

UNIVERSITY OF SWAZILAND
DEPARTMENT OF BUSINESS ADMINISTRATION
MAIN EXAMINATION PAPER
MAY, 2017

TITLE OF PAPER : E COMMERCE
COURSE CODE : BA 431 FULL TIME/ IDE
TIME ALLOWED : THREE (3) HOURS

- INSTRUCTIONS:**
- 1. THE NUMBER OF QUESTIONS IN THIS PAPER FIVE (5)**
 - 2. SECTION A IS COMPULSORY.**
 - 3. ANSWER ANY TWO (2) QUESTIONS IN SECTION B**
 - 4. THE MARKS TO BE AWARDED FOR EACH QUESTION ARE INDICATED ALONGSIDE THE QUESTION.**

NOTE: MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH, AS WELL AS FOR ORDERLY AND NEAT PRESENTATION OF WORK. FURTHER MARKS WILL BE AWARDED FOR USE OF RELEVANT EXAMPLES.

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

SECTION A

Haworth Incorporated, headquartered in Holland, Michigan is the world's second largest designer and manufacturer of office furniture and workplaces. The company offers a full range of furniture known for its innovative design, including desks, chairs, tables, partitions and store products. Haworth operates in more than 120 countries, with 9,000 employees, 40 manufacturing locations, 60 showrooms and more than 600 independent dealers around the world.

Haworth was particularly successful during the booming economy of the late 1990s, which stimulated demand for new office space, but the company was hit hard when many dot-coms went under because these companies glutted the market with their slightly used Haworth products.

To bring costs back in line with declining revenue, Haworth started an ambitious overhaul of its supply chain management systems in 2002. Haworth's 15 North American manufacturing facilities are located in North Carolina, Arkansas, Michigan, Mississippi, Texas, Ontario, Alberta and Quebec. These facilities supply inventory to distribution centres in Michigan, Pennsylvania, Georgia and Arkansas. Haworth needed to coordinate order fulfilment from multiple distribution centres with products received from all of its manufacturing facilities. The distribution centres need to communicate effectively with the manufacturing facilities to better plan the processing of customer orders.

Haworth's existing distribution system was an old-style mainframe locator application that could only handle inventory data for a single building and could not differentiate between facilities. Each distribution centre used a different version of the system based on the computer system with which it interfaced, the system with which it interfaced. The system did not provide a way to preplan shipments, so Haworth could not cross-dock material directly to an outbound shipment as efficiently as it desired, raising labour and freight costs.

Cross-docking enable goods earmarked for a specific customer to move directly from the receiving dock to the shipping dock without being checked into the system and picked from inventory.

To solve these problems, Haworth implemented a new warehouse management system (WMS) based on IristaWarehouse software from Irista in Milwaukee. WMS tracks and control the flow of finished goods from the receiving dock at any of Haworth's distribution centres to the customer site. The system has cross-docking capabilities to reduce labour costs in the warehouse. WMS interfaces with the various ERP applications running in the four distribution centres and with Haworth transportation Management System (TMS). Acting on shipping plans from TMS, WMS directs the movements of goods and based on immediate conditions for space, equipment, inventory, and personnel.

The TMS uses optimization and carrier communication software from Manugistics Group in Rockville, Maryland.

The system examines customer orders, factory schedules, carries rates and availabilities, and shipping costs to produce optimal lower cost delivery plans. These plans are generated daily and updated every 15 minutes. TMS has an automated interface that enables Haworth to negotiate deliveries with its carriers. To find the minimal freight cost for deliveries TMS maps out efficient routes that minimize "less-than-truckload" shipments and damage to goods.

TMS also electronically sends carriers "tenders", which are requests to bid on a shipment. These tenders are transmitted over a private network or the Web, and carriers transmit bids back automatically. In the past, that process required two phone calls. If a carrier does not reply within a specified time, the system automatically contacts another carrier.

Both TMS and WMS run on the server computers from Hewlett-Packard using the Unix operating system. They interface with two sets of order entry, manufacturing planning, and shipping systems that service two different furniture markets. To tie these applications, Haworth uses specific "middleware" software from SeeBeyond Technology in Monrovia, California. The middleware passes customers' orders, shipping plans, and shipping notifications among the applications.

According to Jim Rohrer, a business applications process manager and key liaison between Haworth's information systems and supply chain operations, the new systems have not merely optimized business processes they've transformed them. Haworth used to have a "signpost" system where distributed centres received information on labels or on screens and then decided what to do with it. Now the system is more directed, TMS sets up a plan, feeds it to WMS and WMS specifies the tasks that need to be accomplished.

The payoff from these systems was considerable: warehouse worker productivity increased 35 percent, freight costs were reduced 16 percent, and "less-than-truckload" shipments and damaged goods in transit declined 50 percent. Haworth's investment in these supply chain management systems paid for itself in only nine months.

Q1. What problems did Haworth face? How did they affect the way the company ran its business? 25 marks

Q2. What people, organization and technology issues did the solution have to address? 25 marks

SECTION B

Question 1

Explain between retailing and e-tailing

25 marks

Question 2

Give an account of forward auction and reverse auction. Clearly distinguish them by giving examples.

25 marks

Question 3

What do you understand by electronic cash? Give advantages and disadvantages of

Electronic Cash

15 marks

What do you understand by electronic wallets? What are the limitations of electronic wallets

10 marks

Question 4

Name and discuss the ecommerce server threats? What are the counter measures of these threats?

25 marks