph.D.), Syracuse University.
176. Venkatraman, N. (1994). IT-enabled business transformation: From automation to business scope redefinition. *Sloan Management Review*, 35(2), 73–87.
177. Venkatraman, N., & Zaheer, A. (1990). Electronic integration and strategic advantage: A quasi-experimental study in the insurance industry. *Information Systems Research*, 1(4), 377–393.
178. Vijayarathy, L. R. (1994). *Consequences of interorganizational information systems: An empirical investigation of the effects of EDI use on interorganizational relationships in the retail industry*. Unpublished Ph.D. dissertation, Florida International University, Miami, FL.

179. Vitale, M. R. (1986). *American Hospital Supply Corp: The ASAP System*. Boston, MA: Harvard University Press.
180. Vlosky, R. P., Wilson, D. T., & Vlosky, R. B. (1997). Closing the interorganizational information systems relationship satisfaction gap. *Journal of Marketing Practice*, 3(2), 75–82.
181. Vogel, D. (1996). Electronic commerce options and strategies in the international office of the future. In P. M. C. Swatman, J. Gricar, & J. Novak (Eds.), *Ninth International Conference on EDI–IOS: Electronic Commerce for Trade Efficiency and Effectiveness, Proceedings, Bled, Slovenia, June 10–12* (pp. 547–555).
182. Volkoff, O., Chan, Y. E., & Peter Newson, E. F. (1998). Leading the development and implementation of collaborative interorganizational systems. *Information & Management*, 35(2), 63–76.
183. Wagner, C. (1998). Use of simulation gaming to assess impact of interorganizational information sharing on inventory performance. In E. D. Hoadley, & I. Benbasat (Eds.), *Proceedings of the Fourth Americas Conference on Information Systems* (pp. 795–797), August, Baltimore, MD, Association for Information Systems (AIS), Baltimore, MD.
184. Wang, E. T. G., & Seidmann, A. (1995). Electronic data interchange: Competitive externalities and strategic implementation policies. *Management Science*, 41(3), 401–418.
185. Weigand, H., & van den Heuvel, W.-J. (2002). Cross-organizational workflow integration using contracts. *Decision Support Systems*, 33(3), 247–265.
186. Wey, Y. J., & Gibson, D. V. (1991). Influence of the external environment on interorganizational systems: An integration of transaction costs and resource dependence perspective. In *Proceedings of Hawaii International Conference on System Sciences* (pp. 501–507). Washington, DC: IEEE Computer Society Press.
187. Whang, J. (1992). *An empirical study of factors influencing interorganizational information systems implementation: A case of the real estate industry*. Unpublished thesis (Ph.D.), University of Nebraska–Lincoln, Lincoln, NE.
188. Williams, T. (1997). Interorganisational information systems: Issues affecting interorganisational cooperation. *Journal of Strategic Information Systems*, 6(3), 231–250.
189. Wood, D. J., & Gray, B. (1991). Toward a comprehensive theory of collaboration. *Journal of Applied Behavioral Science*, 27(2), 163–179.

190. Wortmann, H. S., Nick. (2001). ICT issues among collaborative enterprises: From rigid to adaptive agent-based technologies. *Production Planning and Control*, 12(5), 452–465.
191. Zaheer, A., & Venkatraman, N. (1994). Determinants of electronic integration in the insurance industry. *Management Science*, 40(5), 549–566.
192. Zwass, V. (1996). Electronic commerce: Structures and issues. *International Journal of Electronic Commerce*, 1(1), 3–23.