

E-BUSINESS AND SUPPLY CHAIN MANAGEMENT

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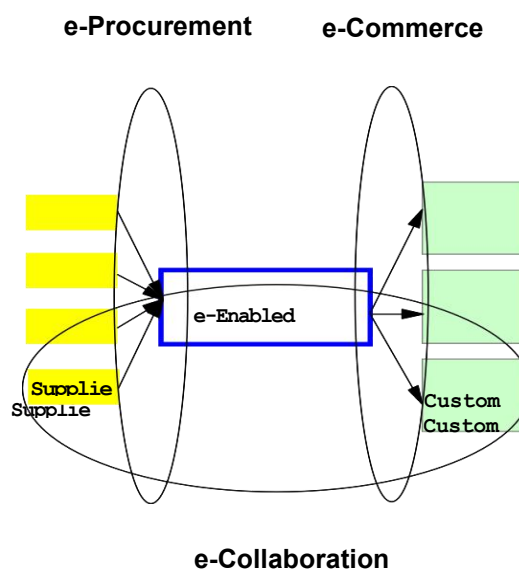
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Abstract: The web has a huge impact on how phones interact with their other customers. Past stumbling blocks to consolidation in the purchase of goods such as high transaction costs between partners, access to poor information, and the challenges of managing complex connections between operations all organizations melt away on the web. In this paper, we explore how the web changes delivery chain management. We present a emerging research study on the impact of e-business on delivery chain management includes descriptive frameworks, analytical models, power analysis, and cases lessons. We divide this work into three main categories: e-commerce, e-procurement, and e-collaboration.

1. Introduction:

Nothing has shaken the small supply chain management sector as the emergence of the Internet. While information flow management has always been a key part of procurement management, rapid growth of web-based information transfer within companies, their suppliers, and their customers have decided to increase the value of knowledge management in building effective supply chains. Indeed, the Internet has emerged as the least expensive means of consolidation. It does not explain e-business as a marriage between the Internet and the integration of procurement. This marriage transforms many processes within the property from the purchase of the goods to the customer product management and construction. In this paper, we explore how e-business transforms supply chains and examines the rapid research in this area. Following the framework of Lee and Whang (2002c), we classify different types of e-business applications into three categories: e-commerce, e-purchase, and e-collaboration (Figure I). E-Commerce helps network marketing partners identify and respond quickly to changes in customer needs taken over the Internet. e Procurement allows companies to use the Internet to find directly or indirectly. Building materials, and handling value-added services such as travel, maintenance, culture, payment, quality assurance and documentation. E-Collaboration facilitates national cohesion

through various decisions and operations beyond transactional partners, both suppliers and customers, via the Internet (e.g., integration of engineering a change in the product-specific product of the exported partner). This paper is divided into three sections examining the research into these three e-forms. In our study, we include extensive research from the old model building and strong lessons in cases and structures. At the end of each phase, we review the papers included in this special POM program, related to the original work. Given the first phase of research in this area, most of the published research is still in the form of case studies and explanatory frameworks. While we don't want our review to be perfect, we believe it provides a good picture of the place. We focus on articles that are explicitly linked to online marketing applications. Of course, there is a lot of research related to the web before information technology and procurement management. We include only a few of these papers to provide continuity in the previous work. We classify papers for both e-business and research method of operation. In addition, we are reviewing e-business-focused teaching cases as well supply chains. The number of teaching cases centered in this area has increased significantly over the past few years. In teaching cases, we limit our review to written cases three years ago (2000-2002). This removes many cases that focus on B2B exchanges and failed e-tailers. We recognize that a few cases we have included in our review openly check the failures of these companies. We classify teaching cases with business form and procurement management area using a framework developed by Johnson and Pyke (2000).



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Figure 1. e-Business forms and their impact on the supply chain.

2. Commercial

E-Commerce has had a huge impact on the supply chain of many products. Obviously, information supply chains have seen a dramatic change (e.g., see Dewan, Freimer, and Seidmann 2000). Manufacturers of visual products have also turned to the Internet as a direct route of distribution. The direct channel creates different resolutions as well challenges from those in an existing "brick and mortar" store. These two channels procurement challenges that have led to company failure, including their focus on e and areas under the control of asset sales highlighted in this case. For example, the Webvan case examines challenges to quickly build a distribution system. Garden.com checks provider news management and conflicting incentives in real sales. In both cases, the offer chain challenges have led to the failure of these firms. In contrast to these cases, Chempoint shows the virtual supply chain for the distribution of small volumes, special chemicals where benefits model. Chempoint has managed to build a good business with both of them adding value to their customers with product knowledge and better order fulfillment and careful development of the set of responding providers. Papirus / Office Depot case examines Eastern competition Europe's office supply market and the role e-commerce plays in that transformation in the market. Finally, the 7Dream case, based in Japan, is a favorite example of bricks as well solution for the last mile problem. Customers order from many different vendors in 7Dream website receives their delivery at the nearest 7-11 store where they are can pay in cash. Returns are also store-bought.

Two papers on this Special Issue address two questions from e-commerce: "provided real-time details of the offer and demand over the Internet, one can count on it found promise (ATP)? "and" when customers are given the opportunity to choose a service that comes first with delivery immediately at a higher price, what should be the appropriate asset valuation policy? " To answer the first question, Chen, Zhao, and Ball (2002) consider configure-to-order an ATP batch-mode operating system where customer requests are collected in batch and was later processed together with a

model that determined ATP commitment and resource allocation. This paper studies the procurement process in relation to certain ATP parameters as a mixing interval. The manufacturer is expected to resolve the file a mixed system for each batch. The program takes the required profiles and offers issues (e.g., availability of raw material, production capacity, material compatibility, and customer preferences) and increases operating profitability. Outputs include assembly final order strategies, order acceptance decisions, and quantity delivery over time. It follows in sequence running the program in Maxtor data and gets more details (about batch size and flexibility). The model fully reflects the production system that provides customization products with advanced service mode (using real-time series visibility) -all again sensible in the Internet era. The second question was answered by Cattani and Souza (2002). They look at two types (most importantly compared to low) customer demand comes at Poisson prices. Requirements are met from the standard configuration filled by the server at a limited speed but stops when the file inventory reaches a certain level. In addressing different customer needs, the manufacturer may use a pre-arrival policy (FCFS) or a rating policy where solid ships order only from leading customers below a certain level of creativity. The advantage of a direct channel manufacturer is the invention and flexibility of vessels, because some online customers are more willing to wait longer than others. The paper continues models of line processes or processes of birth defects and receive an additional value (in terms of terms operating performance) of the FCFS policy equity policy under three losses conditions sales, backlogs, and their combinations. They offer a large number of run runs to get other relevant details. This paper shows the additional benefits of e-commerce in addition to traditional sales channels, such as delivery time flexibility and visual adjustment. Regarding storage, note that in the e-commerce system development, the flow of goods and information flow can be interrupted - delivery the process can take a different route for order flow. One can order a book from Amazon website, but the actual delivery may be from the archive of its distributor, Ingram Books. Therefore, an online firm can create a virtual reality network that contains Suppliers 'suppliers' and personal property (Lee and Whang 2001)

3. e-Purchase of goods

Modern production requires flexibility due to tough competition, a fast-changing customer favorites, reducing the product life cycle, and increasing product diversity. Once dynamic allocation, effective procurement serves as a pillar of support for flexibility production. The Internet also offers a natural platform to facilitate active purchases as many buyers and sellers find each other and shop according to what has been said before protocols (governed by market or internal traders' rules). While e-purchase is e-commerce mirror image, they have many different features. For example, e-commerce

they usually deal with a large number of individual buyers, and e-purchases are often involved working with companies. After all, many e-procurement ideas such as strong markets and auction theory have read long into the economy (e.g., auction, see Milgrom and Weber 1982 or Riley and Samuelson 1981). Recent work has begun to explore how online exchanges affect procurement process and supply boxes for individual companies. For example, Kaplan and Sawhney (2000) and Wise and Morrison (2000) both form frameworks for self-understanding what types of exchanges will emerge from different types of products and how they are tested exchanges can change. Jap and Mohr (2002) examined why some firms were so successful e-procurement strategies while others are not. Lee and Whang (2002a) imitate how second it is online markets influence the supply of goods. pyke and Johnson (2002) compare many e-procurement strategies in the union of traditional strategies.

In the last 3 years, there have been a number of interesting cases listed in e-procurement . The five cases summarized here examine the role of sector trade: SciQuest is with a focus on the laboratory and scientific research community; Instill is focused on food service sector; EConnections and PassAct in the electronic components industry; and ESkye focuses on the beverage industry. In each case, the company's initial focus is it was a connection that brought buyers and sellers together without exception touches the product. While they all experience some success, they find it important resistance to sales as they challenge the balance of power between customers, distributors, and suppliers. Today, three survivors (Instill, Skye, and SciQuest) have it all redesign their business model in the sale of procurement software, targeted at their individual industry .The PassAct case examines the

problems facing transactions why many have failed. A related case, Quantum, explores the challenges of a given a digital storage device company and its response to the development of an industrial organization exchange (at HITECH, later became Converge). Case 12 of TradeMatrix is very focused. The software manufacturer's strategy to use its expertise in procurement planning to become a major engineer of public and private commerce. Two other cases examine how e-commerce and Internet auctions have changed purchase process. The Home Depot case examines how Home Depot uses the bid Procedure and smart optimization algorithm for providing large contracts for the movement of goods carriers. "I hear 5 Million Euros?" details of the use of a one-off return auction the impact of such procurement solutions on a company like Scotts. This special issue has three pages on e-procurement- "Short-Term in Procurement strategies Versus Long-Term Contracts" (Peleg, Lee, and Hausman 2002), "Internet Drivers Buying Success "(Boyer and Olson 2002), and " A Simple Heuristic for Dynamic Order Choosing a Size and Provider with Time-varying Information "(Tempelmeier 2002). The first paper (Peleg, Lee, and Hausman 2002) reads and compares three different manufacturer's purchase strategies. The first strategy (called Strategic Partnership) is to develop a long-term supply relationship with a specific provider, and a second strategy (called an online search strategy) buy online at a better price. Third is the inclusion sign both a long-term purchase contract with the supplier to some extent, but only if required, additional value can be purchased online. A tradeoff between Strategic collaboration and online search is a lower predic value compared to random opportunity at a lower price. The consolidated strategy incorporates a minimum commitment obligation, so a non-negotiable quantity commitment is traded for the benefit of stratification. This paper offers situations where one strategy is superior to another. These writers re-read the appropriate number of suppliers to contact when consistent search costs are incurred individually the potential provider is contacted. The analysis emphasizes the fact that e-purchase opens the file opportunities for an integrated strategy and find an appropriate solution to the integration site. It also shows that low search costs and other items «h-iven yi Internet) can affect your purchasing power. We actually get various software packages that support such powerful purchasing strategies. These products (e.g. Broadcasting, Manugistics, Tradec, and Instill) capture real-time data (e.g., item prices, sales data, and market) price in exchange for electricity) and

provide a good presentation of working conditions too the ability to do limited. The second paper (Boyer and Olson 2002) surveyed 416 e-procurement users (of Office Depot) also researches successful items in purchasing indirect items. Data and its step-by-step analysis supports the fact that buying companies are realizing the manfor benefits of e-purchasing and identifying successful drivers. A good summary of of paper, performance drivers are divided into the company's operational areas (strategies and environment) and Internet features (Internet-related and site-specific). Combined with the work of Peleg, Lee and Hausman, this work presents the most useful research in the future on the nature and impact of direct e-purchases building materials. The final procurement paper (Tempelmeier 2002) looks for an improvement tool to help in selecting powerful suppliers. The author looks at the issue of the company facing power demand and many providers that offer a variety of different discount strategies time. The problem is made as a prbgram of mathematics and a quick heuristic solution proposed and tested. The author explains how the solution process is done as part of SAP's Advanced Planner and Optimizer (APO) software.

4. Cooperation

While e-commerce and e-procurement have taken over most of the business news topics five years ago, the promise of e-cooperation could be even greater. It does not explain e-interaction as a business-to-business interaction supported by the Internet. These internal actions extend beyond the simple buy / sell transaction and can best be described as a relationship. This includes activities such as information sharing and integration, decision-making, the process of sharing, and sharing resources. Lee and Whang (2002b) provide this tax for interact with e and link the concept to previous research in asset management. For three places, information sharing has seen too much research. With a broad interest in the effect of bullwhip (Lee, Padmanabhan, Whang (1997 »)), many researchers have worked on measured the impact of bullwhip (Chen, Drezner, Ryan, and Simchi-Levi 2000) as well explore the benefits of information sharing (for example, see Cachon and Fisher 2000; Iyer and Ye 2000; Moinzadeh 2002). There was an important task to understand the the benefits of IT investment within the business (e.g., ERP impact; McAfee 2002). Process sharing like collaborative design and product design is also an exciting one opportunity. Many

researchers are wondering how the web will change something new inside again between companies (Sawhney and Brandelli 2000). In two papers, Johnson (2000, 2002) explores webcentric interactions with product design in both high-tech and clothing industries. Develops a framework for understanding the benefits of design marketing interaction. There are many new cases exploring various aspects of cooperation, from information sharing and integration processing and sharing resources. Several of these cases that test new web native companies that have developed new plans for different types of partnerships. For example, Agile looks at the role of cooperation managing product design and engineering changes on the web; Extricity looks at software is designed to assist in the integration of information between business systems; SeeCommerce illustrates DaimlerChrysler's information integration application to facilitate the sale of goods metrics; Quad explores the value of visibility of a supply chain for each supply partner provide RFID compliance with supply chain; and Syncra is focused in collaborative prediction and refilling between buyer and seller. A few other cases have highlighted the impact of information consolidation on others a specific aspect of the sale of goods. Some cases focus on supply chain management and some are more customer-oriented. For example, the Solectron case focuses on how the use of information has transformed Solectron from a simple contractor is a link to provide complete assistance. Accordingly, "Third-Party Logistics Services", The case examines how companies such as Flying Cargo's transport operator use the information to expand their services to a nearby freight business. On the other hand, cases as General Motors and Lufthansa show how information can be used to scale customer loyalty and pricing management. Hewlett-Packard explores repetitive purchases and information integration issues for managing returns. Finally, Mark & Spencers as well Zara checks out the competition 1 between two clothing companies, including an integrated role design and production. In this Special Issue we have two papers related to the interaction of e. First page (Tatsiopoulos, Ponis, Hadziliias, and Panayiotou 2002) described how to make the product co-operative in the Greek clothing industry. systematic modeling and simulation, considering the potential benefits of a web-based program before launch. Most authors: describe one of the cases of several companies that illustrates how to work at Mass Fashion, a Greek clothing company. They include many details of actual use and changes that lead to overall product production process.

The final paper (Zhang 2002) explores incentives for firms to share demand information. The author's research follows a wide range of information and practice supply chains (for example, Cachon 2001). This paper creates a two-echelon system model for the manufacturer and two low-cost retailers participate in the Cournot or Bertrand competition. Authors diagnose problem leakage of information in a sharing relationship and indicate that the correct amount of the manufacturer does not depend on the type of competition below but only on information sharing arrangement.

5. Conclusion

It is true that Internet-based software products made by the first companies have them has recently experienced serious problems. However, while the Internet bubble may have exploded as an opportunity to make money quickly, we believe the influence of the Internet on the sale of goods the bosses are still alive. Instead of disappearing, it widens the scope again at the same depth. Many companies open Internet channels and many consumers order via the Internet. Also, applications are progressing rapidly. For example, industry trading not only handles transactions, but also generates data. This will create a file for a whole new study and a new type of "do" software products that allow that the company to take real-time data and make powerful decisions. They fill according to tradition

"planning" programs such as ERP. Indeed, SAP recently introduced programs to improve applications to better communicate with their planning systems and increase asset tracking system in its transport management system (Gilbert 2002).

At the same time, the sheer volume of information from Internet marketing leads to details "overload." This also creates an opportunity to develop integration solutions, summarize, and correctly translate the manager. Really software products as well The solution providers appear to address the needs with various terms such as "dashboard," "cockpit," and "command center" (eg Broadcasting, Powermarket, Tradec section, and Copywriting). Given the many challenges in the management of global purchases and with unlimited ingenuity in the business community, it's just a little talk of being new. A powerful tool called the Internet will find its way to many of the best applications in the long run time. So too, it could be researched, such as compliance.

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