

## **Assignment 2 Organization System Design**

ABC Yogurt Company, a Thai market leader in Yogurt and related health products, is experiencing sharp growing pains. ABC's sales have tripled during the past five years. However, new local competitors, offering fast delivery from local production centers and lower prices, are challenging ABC for retail shelf space with a bevy of new products. ABC needs to justify its share of shelf space to grocers and is seeking additional shelf space for its new yogurt-based products such as frozen desserts and low-fat salad dressings. Yogurt has a very short shelf life measured in days, and it must be moved very quickly.

ABC's corporate headquarters is in Bangkok. Corporate has a central mainframe computer that maintains most of the major business databases. All production takes place in processing plants that are located in Samprakarn, Rayong, Ratchaburi, Saraburi and Nakorn Ratchasima. Each processing plants has its own minicomputer, which is connected to the corporate mainframe. Customer credit verification is maintained at corporate headquarters, where customer master files are maintained and order verification or rejection is determined. Once processed centrally, order data are then fed to the appropriate local processing plant minicomputer.

ABC has 20 sales regions countrywide, each with 30 sales representatives and a regional sales manager. ABC has a 12-person marketing group at corporate headquarters. Each sales-person is able to store and retrieve data for assigned customer accounts using a terminal in the regional office linked to the corporate mainframe. Reports for individual salespeople (printouts of orders, rejection notices, customer account inquiries, etc.) and for sales offices are printed in the regional offices and mailed to them.

Sometimes, the only way to obtain up-to-date sales data is for managers to make telephone calls to subordinates and then piece the information together. Data about sales and advertising expenses, promotional campaigns, and customer shelf space devoted to ABC products are maintained manually at the regional offices. The central computer contains only consolidated, company-wide files for customer account data and order and billing data.

The existing order processing system requires sales representatives to write up hard-copy tickets to place orders through the main or by fax. Each ticket lists the amount and kind of product ordered by the customer account. Approximately 20 workers at ABC corporate headquarters open sort, and enter 500,000 order tickets per week into the system. Frequently, orders are delayed when the fax machines break down. Order information is transmitted every evening from the mainframe to a minicomputer at each of ABC's processing sites. The daily order specifies the total yogurt and yogurt product demand for each processing center. The processing center then produces the amount and type of yogurt and yogurt-related products ordered and ships out the orders. Shipping managers at the processing centers assign the shipments to various transportation carriers, who deliver the products to receiving warehouses located in the regions.

A year ago, growth in new products and sales had reached a point where the firm was choking on paper. For each order, a salesperson filled out at least two forms

per account. Some sales representatives have more than 80 customers. As it became bogged down in paper, ABC saw increased delays in the processing of its orders. Because yogurt is fresh food product, it could not be held long in inventory. Yet ABC had trouble shipping the right goods to the right places on time. It was taking between 4 and 14 days to process and ship an order, depending on mail delivery rates. ABC also found accounting discrepancies of B600 Million annually between the sales force and headquarters.

Communication between sales managers and sales representatives has been primarily through the mail or by telephone. For example, regional sales managers have to send representatives letters with announcements of promotional campaigns or pricing discounts. Sales representatives have to write up their monthly reports of sales calls and then mail this information to regional headquarters.

ABC is considering new information system solutions. First of all, the firm would like to solve the current order entry crisis and develop immediately a new order processing system. Management would also like to make better use of information systems to support sales and marketing activities and to take advantage of new Web-based information technologies. In particular, management wants a sales-oriented Web site to help market the products but is unsure how this will fit into sales effort. Management wants to know how these new technologies can assist the local groceries and large chains who sell the product to the actual consumer.

Senior management is looking for a modest reduction in employee head count as new, more effective systems come online to help pay for the investment in new systems. Although senior management wants the company to deploy contemporary systems, they do not want to experiment with new technologies and are only comfortable using technology that has proved itself in real-world applications.

### **Sales and Marketing Information Systems: background**

Sales order must be processed and related to production and inventory, Sales of products in existing markets must be monitored, and new products must be developed for new markets. Firms need sales and marketing information in order to do product planning, make pricing decisions, devise advertising and other promotional campaigns, and forecast market potential for new and existing products. They must also monitor the efficiency of the distribution of their products and services. The sales function of a typical business captures and processes customer orders which are used to produce invoices for customers and data for inventory and production. A typical invoice is illustrated here.

<b>ABC Inc.</b>				
<i>Customer:</i> Highview Supermarket Silom Road, Bangrak Bangkok 10500 Thailand				
<i>Order Number:</i> 679940				
<i>Customer Number:</i> #00395				
<i>Date:</i> 25/04/2003				
<i>Quantity</i>	<i>SKU#</i>	<i>Description</i>	<i>Unit Price (Baht)</i>	<i>Amount (Baht)</i>
100	V3392	8 oz Vanilla	18.00	18,000.00
50	S4456	8 oz Strawberry	18.00	9,000.00
80	L4492	8 oz Lemon	18.00	14,400.00
<i>Shipping</i>				400.00
<i>Total Invoice:</i>				41,800.00

Typical Invoice

Data from order entry are used by a firm's accounts receivable system and by the firm's inventory and production systems. The production planning system, for instance, builds its daily production plans based on the prior day's sales. The number and type of product sold determines how many units to produce and when.

Sales managers need information to plan and monitor the performance of the sales force. Management also needs information on the performance of specific products, products lines, or brands. Price, revenue, cost, and growth information can be used for pricing decisions, for evaluating the performance of future products.

From basic sales and invoice data, a firm can produce a variety of reports with valuable information to guide sales and marketing work. For weekly, monthly, or annual time periods, information can be gathered on which retail outlets order the most on what the average order amount is, on which products move slowest and fastest, on which salespersons sell the most and least, on which geographic areas purchase the most (and least) of a given product, and on how current sales of a product compare to last year's sales.

### The Assignment

Develop a proposal for redesigning ABC's business processes for sales, marketing and order processing that would make the company more competitive. Your report should include the following:

- An overview of the organization - its structure, products, and major business processes for sales, marketing, and order processing
- Identification of the major changes in businesses required to achieve your plan
- Identification of the major new technology components of your plan that are required to support the new business processes. If your solution requires

a new system or set of systems, describe the functions of these systems; what pieces of information these system should contain; and how this information should be captured, organized, and stored.

Reference: Adapted from “Management Information Systems: Managing the Digital Firm”, Kenneth C. Laudon and Jane P. Laudon, Prentice Hall