Erp helps productivity at northern digital

Business, Marketing

Case Study7. 1. : ERP Helps Productivity at Northern Digital Inc. Question: 1. For a small company like NDI, why is an ERP better than SCM applications? Answer: ERP supports internal supply chain within an enterprise, while SCM applications support just certain part of internal supply chain. Therefore, for small companies like NDI, it's more efficient and effective to implement one system, namely ERP, instead of more SCM systems. Further, ERP software support several functionalities for supply chain management, and small companies like NDI could choose which functionalities they would like to implement, i. e. to support by IT advantages.

Also, unlike SCM applications, ERP system of new generation provides new opportunities for enterprises in (near) future: to connect to their business partners, to integrate new functionalities (open ERP), to use Internet capabilities, to integrate with CRM solutions, etc. In practical sense, maintenance/servicing and training for one –ERP- software instead of several –SCMs- is better for NDI in financial and time sense. Finally, kind of industry (high-tech) within NDI operate demands efficient supply chain management, with high turnover of assets and inventory, so as precise and efficient production and inventory planning.

Question: 2. Identify the supply chain segments that the ERP supports; be specific. Answer: In the case of NDI enterprise, implemented ERP system would support those activities which produced greatest costs in previous period, putting customer satisfaction at risk and making internal moral decreasing. Also, the ERP supports the segments in NDI as well as itsenvironment. First, ERP optimizes the production processes in NDI; including taking into account the needs of its employees. Second, ERP

contributes to better forecasting of demands and, additionally, better processing of their orders.

Third, ERP efficiently coordinates upstream activities between NDI and suppliers. In the company, the implementation the ERP results decrease of costs and increase of revenue. In detail, using the ERP software improves the efficiency of NDI. Providing information for the demand forecasts of the products helps to decrease inventory. Therefore, in NDI case, revenue increased from 10 to 20 million with little increase in inventory value. Additionally, managing the processes of the company more efficiently increases order capacity. Result is an increase of revenue due higher ordered quantities.

The better planning doubles the turnover of inventory, i. e. NDI's automated inventory management achieved instead of 2 now 4 turnovers of inventory per year. At the side of the customer, having the opportunity for a better forecast of the demand and increasing the efficiency of the company, results to reduce the order cycle. This ensures the customers better and quicker service connected with reducing lead times and on-time deliveries. Therefore, supported by ERP production control system, NDI reduced its order cycle time for flagships product from 4 months to 4 weeks.

This also contributes to improvement of customers relationships. At the side of the suppliers, knowing the demand of customers helps NDI to forecast its own demand for material. ERP allows them to make orders to the suppliers on time and to avoid bottleneck caused by material lack. Additionally, optimization of the processes in the company makes it possible to forecast

the need for labour. Implementing ERP decreases the costs in the company and increases its profitability. Additionally, it improves the relationship between the firm and it customers and suppliers.

This ensuresloyaltyin the future relations. Question: 3. Relates this case to Porter's value chain and to its competitive model (Appendix 1A). Show the ERP contribution. Answer: The Porter's Competitive Model describes five factors, which endanger the profitability of NDI: The first factor is threat of entry of new competitors. Main barriers for new companies to enter the market are economies of scale, product differentiation, brand identity, cost advantages, etc. Therefore, implementing ERP NDI has increased the overall efficiency of the company. In this way, the production costs fall down.

Additionally, it increases order quantities, which decreases production costs per unit. These facts ensure costs advantages compared with other companies in the same industry. Second factor is the bargaining power of suppliers. The fact that the ERP system allows NDI to forecast better its demand contributes to a precise forecast for material. This ensures on-time deliveries. On the other hand, the increase of ordered quantities affects increase in the ordered quantity of materials. This fact ensures lower prices for material. The third point is the bargaining power of customers.

The software improves the relationship with the customers. The profits of the buyers are proving after sales information, on-time deliveries. Additionally, the satisfied customers increase their orders. As a result, the revenue of NDI increases. Forth is the threat of substitute products or services. The use of ERP provides NDI with information about sales ensurescommunicationwith

customers and gives information about their needs. Good relations with customers decrease the probability that customers will prefer substitutes. Fifth, the rivalry among existing forms in the industry endangers the company's profitability.

Producing efficiently ensures the firm a head position in front of its competitors. Delivering on time their orders gives an advantage to NDI. Taking care of the customers' relationship with help of ERP creates loyalty of the customers. Testing the quality on every production step ensures the customers the high quality products. The Porter's Value Chain Model is divided into two parts: Primary activities produce goods or services for which customers pay. They begin with the input of materials, through production, sales and marketing, and after sales service. The ERP system provides information to NDI in each of these steps.

ERP ensures on time deliveries due to collaboration with vendors; also, it increases the efficiency of using the resources of NDI. Quality control during every process guarantees for high quality. Collaboration on side of the customers provides information for their needs and past orders. Finally, ERP supports the after sales services. Support activities provide support to the NDI's primary activities. Support activity is for example the procurement. ERP helps collaboration with vendors. Also, ERP presents a standardised system for the whole NDI system, and it supports information flows from the sales department to the accountings department.

In supports, also, the human resource management department with detail forecast for the needs of labour. Question: 4. Enter intuitivemfg. com and

report on capabilities of the company's ERP product. Answer: The Intuitive ERP product has a goal to increase the profitability of a company. Intuitive ERP software achieves this goal by (1) improving the productivity and reducing the costs; (2) increasing satisfaction of customers; (3) supporting better decision making; and, finally, (4) improving the overall IT infrastructure. First, the product reduces the needed manual work of the employees.

Avoiding this process we reduce the data entry and errors. It delivers visible reports, which summarise the information and provides data for the current situation in the company. In this way, it is ease to indicate problems before it is too late. The software shows bottleneck before they occur. Thus, we could increase the throughput and make more efficient schedules. ERP provides quickly information about future need, which can be provided to suppliers in a minute. The process reduces significantly lead times and avoids bottlenecks. Visualisation of material report and collaboration with vendors improves on time deliveries.

We can save cost with better forecast of our demands and providing this information to our suppliers. This information gives us the opportunity to produce just-in-time. Thus, we can reduce our inventory and save costs. The increase of our efficiency increases the order capacity and revenue. Second, the software helps company to satisfy its customers. We easily get information about the history of every customer from the system. Many process connected with providing information to the customers can be

automated, which improves communications. ERP allows the company to access information about orders through Internet.

Inspection of all processes improves the quality of products, which contributes to satisfaction of customers. The system offers an after sales support to customers. It provide information if the firm can fulfil its orders and calculates the feasible dates to finish the production of the order. Third, ERP provides visualisation of the information of the company. Many indicators, which are needed to monitor the business, are calculated automatically. Thus, critical elements in the firm are presented. The software provides the needed information to make the optimal decisions.

Forth, the system combines the information of the company in one central system and standardises the process. In this way, the firm savesmoneyby the efficient use of its recourses. In conclusion, ERP improves the profitability of the company. It contributes to the improvement of the relationship of the customers and allows using the resources more efficiently. Question: 5. Relate this case to business planning and strategy. Answer: Using existingtechnology, NDI has recognised business planning problems in achieving efficient product/order life cycle, and delivering its products to customer in satisfied way.

The demand for NDI products was growing, but existing technology wasn't able to respond to new environment, i. e. market circumstances. NDI recognised forecasting capabilities -of marketing department- as main cause for recorded missed sales and poor inventory management. Therefore, needed raw materials weren't in place for demanded products by customer,

and customer had to wait too long, starting even to return back shipments. Pressed by higher demands from market, NDI determined growth as main business strategy, and forecasting and planning segments of internal value chain as key support for chosen strategy.

In other words, forecasting and planning segments of value chain were assigned as most beneficial parts for IT support towards more effective and efficient production process of growth strategy. Implemented ERP has supported whole NDI production process and its control, along with secondary activities, but stressed capabilities of Material Requirements Planning and Forecasting modules necessary for correct prediction of future demand and, therefore, better raw material supply and inventory management. In general, ERP support NDI's business data collection and manipulation, i. . data management, and subsequent data mining and optimization of production processes towards greater revenue, i. e. decrease production costs. Finally, defining long-term strategic companygoalsand strategy, NDI managed to improve its own operation using IT support for right production functions, aligning directly and successfully corporate business strategy with IT strategy. Now, mobilising human resources, as the greatest wealth of an organisation, NDI could now plan more radical strategy towards achieving competitive –or lock in- position within own industry cluster.