TOPIC; Enterprise Systems

Description

Synthesise a strategy for an enterprise wide system implementation based on appropriate theory and practical experience within a given environment 3 4 Analyse the limitations, advantages and disadvantages of the use of ERP packages CASE STUDY: Peanut Burger manufactures sells two types of nutritious snack bars: EB-Kulikuli and EB-Nkate Cake. The EB-Kulikuli bar touts “advanced energy,” and EB-Nkate Cake boasts “body-building proteins.” Each bar contains a mix of the following ingredients: • dry base mixture: groundnuts, flour, wheat germ, protein powder, and spices • wet base mixture: honey and coconut oil • vitamins and minerals Each type of bar contains additional unique ingredients: EB-Kulikuli contains cassava chips and raisins, and EB-Nkate Cake contains cashew nuts and dates. Peanut Burger’s sales force is organized into two groups: the Wholesale Division and the Direct Sales Division. The Wholesale Division sells to intermediaries that distribute the bars to small shops, vending machine operators, and health food stores. The Direct Sales Division sells directly to large grocery stores, sporting goods stores, and other large chain stores. The two divisions operate separately from one another, in effect breaking the Marketing and Sales functional area into two pieces. Each division has an organizational structure that interacts with Peanut Burger’s other functional areas, such as Accounting and Finance and Supply Chain Management. The two sales divisions differ primarily in terms of order volume and pricing terms. The Direct Sales Division offers customer’s volume discounts to encourage larger sales orders, which are more efficient to process. The Wholesale Division charges customers a lower fixed price because the orders are usually large. Each order - regardless of size - generates costs related to the paperwork, shipping, and handling of the order. Thus, an order of 500 cases of snack bars incurs the same handling costs as an order of 10 cases. However, the large order might generate GH¢2,500 in profit, while the small order might generate only GH¢50. Both divisions send their customers invoices requesting the total balance within 30 days and offering a 2 percent discount if the customer pays within 10 days (2–10/net 30). In addition to selling snack bars under the Peanut Burger brand name, the company also packages the bars in store-brand wrappers for some chain stores. Problems with Peanut Burger’s sales process Many of Peanut Burger’s sales orders have some sort of problem, such as incorrect pricing, excessive calls to the customer for information, order-processing delays, missed delivery dates, and so on. These problems occur because Peanut Burger has three separate information systems: the sales order system, the warehouse system, and the accounting system. Information from each system is shared either electronically through periodic file transfers (sales order system to accounting system) or manually by paper printout (credit status from the Accounting Department to sales clerks). The high number of manual transactions creates many opportunities for data entry errors. Further, not all the information stored in the three systems is available in real time, resulting in incorrect prices and credit information. In each sales division, Peanut Burger has four salespeople who work on the road, plus two clerks who work in the sales office. Salespeople work on commission and have some leeway in offering customers “discretionary discounts” to make a sale. The entire sales process involves a series of steps that require coordination between Sales, Warehouse, Accounting, and Receiving, as shown in Figure 1.1. (Notice that Production is not directly involved in the sales process because Peanut Burger plans production using a make-to-stock strategy, with product shipped to customers from warehouse inventory rather than being manufactured for specific orders.) Figure 1.1: The sales process at Peanut Burger Sales Quotations and Orders Giving a customer a price quotation and then taking the customer’s order should be a straightforward process, but at Peanut Burger it is not. For a new customer, the sales process begins with a sales call, which might be over the telephone or in person. At the end of the sales call, the salesperson prepares a handwritten quotation on a form that generates two copies. The original quotation goes to the customer, and the middle copy is first faxed and then mailed to the sales office; the salesperson keeps the bottom copy for his or her records. On the quotation form is a toll-free number that the customer can call to place an order. A number of problems can occur with this process, including the following: • The salesperson might make an error in the sales quotation. For example, a salesperson in the Direct Sales Division might offer both a quantity discount and a discretionary discount. If the salesperson is not careful, the two discounts combined might be so deep that the company makes little or no profit on the order. • Salespeople fax a copy of their sales quotations to the sales office, but sometimes a customer calls to place an order before the fax is transmitted. In such cases, the sales clerk has no knowledge of the terms of the sale (which are outlined on the quotation) and must ask the customer to repeat the information. On the other hand, even if the quotation has been faxed, the data might not have been entered into the customer database, so the customer might still need to repeat the order information. This situation can also lead to a duplicate order. • The fax received by the sales office is a copy of a handwritten form, and might not be legible. When customers place an order, they usually inquire about the delivery date. To get a shipping date, the sales clerk must contact the warehouse supervisor and ask whether the customer’s order can be immediately shipped from inventory, or whether shipping will be delayed until a future production run is delivered to the warehouse. However, because the warehouse supervisor is generally too busy to get an updated inventory count, total all the orders waiting to be filled, and find out how many other orders are in process in the sales office, she can only estimate the shipping date. Once the sales clerk has the warehouse supervisor’s estimated shipping date, she determines the shipping method and how long delivery will take. Next, the clerk checks the customer’s credit status. For new customers, the clerk fills out a paper credit-check form that includes basic customer data and the amount of the order. The form goes to Accounting, where accountants perform the credit check and then return the credit-check form showing the customer’s credit limit. If the order is from an existing customer, the clerk checks a paper report from Accounting that shows the customer’s current balance, credit limit, and available balance. However, because the report is generated weekly, it might not reflect a customer’s most recent payments or orders. If a customer’s available credit is less than the amount of the current order, assuming there are no other orders outstanding, the clerk calls the customer to determine what action the customer wants to take (reduce the amount of the order, prepay, or dispute the amount of credit granted). Once the order details have been finalized, the sales clerk enters the order into the order-entry system. The computer program performs four important tasks. First, it stores the customer’s order data, which are used later to analyze sales performance at the division level. Second, it prints out a packing list and shipping labels for the warehouse to use to pick, pack, and ship the customer’s order. Third, it produces a data file of all current transactions for the Accounting Department to use for preparing invoices (this file is also used for financial, tax, and managerial accounting). And fourth, the data file is copied to a USB key each evening for uploading into the company’s PC-based accounting system. Order Filling Peanut Burger’s process for filling an order is no more efficient than its sales order process. Packing lists and shipping labels are printed in the sales department twice a day – at noon and at the end of the day. These are carried by hand to the warehouse, where they are manually sorted into small orders and large orders. The Production Department produces and wraps the snack bars and packs them in display boxes, 24 bars to a box. The display boxes have promotional printing and are designed to serve as a display case. Peanut Burger packs 12 display boxes together to form a standard shipping case. The warehouse stores both individual display boxes and shipping cases, organized by label type (Peanut Burger brand and store brand), so depending on the inventory level in the warehouse, Production personnel might transfer individual display boxes directly to the warehouse, or they might first pack the display boxes into shipping cases. For small orders (less than a full shipping case), the order picker goes to the warehouse with a handcart and pulls the number of display boxes listed on the packing list. If there are not enough individual display boxes in the warehouse to fill the order, the picker might break open a shipping case to get the required number of display boxes. If he does this, he is supposed to advise the warehouse supervisor so she can update the inventory records – but sometimes this step is overlooked. The picker then brings the display boxes back to the small-order packing area, where they are packed into a labeled box – with the packing list enclosed – and prepared for shipping by a small package shipper. For large orders (one or more shipping cases), the picker uses a forklift to move the appropriate number of shipping cases to the large-order packing area. Workers label them for shipping, load them on a pallet, and attach them to the pallet with shrink-wrap plastic for protection. These pallets are shipped either by one of Peanut Burger’s two delivery trucks or by a less-than-truckload (LTL) common carrier. Peanut Burger uses a PC database program to manage inventory levels in the warehouse. The program adjusts inventory level figures on a daily basis, using data from production records (showing what has been added to the warehouse), packing lists (showing what has been shipped from the warehouse), and any additional sources of data (such as shipping cases that have been opened to pull display boxes). Each month the warehouse staff conducts a physical inventory count to compare the actual inventory on hand with what the inventory records in the database show. Peanut Burger’s monthly inventory counts show that inventory records are more than 95 percent accurate. Although 95 percent accuracy may not sound too bad, having 5 percent errors means that Peanut Burger regularly has problems filling orders. Because snack bars are somewhat perishable, Peanut Burger keeps inventory levels fairly low. Inventory levels change rapidly during the day, and Peanut Burger’s current system does not provide a good method for checking inventory availability. As a result, a picker might go to the shelves to pick an order and discover that there are not enough snack bars to fill the order. In this case, there are several possible outcomes: • There might be more of that type of bar in the production area – ready to be transferred to the warehouse—in which case the picker could wait until the inventory is received into the warehouse to finish picking the order. • For an important customer that purchases store-branded snack bars, production might change the wrappers and display box labels currently on the production line to the customer’s brand to produce enough bars to complete the order. • In other situations, the customer may be willing to take a partial shipment consisting of whatever is on hand, with the rest shipped when it becomes available – which is known as a backorder. • Or, the customer might prefer to take the goods on hand, cancel the balance of the order, and place a new order later. • If the customer’s company has enough inventory on hand, the customer may prefer to wait until the whole order can be shipped, thus saving on delivery charges. To determine what to do in this situation, the order picker might have conversations with the warehouse supervisor, production supervisor, and sales clerks. Whatever the final decision, the warehouse supervisor has to contact the sales clerk so she can notify the customer (which does not always happen when things are busy) and the Accounting Department so they can change the invoice. Accounting and Invoicing Invoicing the customer is problematic as well. First, the data from the current order-entry system is only loaded into the accounting system at the end of each day, so the Accounting Department does not have information on new sales orders until the following day. In addition, clerks must manually make adjustments in both the order-entry system and the accounting system for partial shipments and for any other changes that have occurred during the order-fulfilment process. Many times these corrections are not made in both systems, causing discrepancies that must be corrected at the end of the month, at which point it is more difficult for the parties involved to remember what happened. Delayed order corrections also sometimes result in late or inaccurate invoices. If the completed invoice is waiting to be mailed when the warehouse notifies Accounting of a partial shipment, then a new invoice must be prepared. In any case, an invoice is eventually sent to the customer, separate from the shipment. Payment and Returns Peanut Burger’s procedure for processing payments often yields frustrating results for customers. Almost all customers pay the invoice within 10 days to receive the 2 percent discount. If any errors have occurred in the sales or order-fulfilment process – from the original quotation to entering the order into the sales order program to filling the order in the warehouse – the customer will receive an incorrect invoice. Even though Peanut Burger provides customers with two invoice copies, many customers do not return a copy of the invoice with their payment, as instructed. Errors sometimes result in the incorrect customer’s account being credited. Peanut Burger’s returns processing is also flawed. Because Peanut Burger’s snack bars contain no preservatives, they have a relatively short shelf life. Thus, the company has a policy of crediting customer accounts for returned snack bars that have exceeded their “sell by” date (this is a generous policy, because it is impossible to know who – Peanut Burger or the customer – is responsible for the bars not selling before they expire). Peanut Burger also gives credit for damaged or defective cases returned by customers. Customers are supposed to call Peanut Burger to get a returned material authorization (RMA) number to simplify the crediting process. When cases are returned to Peanut Burger, the Receiving Department completes a handwritten returned material sheet, listing the returning customer’s name, the materials returned, and the RMA number. However, many customers do not call for the RMA number, or fail to include it with their returned material, which makes it more difficult for the Accounting Department to credit the appropriate account. Poor penmanship on the returned material sheet also creates problems for Accounting. When an account becomes past due, Peanut Burger sends a dunning letter, which is the term for a letter notifying a customer that their account is past due and requesting payment if payment has not already been sent. As the account gets more delinquent, the dunning letters usually get more direct and threatening. If a customer’s account has not been properly credited, however, the customer may receive a dunning letter in error, or may receive a call about exceeding their credit limit after placing a new order. Such situations damage goodwill with both new and repeat customers. Questions 1. As the new CTO hired by Peanut Burger to clean up some of the company’s problems as outlined above, analyse the system requirements for the company’s sales process and discuss current opinion on the pros and cons of using an ERP package to improve the overall business processes at Peanut Burger. (Note: Your analysis must address the issues raised in the case study as well as in other literature – demonstrating knowledge, comprehension, analysis and synthesis) [40 marks] 2. Based on your description above, create a strategy for an enterprise-wide system implementation based on appropriate theory and relevant use cases for Peanut Burger. [30 marks] 3. If Peanut Burger installs an ERP system, how could they reorganize and configure their sales processes to be more efficient? Be specific about how you would rearrange divisions, or consolidate them. [30 marks] Note: You need to use academic journal articles to support your discussions and justifications, and these must be appropriately referenced. A minimum of 10 journal articles should be used for this assignment.