

The lead time of lean product

[Business](#), [Marketing](#)



This case study bases on a medium sized company which manufactures various models of car control panels with frames while supply for five cars manufactures. All the aims of company operation are that minimize the lead time of lean production and delivery to quickly respond to the frequent changes of their customers' demand. The company supplies more than 2000 different products with numerous car control panels and models of frames.

After receiving the orders, they first assemble the components and frames and then, dispatch the final products to their customers. Meanwhile, there are also different components suppliers for the company to instead of producing the components by themselves. All these components mainly conclude 6 types of products, Vents, Frames, Glove box, Meter/gauges, steering, Heater and air conditioning control. Some components could be specific for definite product while others could be shared by lots of products with various models and colours.

The company receives the orders from their customers once a week by EDI and then put the information of orders into sales management system automatically. After the orders are confirmed by account manager, the orders will be produced immediately if the stock is sufficient. However, if the stock is not enough for manufacturing, the orders for components will send to the suppliers. And the orders to suppliers base on the daily requirements.

Purchasing manager is in charge for the record of arrived components into stock management system and update the system. Each day, the schedule of producing the orders is placed at the beginning of the assembly line in the form of spreadsheet and finally the record of quantities for finished products

is input into the stock level and then, these products can be wrapped and dispatched to the customers and the lead time for delivery is four to six weeks which depend on the different distance.

On the basis of the current operations, there are several issues within operations which limit the development of the company. The operation targets of company is efficiency and short lead time, as the matter of fact, the processing for order creates, production and stock management is complicated and a waste of time. The information cannot be updated in a short time, thus, it is more possible to make mistakes in daily operations not only the record of orders updates, but also lead to the slow response for the fluctuation of demand. Moreover, this will also causes a high level of stock and long lead time for products. In the paper, the suitable solution will be provided for the current system to reduce the stock level as much as possible and attempt to make an efficient production. Meanwhile, the methods will also be supplied for the effective consultation between components supply and produce plans.

This report will first states the review of different concepts, approaches which relate to the enterprise system integration, then analysis the issues in the case, information flows of the extended enterprise and the suitable SAP systems applications. After that, the solution of the issues and accordingly explanation of functionalities will be illustrated. Finally, the conclusion of the whole project as well as the limitations will be addressed.

Literature Review

During the past several decades, more and more company realised that enterprises should share the information and create an integration network to maximise the benefits and keep the competitive advantage over the marketplace through the integration of process, data and existing systems. On the basis of this, the term Enterprise System integration has appeared and had an effect on the operation decisions.

Enterprise system integration is a method that supply a basic substructure to connects, combine and reuse the information and business operation with accumulation of specific techniques and technologies. As Johannesson and Perjons (2001, p. 166) indicate, " Enterprise Application Integration, which aims at integrating individual applications into a seamless whole, enabling business processes and data to speak to one another across applications".

Similarly, Erasala, et al. (2003) define that Enterprise Application Integration is a way to enable the information sharing and business process integration which could lead to the effective operations and optimize the changes of business requirements. It is not the completely scrap the original applications but the exploiting the value of these applications and make them be utilized in a proper way.

The enterprise system (ES) value line has a number of factors which involves Spend time with the ES, invest in the ES, implement extensively and benefits realized. Different factors take up different values. According to Thomas et al. (2004, pp. 18), " when it comes to an ES, too many firms stop short. Simply assembling the raw technical components of a vision can only yield a

limited amount of value". Thus, there are only three factors which drive realization of enterprise system value: integrate, optimize and informate.

The traditional integration structure is Function-oriented organization structure. This Structure designs the individual software package for each of functionality. According Figure 1, different functions within this organization are not integrated but have its own data and some functions are duplicated. Different applications keep the key value which depends on the service supplier. Otherwise, the current integration has become a process-oriented structure which is the integration of different IT systems. This type of integration structure integrates the different applications and process and avoids the duplication. All applications exchange the information into a enterprise system and could quickly respond to the changes (Johannesson and Perjons, 2001).