Teaching Note

SCM and ERP Software Implementation at Nike – From Failure to Success

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SUMMARY

The case gives a detailed account of the failure of Supply and Demand Planning software implementation at Nike, a leading Footwear and Apparel company. The case traces the history of supply chain and ERP software implementation at Nike and presents the rationale behind their implementation. It details the circumstances that led to the SCM software implementation failure and also examines the steps taken by Nike to fix the problem. Finally, the case explores how Nike was able to use the learning from the failure to its advantage and emerge successful with the SAP implementation, a part of the Nike Supply Chain Project.

TEACHING OBJECTIVES & TARGET AUDIENCE

The case is designed to help students to:

- Study and analyze the problems faced in supply chain management (SCM) and ERP software implementation.
- Examine the reasons for SCM software implementation failures.
- Analyze the suitability and implications of ‘Single Instance Strategy’ of Nike for global ERP projects.
- Understand how companies can learn from their mistakes in SCM and ERP software implementation.

The case is intended for MBA/PGDBM level students as part of the Supply Chain Management/Enterprise Resource Planning curriculum.

TEACHING APPROACH & STRATEGY

The case can be used effectively in classroom discussions as well as in distance learning programmes. It can be used to explain the concepts pertaining to the following topics:

Supply Chain Management
- Role of IT in supply chain management.
- Demand and Supply planning software implementation.

Enterprise Resource Planning
- Single Instance Strategies.
- Big Bang Approach.
- ERP Project Management.
SCM and ERP Software Implementation at Nike.

The moderator could initiate discussion through some short questions:

- Why do you think large companies implement SCM software?
- What are the major strategies adopted by companies to manage their ERP implementation?

**ASSIGNMENT QUESTIONS**

The following questions can be given as a class exercise. Students can either submit written assignments individually or present the answers of these questions after discussing them in groups:

1. Elaborate on the measures that can be taken to overcome demand forecasting problems. Examine the limitations of Demand Planning software. Do you think they are suitable for supply chains across varied industries? Justify your answer giving reasons.
2. Examine the role of accurate demand forecasting for a business. Suggest strategies that can be adopted by companies to avoid supply chain problems as faced by Nike.
3. Analyze the various factors which made the difference between success and failure in the two software implementations at Nike. What lessons can be learnt by other companies from Nike’s initial failures and successes? Explain.

**ANALYSIS**

1.

Demand planning software has certain limitations due to the nature of demand planning which involves a futuristic approach to problems and therefore creates a lot of uncertainty. The models which are used in demand forecasting system require correct data and a potential relationship among the variables to provide accurate output. However, in practice most of these variables are rough estimates of the actual scenario. For example, forecasting of demand is generally done based on what the retailers purchase rather than what the consumers ultimately purchase from the retailers. This can significantly change the situation from that of a high demand to that of low demand. For instance, if the retailer bought goods based on its cash flow or stock situation; it can give a wrong signal of high demand when in reality there is none. Moreover, computer generated forecasts use past data and are quite vulnerable to error if the future does not resemble the past. In addition, software can only analyze quantities and do not have the ability to comprehend the environmental trends or do qualitative analysis.

Demand forecasting can be useful for all supply chains provided they are adopted using the correct approach. It would be impractical to suggest that businesses ought to keep away from using a technological tool like demand forecasting in the light of fierce global competition and rapid change. Demand planning software provides a degree of objectivity to demand planning. In the absence of computer generated forecasts, their might be conflicting projections generated by various departments in an effort to serve departmental interests. Companies should first modify their business models and supply chains to benefit from the software implementation. Moreover, the process of re-engineering supply chains for demand planning would in itself be advantageous for a firm.

**Counterview:** Demand forecasting may not be suitable for all supply chains. The software ought to be used only after an assessment of its suitability to the business model and the nature of its supply chain. It is generally more suitable for products which have greater visibility in their supply chain. For example, fashion goods have a much more flexible supply chain due to shorter and rapidly changing product life cycle compared to products with longer life times and more predictable demands. As in the case of Nike, it had a rapidly changing and highly controlled supply chain. The company’s Futures orders were placed six months in advance of the demand therefore it was not very suitable to implement demand planning.
Companies can adopt the following strategies to prevent similar problems with their supply chain system:

- Companies should adopt the approach of aligning IT with business rather than give up business control to IT software. IT personnel should not be just occupied with the technicalities of the implementation but should rather co-relate IT processes with their business impact.

- Customization of supply chains according to the products is also important. For example, products such as fashion goods require a more flexible supply chain compared with functional products with longer life times and more predictable demands. They should also recognize the complexities of system interaction among operations, marketing, and other parts of the business.

- Over-reliance on technology to solve supply chain problems is also a mistake that ought to be avoided. Companies ought to recognize that human insight can not be replaced by machines. Problems of GIGO can be avoided in the supply chain systems by ensuring the data have been checked for accuracy.

The concept of continuous learning and improvement is also important. Companies ought to identify supply chain problems with a fresh approach. For example, employees can search a fixed portion of the store daily for stocked-out SKUs and then analyze it to know the reasons for the stock-outs to improve the systems.

2. Demand forecasting plays an important role because the core business processes like purchasing, manufacturing and distribution are driven by demand forecasts. It also has its bullwhips. The errors of over-forecasting and under-forecasting are equally dangerous. Inflated forecasting would lead to selling of excess inventory at cheaper prices whereas huge losses can also occur due to unfulfilled demand. Demand forecasting tries to aim at a golden balance to avoid both the above situations. However, it is easier said than done due to the uncertainties in the business environment.

The following could be the remedial measures that can be adopted to surmount demand forecasting problems:

- Forecasts can be substantially improved by using the latest sales data combined with point-of-sale (POS) information sourced directly from the retailer. Going in for smaller period forecasts can further reduce the margin of error in comparison to forecasts spanning long periods.

- Combining the order information received from customers with market intelligence reports can ensure that trends not revealed by quantitative analysis are identified. Finally, the forecasts generated by this method ought to be given a fresh glance. A system of human checks having the required processes and people should be put in place to make sense of inconsistent results to check computer-generated predictions against the market pulse.

- A dual forecasting process can be set up in which the sales department comes up with a forecast and the computer system, makes another. The two approaches would complement one another as the sales department is too conservative with its forecasts. This way, a company can ensure that it is aware of market changes not revealed by the computer system. Another approach could be to distribute computer generated forecasts to designated forecast planners for feedback. The planners ought to be experts for the area they represent and they can be allowed to make changes based on their expertise. For example, a planner may lower a forecast due to bad weather or another might increase a forecast if he knows that a particular store is planning a promotion.
3.

There were several factors that were responsible for the success of NSC project. Nike had a detailed and clear business plan which it stuck to throughout the six year period. It took its training and testing efforts very seriously for the ERP roll out. Moreover, its efforts to ensure a close partnership between IT and business groups ensured better understanding of the whole process and prevented problems that arose due to lack of co-ordination.

Nike’s failure of i2 SCM implementation was caused due to many reasons. The company went in for too much customization of a complex SCM without a third party integrator with problematic legacy systems to handle. Inadequate training and testing also made the project susceptible. In addition, problems of accurate data inputs led to wrong forecasts and with no human reviews in place the company found itself in a situation of over stock for the low selling models and insufficient stocks for the high selling models.

Other companies going in for SCM software implementations can consider the following measures to avoid failure:

- Enterprise software implementations should not be hurried. Companies should be aware that these projects take time to demonstrate sizeable benefits. Companies should avoid being driven by unrealistic deadlines that put too much pressure and impact the project adversely.

- It is important to realize that the goal is not to just have the software implementation done but to improve the business with the help of the software. Treating software implementations as business change efforts is essential for success.

- It is important to ensure joint responsibility of project implementations and communicate this to the vendor. There should be a system of continuous project tracking and review in place before companies go in for roll-outs.

- ‘Blank sheet’ reengineering which may lead to unrealistic business process designs that are not practical to implement should be avoided. Instead, they should have in depth analyses of how business is conducted to define clear goals for a project.

Companies planning to adopt the Single Instance Strategy can learn from Nike’s experience. Nike’s success can be attributed to the fact that it had a clear business plan which guided it throughout the six year long project. The company wanted to take three months out of its sneaker manufacturing cycle and it ultimately achieved the goal. Moreover, there was ample support for the strategy from the CEO all throughout even when things went wrong with the i2 implementation. Nike was also wise enough to learn from its past mistakes and did not rush other implementations. Similarly, it took extra efforts for training as well as testing to make its ERP project a success.
Additional Readings & References

4. Charles Trepper, ERP Project Management Is Key To A Successful Implementation, August 01, 1999.


34. www.sapinfo.net.


42. www.i2.com.