

Information system for perky pies essay sample

[Business](#), [Management](#)



This report provides an analysis of Perky Pies, a franchise organisation's business background and the problems it faces in its supply chain management. Furthermore the concept of supply chain management was defined and the issues and benefits that results from implementing an information system in Perky Pies' supply chain management were outlined.

A Supply Chain Management is a business model which is integrated and takes a view of how all business functions work together and also the relationship a business has with its suppliers and customers.

The report finds that the main issues the Perky Pies will face when a supply chain management information system is implemented are resistance from employees and internal stakeholders and also the possibility of the system's software to be incompatible with the company's existing ERP systems. The benefits that could be reaped are better customer satisfaction, a competitive advantage and a higher profit as well as the increased speed of all supply chain activities. Hence, KGIS recommends that a supply chain management information system where the system supports the supply chain management activities by automating the tracking of the inventory and information both upstream, downstream as well as internally should be implemented so that the fulfilment, production, revenue and profits are optimised within Perky Pies' supply chain management. This leads to customers' satisfaction, better relationship with suppliers and also the resolution of issues faced by the franchise organisation's supply chain management. The system's specifications were outlined which covers the element hardware, software, data, procedures and people in the supply chain management of Perky Pies.

KGIS concludes that Perky Pies should implement an information system in their supply chain management to resolve the issues they face currently as well as to reap more benefits.

Introduction

According to Ireland and Webb (cited in Fawcett, Magnan & McCarter 2008), The strategic supply chain continues to be adopted by organizations as the medium for creating and sustaining a competitive advantage. Such a displacement is understandable considering the potential benefits of successful supply chain management. Kathy Walters, owner of Perky Pies who realizes that that the franchise's supply chain management is defective has approached KGIS to rectify the situation. The purpose of this report is to create and implement an effective supply chain management (SCM) system to resolve the various problems faced by Perky Pies. This report will extensively cover the background information on Perky Pies and the problems encountered by Perky Pies. It also focuses on the concept of supply chain management (SCM) in relation to Perky Pies, issues that are encountered by Perky Pies if supply chain management (SCM) information system is implemented and the benefits that it can provide. The current trends and examples of SCM are also covered in the report. The report also constitutes of recommendation of a supply chain management (SCM) information system for Perky Pies and the specifications of the system.

Background

Perky Pies is a franchise organisation which sells a franchise for \$20, 000 to those who are interested who then buy pies from the organisation for a set fee and sell them to customers. These pies are sold at branches and stores set up based on a prescribed business model. Perky Pies who found that the lunchtime market is rapidly expanding, took the opportunity to sell gourmet pie which are high in quality to eat on premises or to take away. Perky Pies also found that customers are willing to pay higher price for a healthy and quickly obtained pie. Perky Pies' products are produced in a variety of different flavours and are delivered to the branches upon order request. The centrally located commercial kitchen where the pies are produced receives the raw ingredients from its supplier and store the materials there.

The refrigeration units contains the appropriate ingredients while the rest which do not need refrigeration are stored in the adjacent warehouse. Lately, Perky Pie's central office has been receiving increasing number of complaints from their branches regarding the delivery of pies such as incorrect numbers, delays of orders and out of date pies. Some of the pies supplied from the kitchen in Footscray were defrosted hence had to be thrown away. Also, there are excessive amount of items which needs refrigeration and this leads to wastage and/ or there is an excessive production of some varieties of pies compared to others. These problems lead to wastage of inventory and money. It is believed by the owner that the problems have been caused by the rapid development of the business and the lack of information system in upstream and downstream of the supply chain. Hence, Kathy Walters has approached KGIS requiring advice on implementing an information system on Perky Pies' supply chain management.

Supply Chain Management Systems

1 The meaning of SCM

The Supply-Chain Council defines supply chain management as “[m]anaging supply and demand, sourcing raw materials and parts, manufacturing and assembly, warehousing and inventory tracking, order entry and order management, distribution across all channels, and delivery to the customer” (Wisner, Leong & Tan 2005).

2 Issues and Benefits

Resistance from employees and internal stakeholders is one of the issues of implementing a SCM information system (EPIQ Technologies 2012).

Employees tend to do what feels comfortable to them hence introducing a new system generates a negative perception to it from them . If the employees of Perky Pies refuse to change their normal operating practises to suit the new information system, the operational performance will be negatively impacted (Bayraktar et al. 2009). EPIQ Technologies also states that a SCM software might be incompatible with the company’s existing ERP systems. When modules from different ERP systems are used, the full integration of those modules are prevented hence information access as well as sharing of information cannot be carried out between the modules and departments (Bayraktar et al. 2009).

If the system used by Perky Pies’ suppliers and its customers prevent information exchange, the operational efficiency is reduced in the whole supply chain. The benefits of implementation of a SCM information system

would be it guarantees the participating companies better customer satisfaction, a competitive advantage and a higher profit (Marincas 2008). These will be possible for Perky Pies because “ the information system allows all information about demand, supply, manufacturing, delivery, market condition changes between the supply chain members “, and this makes decision making fast and efficient (Marincas 2008). Implementation of an information system for SCM increases the speed of all activities in a supply chain. Hence, the utilisation of such a system in Perky Pies’ supply chain the delivery lead time will be reduced, thus ensuring inventory cuts, less re-work, higher quality, less overheads across the supply chain (Marincas 2008).

3 Current Trend and Example in SCM

“ RFID is an area of automatic identification that is gaining momentum and is considered by some to emerge as one of the most pervasive computing technologies in history” (Roberts 2006). “ As an electronic identification technique, RFID offers a potential solution to the item/object transparency problems that have plagued supply chains in the past” (Coltman, Gadh, Michael 2008). Wal-Mart utilises RFID where the employees are given a “ hand-held computer which is linked to in-store terminals through a radio frequency network. These helped them to keep track of inventory in stores, deliveries and backup merchandise in stock at the distribution centres” (Chandran 2003). The RFID “ tags can be read through a variety of visually and environmentally challenging conditions such as snow, ice, fog, paint, grime, inside containers and vehicles and while in storage” (Roberts 2006).

Therefore, the tags couple with the sensors can provide important information on the state of the raw materials for the pies at the Perky Pies' production warehouse and the refrigerated materials " can be monitored for temperature, problem areas identified and alarms raised" (Roberts 2006).

Recommendations

KGIS recommends a supply chain management information system where the activities of the supply chain management is supported by the system by enabling the automation of tracking of inventory and information upstream, downstream and internally. The information system designed could help Perky Pies Organisation by optimising the fulfilment where the right quantity of pies is delivered to the branches at the right time without any delay. Also, the production will be optimised so that the production lines function smoothly and the quality of pies is always high. The revenue and profit are also optimised so that Perky Pies will be able to prevent lost of sales because of insufficient inventory. Overall, customer's satisfaction is guaranteed and the issues faced by Perky Pies will be rectified. Rapid Application Development (RAD) approach should be used to develop the information system so that a workable system can created in a short period of time. It involves extensive involvement of the users in the analysis, design and development phases of the system rather than that of the programme developers. The RAD should entail the use of visual programming and the tools for modelling the user interface, the databases, and business processes of Perky Pies.

A prototype of the system is created which acts as a preliminary model of the major information system. For example, the prototype shows sample report formats and when the actual system is developed the prototypical reports will be used as models for the actual system. The tools employed by RAD such as a database rapid application development tool, make the development of the system more agile and flexible, thus enabling the SCM information system to rapidly adapt and change with the changing conditions and environment of Perky Pies. A pilot implementation strategy will be used to convert the old information system used in Perky Pies' supply chain management to the new one developed by KGIS. This strategy requires just a few employees to use the new information system for a fixed period of time before the entire supply chain uses it. Since the pilot implementation strategy limits the exposure to only a small portion of Perky Pies' SCM, if there are any problems or glitches identified during the implementation, they can be rectified or the system can be modified to eliminate those problems.