



Programme: PGDM

Batch: 2015-17

Trimester: 1st

PGDM, 2015-17
ERP for Managers
DM - 101

Trimester –I, End Term: Examination September 2015,

Time Allowed: 2 hrs. & 30 min.

Max Marks: 50

Roll No. _____

Instruction: Students are required to write **Roll No.** on every page of the question Paper, writing anything except the **Roll No.** will be treated as **Unfair Means**. In case of rough work please use answer sheet.

Section A

Attempt any 3 questions out of 5

3*5 Marks = 15

Q1. Define the following terms:

- a. Free-on-board
- b. Payment Terms
- c. Material Staging
- d. Forward Scheduling
- e. Partial Delivery

Q2. What are the role of organizational data, master data, and transaction data in an ES?

Q3. Define the organisational structure of GBI group and what are the benefits of using this structure to an organization?

Q4. Explain the difference between sell-from-stock and configure-to-order strategies.

Q5. What are the typical fields in customer master field? Explain the partner functions.

Section B

Attempt any 2 questions out of 3

2*10 Marks = 20

Q1. What is BPR? What are the pros and cons of BPR? Explain in Detail.

Q2. Briefly describe the key documents in the procurement process in terms of their role in the process.

Q3. Describe the Competitive Forces or Porter's Five Forces Model. How would you apply this model to analyse the five forces on business? Discuss.

Section-C

Compulsory case Study

15 Marks

Hershey's Enterprise System Creates Halloween Tricks

When someone says "chocolate," many of us think of Hershey's---their chocolate bars, their Kisses, their many other candies. Hershey Foods Corp. of Hershey, Pennsylvania was founded in 1894 and recorded \$4.4 billion in sales in 1998, including its other brands such as Reese's Peanut Butter Cups, Milk Duds, and Good and Plenty. Altogether the company sells approximately 3,300 candy products including variations in sizes and shapes. Candy is a very seasonal product, with Halloween and Christmas recording about 40% of annual candy sales, making the fourth quarter calendar crucial to Hershey's profitability. Hershey's largest continuous challenge may be that it must rack up its multibillion dollars in sales of 50 cents or one dollar at a time, requiring huge numbers of its products to be sold. Such quantities means Hershey must have very reliable logistics systems.

Traditionally the food and beverage industry has had a very low ratio of information technology (IT) spending to total revenue, ranging between 1.1% and 1.5%, according to Fred Parker, senior vice-president of IS at Schreiber Foods Inc. in Green Bay, Wisconsin. The last great technology advance in the industry was the barcode scanner, which arrived about 1980. Parker believes the reason for the low IT spending ratio is the very low profit margin in the industry. However, the industry's stingy approach to IT began to change as the year 2000 approached. Many companies chose to solve their Year 2000 (Y2K) problems by replacing their legacy systems rather than spending a lot of money to retain them by fixing the Y2K problems within them. According to Hershey vice-president of information systems, Rick Bentz, Hershey began to modernize its software and hardware in early 1996. The project, dubbed Enterprise 21, was scheduled to take four years (until early 2000). Enterprise 21 had several goals, including upgrading and standardizing the company's hardware, and moving from a mainframe-based network to a client-server environment. The company replaced 5,000 desktop computers and also moved to TCP/IP networking based on newly installed network hardware. Bentz noted that benchmark studies by the Grocery Manufacturers of America show that Hershey's IT spending trailed that of most of its industrial peers. The study concluded that Hershey needed to be able to use and share its data much more efficiently. More and more retailers were demanding that suppliers such as Hershey fine-tune their deliveries so that they could lower their inventory costs.

Hershey's information systems management set as a goal a move to an ERP system using software from SAP AG of Walldorf, Germany. SAP was to be complemented with software from Manugistics Group Inc. of Rockville, Maryland. Manugistics would support production forecasting and scheduling, as well as transportation management. In addition, the company decided to install software from Siebel Systems Inc. of San Mateo, California. Siebel's software would aid Hershey in managing customer relations and in tracking the effectiveness of its marketing activities. Management believed that Enterprise 21 would help Hershey better execute its business strategy of emphasizing its core mass-market candy business. A necessary piece of Enterprise 21 was the installation of bar-coding system at all six U.S. production plants in 1999. Bar coding was necessary so the company could track all incoming and outgoing materials. In that way it would be able to improve logistics management while controlling production costs. Enterprise 21 was later modified and called for Hershey to switch over to the new SAP system and its associated software in April of 1999, an annual period of low sales. This new target meant the company had 39 months

to complete the project instead of the original 48 months. Although some SAP modules were actually been put into production in January, the project ran behind the aggressive schedule, and the full system did not come online until mid-July. Included in the delayed conversion were SAP's critical order processing and billing systems, along with the Siebel and Manugistics systems. The timing meant that Hershey would be facing a major problem because Halloween orders were already arriving by mid-July. The information systems staff chose to convert all these new systems using the direct cutover strategy in which the whole system goes live all at once. While this strategy is generally considered to be the most risky, were it to be successful it could save the company time and money while enabling Hershey to fill its Halloween orders on schedule. By the time of the conversion, the whole project had cost Hershey \$112 million. Problems arose for Hershey when the cutover strategy did not work because serious problems emerged immediately. As a result, many Hershey customers' found their shelves empty as Halloween approached. Bruce Steinke, the candy buyer for Great North Foods, a regional distributor in Alpena, Michigan, had placed an order for 20,000 pounds of Hershey's candy and found his warehouse short just prior to Halloween. As a result, 100 of Great North's 700 customers had no Hershey candy when Halloween arrived. The shortage meant not only a drop in Hershey's sales but Great North (and other Hershey distributors) also lost credibility as their retail customers found it hard to believe that Hershey itself could be the problem. The shortages also meant the loss of precious, highly contested shelf space. For example, Randall King, the candy buyer for the Winston-Salem, North Carolina based Lowes Foods chain, faced the shortage problem. As a result, he told his 81 supermarkets to fill their empty Hershey candies shelves with other candies, and he even suggested that they turn to Mars brand candies. Retailers predicted that Hershey's lost shelf space would be hard to win back. Ron Coppel, a vice president of business development at Eby-Brown Co., a Naperville, Illinois candy distributor, observed that "If you don't have my toothpaste, I'm walking out of the store, but," he added, "for a chocolate bar, I'll pick another one. [Customers are] not likely to walk out of a store because there was no Hershey's bar." So Hershey long-range sales were also being placed at risk by the logistics failures.

Hershey itself did not publicly acknowledge the problem until mid-September when it announced that something was wrong with its new computer systems. It did indicate that Hershey employees were having trouble entering new orders into the system. In addition, once in the system, the company stated that order details were not being properly transmitted to the warehouses where they could be filled. Hershey did announce that it expected the problem to be solved in time for Christmas shipments. However, industry analysts, such as William Leach of Donaldson, Lufkin & Jenrette, were quick to note that should the company fail to make that deadline, the problems would likely seriously cut into not only Christmas sales but also Valentine's Day and perhaps Easter shipments, two other crucial candy sales holidays. As soon as the admission of problems was made, questions immediately arose as to the causes of those problems. Kevin McKay, the CEO of SAP in the United States, denied any problems with SAP's systems, saying, "If it was a system issue, I'd point directly to a system issue." He also made it clear that SAP was operating smoothly for Hershey's much smaller Canadian unit. Tom Crawford, the general manager of SAP America's consumer products business unit, verified that his consultants were at Hershey sites to help resolve the problems. But, he made clear, "There are really no software issues per se." Crawford explained that his consultants "are just making sure they [Hershey employees] are using the business processes (built into the software) correctly." Manugistics also said it was working with Hershey on "business process improvements." Paul Wahl, president of Siebel, concluded "It [their system] may have turned out with the big bang [direct cutover] kind of installation, they were maxed out there." Brian Doyle, an IBM spokesperson, pointed to "the business process transformation under way at Hershey" as a possible cause which, he said, "is an enormously complex undertaking." He noted major changes in the way Hershey employees were doing their job, which implied the need for more and different training than Hershey's staff had originally received. It was obvious that the problem was not in candy production. At the time of the cutover Hershey had an eight-day supply of products in its warehouses, a higher than usual supply in anticipation of possible minor problems with the new systems. However, within three weeks of turning on the new systems, shipments were more than two weeks late. Hershey began telling its customers to allow 12 days for delivery

(the usual turnaround time was six days). Even that schedule proved to be too aggressive because Hershey could not deliver goods so quickly. Martha Kahler, director of trade relations at Wal-Mart's Temple, Texas store, in describing the incomplete shipments it was receiving, said, "It wasn't any particular [candy] item. It was across the board." Company spokespersons told financial analysts in late October that computer system problems had already reduced sales by \$100 million in the third quarter. The actual profit drop was 19%. When word of these problems became public, Hershey's stock price went into a sharp slide. By late October, its price had fallen to \$47.50, down 35% from \$74 one year earlier. During the same period the Dow Jones Industrial Average had risen by 25%. Third quarter earnings dropped from \$.74 to \$.62. Hershey Chairman and CEO Kenneth L. Wolfe admitted that "third quarter sales and earnings declined primarily as a result of problems encountered since the July start-up of new business processes in the areas of customer service, warehousing and order fulfillment." He added, "These problems resulted in lost sales and significantly increased freight and warehousing costs." Hershey Senior Vice President Michael Pasquale pointed out that "Clearly, our customer relations have been strained." While Wolfe admitted the problems are taking longer to fix than expected, he did state his expectation that fourth quarter sales and earnings would bounce back.

In late October, key individuals within Hershey held a two-day meeting to review the new system and produce a list of changes needed. Wolfe demanded that those involved the "need to be tested before we put them in, possibly implying a lack of adequate testing prior to the original cutover. In early February 2000, Hershey reported an 11% decline in sales and profits for its fourth quarter 1999. Wolfe again pointed to order processing which this time around had caused many retailers to not even place orders. He said that while system changes and increased personnel experience with the new software had reduced the problems, Hershey's has "not yet fully returned to historical customer service levels. Although Hershey has released very little information on the troubled implementation, observers continue to speculate on the key question: what went wrong? Some point to the pushing forward of the target date---trying to accomplish too much in the allotted time frame. Others have stated their belief that inadequate time and attention was allocated to testing prior to Hershey's new systems going live in July. Still other analysts point to the use of the direct cutover method. "These systems tie together in very intricate ways," stated AMR Research Inc. analyst Jim Shepherd, "and things that work fine in testing can turn out to be a disaster (when you go live)." He called the instant conversion approach "a huge bite to take, given that (processing orders) is the lifeblood of their [Hershey's] business." Finally, some analysts point their finger at training. A. Blanton Godfrey, CEO of the Juran Institute, a consulting firm based in Wilton, Connecticut, says that only 10 to 15 percent of ERP implementations go smoothly. He claims that the difference for them is better training. Some observers draw a distinction between training and education. "Training is the how part of the equation," explained John Conklin, vice president and CIO of World Kitchen, the Elmira, New York producer of Pyrex and Corning ware. "Education is the bigger piece of the puzzle. If people don't go through this education, you won't win their hearts and you won't have their minds." Thus, some observers believe that lack of education on the whys of the system and how the many pieces of the full system fit together are possibly the reason order entry difficulties spilled over into warehouse problems. Hershey's problems were solved in 2000 and company sales and profits did rebound. Its year 2000 third quarter profits jumped 23% from the previous year. The company also took steps to prevent that type of problem occurring again. On December 14, 2000 the company announced the creation of a chief information officer (CIO) position and filled it with George Davis, a former Computer Sciences Corp. executive. Just three days earlier it announced that Hershey's new chief operating officer (COO) was William Christ, the former Hershey's chief financial officer. Davis reports to Christ.

Questions:

1. Analyse Hershey's business model using the competitive forces and value chain models. Was an ERP system and related software a good solution to Hershey's problems? Explain your responses.
2. Classify and describe the problems with the Enterprise 21 project using the categories described in this case on the causes of system failure.
3. What role did enterprise software play in the failure? Were Hershey's system problems the fault of the software vendors, Hershey, or both?
4. Who was responsible for the failure of Enterprise 21? Assess the role of Hershey's IT group and its managers.
5. Evaluate the risks of the project as seen at its outset, and then outline its key risk factors. Describe the steps you would have taken during the planning stage of the project to control those factors.