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BUILDING A RELATIONSHIP BETWEEN PARTNERS IN THE SUPPLY CHAIN USING ONLINE COMMUNICATION

Introduction

The modern logistics emphasizes the planning and movement of goods and information throughout supply chain. Effective logistics requires information that is both accurate and timely. The two most critical sources of inaccuracy are those related to demand projections and to customer requirements. The speed of information flow is also critical. Advances in telecommunications and computer technology, and especially the capabilities provided through electronic data interchange systems have dramatically enhanced the timeliness of logistical communication. Supply Chain Management is a fundamental concept of logistics that has evolved to enable organizations to improve their efficiency and effectiveness in the global and highly competitive environment in the twenty-first century. This conception comprises processes connected with the planning, realization and the evaluation connected with flow of materials of equipment, information, human resources among organizations to assure effective and fast delivery of material products and services among supplier and the customer. This conception has as its aim such planning, steering and the control of logistic processes – from place of origin of the raw materials, across production to final buyer to be able to offer the suitable goods in proper place and the time, in proper quantity and the quality, near well-founded costs with utilization of the modern technology of information.

The Supply Chain Management comprises:

- planning and forecasting of purchases,
- suppliers choice and folding orders,
- projecting and the development of products (near commitment of all the partners like the customers and the suppliers)

- the realization of operating processes (like the projecting, sale, processing the materials, and packing)
- the distribution (hugging orders from customer, development of the tradesman net, delivery the goods the customer, invoicing, money transfer of due amount);
- the relations among suppliers and the customer after sale (the reactions on attention and complaints, after sale service services such how: the installing the, training, the guarantee services and the after guarantee services, technical advising, and also often the receipt of product after use)¹.

To the most important advantages connected with supply chain management one should notice:

- the prevention the potential losses across exact coordinating the flow of information of relating both far-reaching prognoses of the customers' demand, as and the actual demand in data period². This is available through co-operation connected with monitoring the state of stores and the forecasting customers' needs (across analysis of productive cycles of individual assortments);
- utilization of the suppliers' identification system (which could eliminate potential mistakes);
- fast and the effective transport (the possibility of on-line interaction) across introduction the customers from current the offer (which is enlarged by introducing the product innovations), checking the suppliers store-house, evaluation of new product projecting ability (in this process very important role could play the customers who define their expectations, verify and validate the concept as well as documentation and prototypes);
- the possibility of direct reaction on the customers' problems (the complaints, technical advising, the undertaking of corrective actions (the removing of breakdown) at customer across quick dispatch the interventionist service groups³.

¹ P. Stonebraker: *Toward a Contingency Theory of Supply Chain*. "Management Decision" 2004, Vol. 42, No. 9, pp. 1131-1144; R.H. Ballou: *Business Logistics/Supply Chain Management*. Pearson Prentice Hall, New Jersey 2004; R. Narasimhan, Ch. R. Matthews: *Linking the Supply Chain to TQM*. "Quality Progress", November, 2006, pp. 29-35; C.C. Bozarth, R.B. Handfield: *Introduction to Operations and Supply Chain Management*. Pearson Education International, NJ 2008, pp. 329-330.

² N. Gronau: *E-Business mit ERP-Systemen*. "Industrie Management" 2001, Vol. 17, No. 1, pp. 64-67.

³ N. Gronau: op. cit., p. 64-67; D. Grant, R. Hall, N. Wailes, Ch. Wright: *The False Promise of Technological Determinism: the Case of Enterprise Resource Planning Systems*. "New Technology, Work & Employment" 2006, Vol. 21, No. 1, pp. 2-15.

1. The role of Internet in building relationship in supply chain

More and more enterprises to effectively build relationships with customers, including the use of the Internet⁴. In many cases, the role of full basic communication channel being a two-way flow of contracts, negotiations, sales documents, as well as maintenance service on-line, and evaluation of customer satisfaction (for comments, complaints, surveys, evaluation of suppliers and products offered by him). This allows the rapid exchange of information, which enables both a more comprehensive support for buyers, as well as reducing its cost⁵. Websites suppliers increasingly used as a source of information on the quality of products, where the published technical specifications of products (often with pictures and drawings), system certifications and certificates and approvals for products, as well as the opinions and recommendations of users⁶. This form of communication effectively influences shaping the image of businesses and building customer trust them.

2. The role of ERP in building relationship in supply chain

These possibilities give the firms of solution computer classes MRP (Material Requirements Planning). The role of the MRP systems is the optimizing of the planning which serves defining material needs. The basis their functioning is the plan of production of final goods (the master production schedule), which it is subject to plans of supply in ensembles, the components as well as the elementary parts (bill of material).

The next generation of development of systems is ERP (Enterprise Resource Planning) conception.

⁴ R.P. Mohanty, D. Seth, S. Mukadam: *Quality Dimensions of E-Commerce and their Implications*. "Total Quality Management & Business Excellence" May 2007, Vol. 18, No. 3, pp. 219-247; H.-F. Lin: *The Impact of Website Quality Dimensions on Customer Satisfaction in the B2C E-commerce Context*. "Total Quality Management & Business Excellence" June 2007, Vol. 18, No. 4, pp. 363-378; S. Samiee: *Global Marketing Effectiveness via Alliances and Electronic Commerce in Business-to-Business Markets*. "Industrial Marketing Management" 2008, Vol. 37, No. 1, pp. 3-8.

⁵ P.G.P. Walters: *Adding Value in Global B2B Supply Chains: Strategic Directions and the Role of the Internet as a Driver of Competitive Advantage*. "Industrial Marketing Management" 2008, Vol. 37, No. 1, pp. 59-68.

⁶ G. Vaidyanathan, S. Devaraj: *The Role of Quality in E-procurement Performance: An Empirical Analysis*. "Journal of Operations Management" 2008, Vol. 26, Iss. 3, pp. 407-425.

The main aim of this system enterprise is the integration of all rungs of management. His uses allows on quick decision making processes which is realized on-line. ERP hugs comprises such areas as⁷:

- the customers' service (the supervising of the data base about customers, service of standard orders and non - standard, electronic the transfer of documents);
- the production management (the store-house service, costs of production service, purchases of materials, the establishing of production plans, monitoring of the road in individual processes of product of realization);
- the finances (the supervising of book-keeping, control of flow of accountants' documents, and preparation of financial reports).

These systems allow the planning and the management of the enterprise resources not only in reference to effective utilization materials but also to workers and the financial assets. The implementation of ERP one should treat as complex project for several years. As main goals initiating the ERP indicate the improvement of efficiency of business processes as well as the reduction of costs of operating activity. Realization of these aims should allow for improvement of the company image across increasing level of products technical quality the customers' service, enlargement the productive abilities as well as the growth of sale. Enterprise Resource Planning systems require sure and quickly delivered information⁸. To achieve this many companies use the techniques of automatic identification of goods (support by code bar) as well as the electronic forms of information based on EDI Electronic Data Interchange) conception.

3. The role of EDI in building relationship in supply chain

The electronic exchange of information during folding the orders (e-procurement) allow to short the time of exchange of documents (sending of requirements

⁷ M.J. Adayleh, K.M. Abu-alganam: *The Role of ERP in Supply Chain Integration*. "International Journal of Computer Science and Network Security" May 2010, Vol. 10, No. 5, pp. 274-279; J. Managan, Ch. Lalwani, T. Butcher, R. Javapour: *Global Logistics & Supply Chian Management*. John Wiley & Sons, Chichester 2012, pp. 333-336.

⁸ H.A. Akkermans, P. Bogerd, E. Yücesan, L.N. van Wassenhove: *The Impact of ERP on Supply Chain Management: Exploratory Findings from a European Delphi Study*. "European Journal of Operational Research" 2003, Vol. 146, No. 2, pp. 284-301; S.C.L. Koh, A. Gunasekaran, T. Goodman: *Drivers, Barriers and Critical Success Factor for ERP II Implementation in Supply Chain: A Critical Analysis*. "Journal of Strategic Information System" 2011, Vol. 20, No. 4, pp. 385-402.

questions, orders, confirmation of orders as well as the invoices) among the partners as well as to lower the costs of transaction. Very often electronic exchange of information has the place in after sales services. Many enterprises using this form of communication allow their clients to folding complaint and suggestions, supply the technical service advising and propose new solutions also. One of systems which facilitates such on-line exchange of information is the EDI⁹. This solution permits exchange of data (in form of transaction documents) between computer systems. On the development of this solution had the impact such companies like IBM, Ford, General Electric, and General Motors. These concerns they extorted from their suppliers as well as the clients applying this system.

EDI can be used both inside enterprise, uniting individual his parts as this system is considerably more effective also, when oneself it applies him to sending data between suppliers and distributors. More and more often complies solution, which is being connection of Internet and EDI. The being connection of Internet more and more often complies solution and EDI like Lite EDI as well ad WEB EDI. This system allows on applying the documents which are available through the Internet. It improves used sending documents in trade aims and to state administration. EDI Systems are being created for particular sectors and also on use one firm (customized) and its contacts with suppliers in range: exchange of trade documents, electronic transfer of payment, exchange of technical data.

The applying of these systems permitted the enterprises to achieve many organizational advantages like:

- the improvement the circulation of documents among partners,
- acceleration access to trade information,
- the improvement of quality of offered services,
- the reduction of mistakes and the enlargement the exactitude of passed on information,
- the limitation of paper documents,
- improvement of payment flow¹⁰.

Use of EDI in our country requires fulfillment several conditions: the higher quality of telecommunication connections as well as equipment of the computer partners' systems in the conversional software to generating and the receiving

⁹ P. Braun, R.N. Mefford: *Lean Production and Internet*. "International Journal of Production Economics" 2004, pp. 247-260; J.J. Coyle, E.J. Bardi, C.J Langley: *The Management of Business Logistics – A Supply Chain Perspective*. Thomson Learning, Ohio 2003, p. 193; A. Verma, N. Seth: *A Conceptual Framework for Supply Chain Competitiveness*. "International Journal of Human and Social Sciences" 2011, Vol. 6, No. 1, pp. 5-10.

¹⁰ A. Rushoton, S. Walker: *International Logistics and Supply Outsourcing*. Kogan Page, London 2007, pp. 28-30.

the electronic documents. It in many countries also in Poland more and more often are implementing the solutions which are based on EDIFACT standard recommended by United Nation.

To building the partnership of suppliers with their clients especially on B2B market, more and more enterprises contribute an effective and fast form of communications, which comprise exchange of information, using the electronic forms¹¹. Very often this communication holds before accomplishment of transaction. Many suppliers in-put on Internet their offers (in form of catalogues, and the multimedia solutions), certificates of products and quality management systems which conform the customer requirements, search enquiry documents (for standard as well as non - standard products). They give also the possibility of contact with trade advisers and technical advisers in range of individual technical and organizational solutions.

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¹¹ T. Skjøtt-Larsen, H. Kotzab, M. Grieger: *Electronic Market-places and Supply Chain Relationship*. "Industrial Marketing Management" March 2003, Vol. 32, No. 3, pp. 199-210; F. R. Jacobs, R.B. Chase, N.J. Aquilano: *Operations and Supply Management*. McGraw-Hill, New York 2009, pp. 361-362.

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Summary

The building partnerships with suppliers, contributes increasingly effective and fast communication. Currently, most often takes the form of exchange of information, using electronic means of communication. Relationship management in the supply chain allows the participants to see the significant benefits that affect strongly on improving the efficiency and effectiveness of processes, thus lowering the impact on operating costs for both suppliers and customers. Through effective communication between the partners carried out it is possible to prevent potential losses by coordinating the flow of information for both prospective customer demand forecasts and actual demand in the period. This is achieved by working closely linked to the monitoring of stocks and needs of clients (through the analysis of various ranges of production cycles). Building these relationships allows for quick and effective communication (the ability to interact on-line) by familiarizing customers with current product offerings (taking into account the innovations introduced), check product availability in stock suppliers, as well as an assessment of the supplier's ability to design or produce the necessary volume of the deadline. Effective communication processes run allow the formation of close relationships with suppliers posed by the precise definition of the technical requirements (in terms of quality parameters and to have the necessary infrastructure) and organizational (implementation of operational improvement tools).

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