E-COMMERCE DRIVEN STRATEGIC ALLIANCES IN MARITIME BUSINESS

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ABSTRACT

This paper presents an overview of e-commerce with a focus on maritime industry. It describes potential influence of the established financial services industry in the evolution of a new business model, and summarizes e-commerce motivated alliances, mergers, and partnerships in the industry. Given the formative nature of e-commerce technology, it is suggested that the maritime industry strike a balance between their business strategy and organizational readiness on one hand and emerging technologies and the trading environment on the other.

Keywords: Maritime business, e-commerce, alliances, business model, organizational readiness, emerging technologies

BRIEF BACKGROUND OF MARITIME BUSINESS

Maritime business encompasses a complex array of diversified trades and activities ranging from all aspects of shipping and ocean commerce to movement of cargo by sea. It is a highly segmented industry in terms of ownership (e.g. large oil and chemical companies, independent owners, operators, brokers and agents), abundantly variant in terms of firm size, volume of business, types of cargo handled (e.g. oil, bulk, and general cargo), and totally variegated in types of vessels operated – whether liners, which offer scheduled service and tramps which ply waters subject to employment of the vessel and the terms of the contract, and tankers, which carry liquid cargo on demand. (11, 18).

While all these companies belong to the same industry, their organizational structures and operations, their goals and objectives, their pressures and constraints are distinctly different. Take ownership, for example, which can range from a single owner or a free agent whose working life is enwrapped in almost every operation of the business to a multicratic distributed management in case of a large oil or chemical company. In a small organization, owner involvement in company operations is total, whereas in a large organization, it is distributed among many cost and profit center managers with top management focused on the bottom line. This modus operandi reflects unique behavior in how management of variously segmented companies approaches operational strategies.

Considerable resources have been invested in major advances on the ship technology side perhaps at the cost of innovations in management techniques. Regardless of its size, managing a company in maritime business today involves operating in a continually changing environment. In order to stay competitive, companies in the industry are struggling for efficient ways of doing business. The ubiquity of the Internet and its advance technologies are making it possible for everyone to aspire for a piece of the pie of a $500 billion global maritime industry. However, aspiration for an increased market share and apprehension due to the recent dot-coms failure rate have put the industry in a vortex of uncertainty.

In addition, the industry is tradition bound, and set in its own ways of doing things. For example, it is not likely that the "Web revolution will undermine the secretive tanker broking trade." Also, there is fear among some brokers that some oil companies, traders or ship owners will use the web to eliminate them. It is felt that the industry has many traders, brokers, and operators who prefer not to rock the boat. Regardless of the circumstances, the industry is poised to welcome e-commerce for the sake of speed, accuracy, and efficiency. The industry is at a fork in a road, and the direction it decides to take may determine its success or demise [17].

Growth and success of e-commerce in maritime business will depend upon the process of its implementation, and perceived benefits actually realized by users. Therefore, it is necessary for all concerned to gain familiarity of the market place, appropriateness of the technology, readiness of the user, and commitment to service e-commerce customers. In the fast paced world of e-commerce, knowledge of the field is of utmost importance to maintain one's competitive edge.

UNDERSTANDING THE E-COMMERCE MARKETSPACE

E-commerce involves any commercial transaction that occurs on the Internet or over an electronic medium between a buyer and a seller such as businesses (i.e. business-to-business or B2B), businesses and consumer (i.e. businesses-to-consumers or B2C), and the public sector. It is based on convenience and competitive prices for the buyer, and cost and extended market reach considerations for the supplier. It provides choice, expedites product or service selection and delivery, and minimizes ordering, billing and remittance costs for the parties concerned.

Technically savvy consumers with a taste for online shopping appreciate the ease and versatility of e-commerce. They let their fingers do the clicking in the convenience of their home and avoid masses in the malls. They shop online any time and skip long lines at the register. They fish for favorable price and desirable features from several sites in far less time than warranted in the world of bricks and mortar. Indeed, this mode of shopping is gaining popularity especially among those consumers who have access to the Internet. However, this mode of shopping is eclipsed by B2B transactions, which account for the lion's share of the Internet business.

The B2B e-commerce model that is currently in vogue involves business transactions that flow through centralized exchanges. For example, Exxon Mobil Marine Fuels Company appears to have set up Bunkerstem exchange for e-trade [5]. The exchange buys and sells bunker fuel over the net. CIT Equipment Finance Company has an exchange (eFinance-it.com) for equipment buying companies. CIT finance offers loan servicing package for its user/customers. The main role of this type of exchange is –

to bring together a dispersed group of buyers and sellers into a virtual market place;
to facilitate electronic transactions by providing appropriate software tools.

This exchange-based model is very popular. It is relatively easy to set up and administer. However, its durability is highly questionable because of rapid technological innovations.

Among the problems that this model faces are issues that deal with the question of privacy, security, and authentication.

A new and more viable model is patterned after Napster's file-trading system. This is known as peer-to-peer network model that fulfills its mission swiftly, securely, and efficiently. In peer-to-peer model, there is neither a central exchange nor proverbial client-server relationship [10]. It is a lot easier to integrate with internal company system and provides greater degree of freedom to penetrate market place as opposed to the exchange model. Unfortunately, the development of P2P network software has been slow perhaps because of complex nature of the business transactions.

Wise and Morrison posit that B2B commerce shares many of the characteristics of automated financial trading. "Greater market liquidity and transparency have enabled more efficient pricing and more effective matching of buyers and sellers, and, most important, value has shifted from the product itself to information about the product"[18].

The concept of a transaction is divided into 1) physical transfer of goods, and 2) salient information such as price, availability, quality, quantity, etc that can be transmitted electronically. The authors argue that with more than twenty years of track record, financial trading could provide a shape of things to come in B2B commerce. They project four major trends that could influence the evolution of B2B commerce (Diagram 1 and details are presented on the following page). The diagram does not cover peer-to-peer configuration although there is a good chance that such a network will serve as a catalytic agent in making B2B commerce widely acceptable at an affordable price for all business participants.

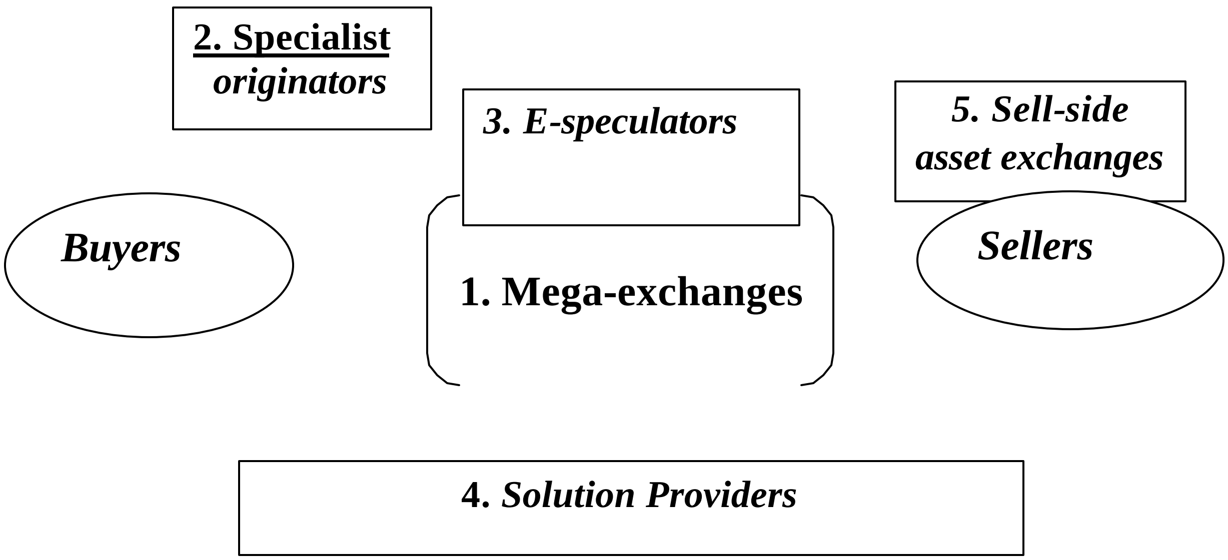
BUSINESS-TO-BUSINESS E-COMMERCE

According to Gartner Group, Inc., the worldwide B2B market is expected to grow from $145 billion in 1999 to $7.29 trillion through 2004. This will represent 7 per cent of the forecasted $105 trillion total global sales transactions. U. S. Department of Commerce cites *The Industry Standard* forecasts for 2003 of the dollar value ranging from $634 billion to $2.8 trillion. It attributes "this wide disparity to a combination of methodological and definitional differences." Given these phenomenal forecast estimates, it is understandable why business executives are rushing to establish an online presence and reap the rewards of this B2B promise land!

New markets are emerging impacting on many traditional models of conducting business. "Web-based startups such as E-Loan and E*Trade are challenging established firms. Producers and manufacturers such as Dell and Cisco are forging traditional wholesale and retail outlets and selling directly to the final consumers on-line. Intermediaries such as FedEx are expanding their services and becoming more deeply involved in the supply and distribution chains of other firms. Cyberintermediaries such as eBay are creating new markets" [11].

As the axiom goes, old order changeth yielding place to new, many new buyers are crowding the Internet to point, click, and engage in a transaction involving a product or service sold on a Web

Diagram 1 - The Emerging B2B Landscape



1. Mega-exchanges act as central hubs for the execution of most transactions and for buyer-seller communication [e.g. Covisint, the automotive mega-exchange initially developed by G.M., Ford, and DaimlerChrysler for proportional profit sharing, now welcomes other auto manufacturers as equity owners, and many suppliers have been given profit sharing stakes. This is a good example of a collaborative exchange model].

2. Specialist originators standardize and automate the buyer-decision-making process for more complex products and then send the transactions to mega-exchanges for execution [e.g. freight forwarders].

3. E-speculators participate or run exchanges, gaining real-time information in order to take direct or derivative market positions. They crystallize essential information from a large volume of data and market it for general consumption [e.g. market researchers and audit surveyors].

4. Solution Providers operate separately from open exchanges by embedding the product sale in a suite of unique, valuable services. These are the small boutique firms that thrive on their reputation for custom services [e.g. premier consulting firms]

5. Sell-side asset exchanges gain efficiency by swapping and reselling orders among a closed set of suppliers. These are mini exchanges that allow suppliers to trade among themselves for clearing their position after their trades on mega exchanges

Source: Wise, Richard, and David Morrison, “Beyond the Exchange: The Future of B2B,” Harvard Business Review, November-December 2000, p.93.

site. For any business to be successful in this endeavor, it is essential to gain an in-depth knowledge of the marketplace, its unique set of customers, and their motivations for using that medium. E-business and technology are changing ever so fast along with not-so-dependable demands of e-customers that it devolves on the marketer to remain vigilant of innovations in IT infrastructure to maintain competitive edge.

Gaining competitive advantage through innovative technologies has become a common denominator for virtually every company. A majority of these firms are seeking improvement in productivity through efficient operations and furthering their goals through strategic alliances.

E-COMMERCE ALLIANCES IN THE MARITIME INDUSTRY

The world of business is steeped in e-commerce activities. Maritime business is no exception. The industry is captivated by promises of cost savings, operational efficiencies, and high profits. But the gloom and doom of dot-coms supplemented by a few casualties already in the industry has maritime entrepreneurs looking for strategic partners to stay competitive. They aspire to outperform their competitors by harnessing complementary strengths in potential partners.

From a business perspective, collaboration and cooperation help competition, not hinder it. New partnerships and alliances develop especially among those businesses that sell similar products or services and cater to the needs of the same customer populations.

Maersk Sealand, created in December 1999, when A.P.Moller-Maersk acquired the international operations of Sea-Land Service Inc., is the largest container carrier in the U.S. trades. Evergreen Line is the second largest followed by APL, Hanjin and China Ocean Shipping Co. It was not easy to determine the extent of their e-commerce business although based on telephone conversation with their operations managers, each of them appear to share an affiliation or alliance with several dot com businesses. For example, nine of the world's leading ocean carriers (e.g. APL; CP Ships; Hanjin; Hyundai; K Line; Mitsui OSK Lines; Senator Lines; Yang Ming; and Zim Israel Navigation Co.) have joined forces with Tradiant in a partnership that is designed to enable importers and exporters to greatly simplify the process of containerized transportation at a significant cost and time savings. This partnership promises to take a 2.5 week process and reduce it down to an afternoon's work [6].

A variety of online marketplaces are competing for a position in the industry's most essential function – procurement. However, several exchanges venturing in the area have succumbed causing the industry to follow a wait-and-see attitude. A few among the industry leaders have taken a plunge in a cautionary manner utilizing a portfolio theory of investment to spread their risk.

Arena, previously known as CargoNet, is a HongKong based company supplying core technology for e-commerce [5]. It has formed a strategic alliance with SpecTec, a leading supplier of maintenance and purchasing software for the shipping industry. Many ship owners and operators avail of their services to improve purchasing efficiency.

E4marine is the marine industry's first independent procurement portal. It was established in May 2000 by Unitor ASA, a world leader in marine supplies and services and SpecTec, a market leader in shipboard maintenance and procurement systems. Between the two partners, they serviced more than 20000 vessels in over 900 ports. It is reported that customers utilizing their system achieve cost savings of up to 70%.

A group of charterers and owners numbering about thirty companies with names like BP Amoco, Cargill, Chevron Transport, Maersk, Mitsubishi, Pan Ocean Shipping, Royal Dutch/Shell etc., have invested in an internet company called LevelSeas. The company aims to deliver the "benefits of new technology to bulk ocean transportation through the provision of voyage management services." The company's revenue model reflects a "pay as you use" philosophy as opposed to pay by transaction. However, nothing concrete has emerged to make any inference about its long term viability.

Similarly, a joint internet portal called INTTRA provides a container shipment management services for its investors like P&O Nedlloyd, Maersk Sealand, Hamburg Süd, Hapag-Lloyd, Columbus Line, Safmarine, Alianca and Crowley American Transport. The site offers container tracking and booking confirmation system with the functionality to view container events and check bookings for all its investors. The single point of entry enables its users to save time and costs. In this case investors are the users and serve as a solid customer base to make the site self-sustaining.

A strategic linkage between MarineProvider AS, specializing in Internet based e-procurement services and Marline Technologies dealing in excess component supply management offers a B2B solution that will cut costs for both buyers and sellers in the industry. The alliance provides a real-time bidding capability that will result in reducing the costs of material acquisition and repair. Industry leaders see benefits down the road from such enterprises and fully support it .

CONCLUSION

E-commerce is much more than being on the Internet and automating one's business processes. New markets are emerging impacting on many traditional models of conducting business. For a business to be successful in this endeavor, it is essential to gain an in-depth knowledge of the marketplace, maintain a customer-centric focus and create superior value for them to keep returning for more business.

Several strategic alliances are formed to exploit the potential of e-commerce in maritime business. However, given the conservative nature of the maritime industry, its segmented structure encompassing a complex array of diversified trades and activities, lack of cohesion among key players, and top management's inadequate vision, the industry as a whole appears unconvinced about the prospects of e-commerce. Trade literature is replete with examples of many partnerships dissolving their relationships and swiftly disappearing from the scene.

Technological advances in affiliated industries, and growing consolidation among larger transportation companies will cause maritime industry to develop sustained e-commerce initiatives and maintain its strategic position in the global economy.

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