

EASTERN UNIVERSITY, SRI LANKA
Faculty of Commerce and Management
Special Repeat Examination in Bachelor of Business
Administration/Commerce (December-2011)
MGT 3213 Management Information System



Answer all five (5) questions

Time: 03 hours

Q1. Case Study:

UPS Competes Globally with Information Technology

United Parcel Service (UPS), is the world's largest air and ground package-distribution company. It started out in 1907 in a closet sized basement office. Jim Casey and Claude Ryan-two teenagers from Seattle with two bicycles and one phone –promised the “best service and lowest rates”. UPS has used this formula successfully for more than 90 years.

Today UPS delivers more than 14.1 million parcels and documents each day in the United States and more than 200 other countries and territories. The firm has been able to maintain leadership in small-package delivery services despite stiff competition from FedEx and Airborne Express by investing heavily in advanced information technology. During the past decade, UPS has poured billions of dollars into technology and systems to boost customer service while keeping costs low and streamlining its overall operations.

Using a handheld computer called a Delivery Information Acquisition Device (DIAD), a UPS driver can automatically capture customers' signatures along with pickup, delivery, and time-card information. The driver then places the DIAD into the UPS truck's vehicle adapter, an information-transmitting device that is connected to the cellular telephone network. Package trucking information is then transmitted to UPS' computer network for storage and processing by UPS's main computers in Mahwah, New Jersey, and Alpharetta, Georgia. From there, the information can be accessed world wide to provide proof of delivery to customers or to respond to customer queries. Through its automated package tracking system, UPS can monitor packages throughout the delivery process. At various points along the route from sender to receiver, bar

code devices scan shipping information on the package label; the information is then fed into the central computer. Customer service representatives can check the status of any package from desktop computers linked to the central computers and are able to respond immediately to inquiries from customers. UPS customers can also access this information from the company's Web site using their own computers or Wireless devices, such as pagers and cell phones.

Anyone with a package to ship can access the UPS web site to track packages, check delivery routes, calculate shipping rates, determine time in transit, and schedule a pickup. Businesses can use the Web sit to arrange UPS shipments and bill the shipments to the company's UPS account number or to a credit card. The data collected at the UPS Web site are transmitted to the UPS central computer and then back to the customer after processing. UPS also provides tools that enable customers, such Cisco systems, to embed UPS functions, such as trucking and cost calculations, into their own Web sites so that they can track shipments without visiting the UPS site.

Information technology has helped UPS reinvent itself and keep growing. UPS implemented a suite of custom-built software that uses operations research and mapping technology to optimize the way packages are loaded and delivered. Because UPS delivers 14 million small packages each day, resulting information is cutting the distance that delivery trucks travel by more than 100 million miles each year.

UPS is now leveraging its decades of expertise managing its own global delivery network to manage logistics and supply-chain management for other companies. It created a UPS Supply Chain Solutions division that provides a complete bundle of standardized services to subscribing companies at a fraction of what it would cost to build their own systems and infrastructure. These services include supply-chain design and management, freight forwarding, customs brokerage, mail services, multimodal transportation, and financial services, in addition to logistics services.

Adidas America, based in Portland, Oregon, is one of many companies benefiting from these services. Every three months the company introduces as many as 10,000 new

apparel items and 4,000 new footwears items. It must handle orders for many thousands of retailers for these orders, and many of these orders are priority requests that must be fulfilled within one or two days. UPS Supply Chain Solutions consolidated what was previously handled by multiple third-party logistics providers into a single streamlined network outfitted with automated inventory and order fulfillment systems. By having UPS coordinate and manage distribution, Adidas America increased its order accuracy rate, boosted on-time deliveries, and improved customer service.

Questions:

- (a) What are the input, processing, and output components of UPS's package tracking system? (07 Marks)
- (b) What technologies are used by UPS? How are these technologies related to UPS's business strategy? (07 Marks)
- (c) What key problems do UPS's information systems solve? (07 Marks)
- (d) What would happen if these systems were not available? (07 Marks)
- (Total 28 Marks)**

Q2.

- (a) Recently, Singer Corporation (Sri Lanka) has implemented the largest web based Enterprise Resource Planning (ERP) ever deployed in the country and in South Asia successfully. Assume that you are requested to measure the ERP system success in Singer Corporation.

List out the key criteria which you would use to measure the ERP system success at Singer Corporation.

(05 Marks)

- (b) List the branded technology producers or IT vendors for the following IT/IS requirements for a business organisation, which is expecting the technological advices from you.
- Computer Hardware Platforms
 - Operating Systems Platforms
 - Enterprise Software Applications
 - Networking/ Telecommunications

- Consultants and System Integrators
- Data Management and Storage
- Internet Platforms

(07 Marks)

- (c) Describe the ways in which the Internet can be used to achieve the strategic business objectives of a firm.

(06 Marks)

(Total 18 Marks)

Q3.

- (a) Describe the factors that an organisation should take into account when determining the two-way relationship between organisation and information technology.

(05 Marks)

- (b) Explain why it is important for a company to ensure that any information system development is in line with corporate strategy.

(05 marks)

- (c) A small business firm expects advice from you regarding, how to start e-commerce for its business. You are required to develop a report in order to advice them. Your report must include necessary operational steps to start e-business.

(08 Marks)

(Total 18 Marks)

Q4.

- (a) What do you mean by the term 'system failure'? Discuss using different perspectives or views.

(04 Marks)

- (b) Describe the present status of telecommunication or data communication technologies of a business organization (any business organization which is familiar to you) and illustrate how that organisation can improve its telecommunication or data communication infrastructure.

(07 Marks)

- (c) Your university has decided to fire all the library staff and automate as much of the processes as they can. How is this decision ethical? Describe the variety of interests implicated by this decision.

(07 Marks)

(Total 18 Marks)

Q5.

- (a) Consider an organisation which is familiar to you and explain the current status of that organization's data management technologies.

(06 Marks)

- (b) ‘..The threats to IT security cannot be mitigated by technological solutions alone; the organisational information security and management policies must be reviewed and updated continuously.’ Do you agree with this statement? Argue your case with examples.

(06 Marks)

- (c) Provide a brief definition of the term ‘information system’. What business functions will an Enterprise Resource Planning (ERP) system support?

(06 Marks)

(Total 18 Marks)

