MIS
Quiz 1 - Code 2

Name: Braith Alwani

1) CRM is meant to improve
   A) Customer relations
   B) Common relations
   C) Community relations
   D) None of these

2) Low level design implies flow chart and pseudocode for converting a
   A) Process into program
   B) Data into Information
   C) None of the above
   D) Both the above (a and b)

3) Three dimensions of Information Systems are:
   A) Organization, Technology and Management
   B) Organization, Systems and Information
   C) Organization, Strategy and System
   D) None of the above

4) Traditional file systems are:
   A) Program data dependent
   B) Program data independent
   C) Hybrid models
   D) None of the above

5) ERD is
   A) Entity Relationship Diagram
   B) Employee Rule Description
   C) None of the above

6) Explicit Knowledge is derived from info and can be
   directly documented

7) ESS is at top level of management triangle

8) Name any three functional processes in a consultancy based organization
   TPS — collects data
   MIS — generates reports
   ESS — take decisions based on the reports

9) Database is a collection of file

10) DSS is of two types name them KMS and HIS
Q1. BaaN is a world leader in powerful, innovative, business software. They are the cutting edge of business technology used by industry leaders all over the World promoting collaboration between customers and suppliers, linking people and processes across the world, and using the Internet to make business faster and more cost-effective.

They have turned towards Knowledge Management, in keeping with the demands of time. Two departments viz 'Knowledge Transfer' and 'Knowledge Development' are projected for this purpose. Their main objective is to empower the members with skills necessary to meet the external world. They have a centralized database system christened as "SCOPHSC Intranet facility" is provided for the members with their identify and password to use the system.

One of the features of BaaN is the encouragement provided to the employees for knowledge management. "ASK HER" is one such technique that provides a chance to the employees to make use of public folders and register their doubts and genuine problems. Longer duration training programs are provided for new recruits. The others receive short or mini programs to update their knowledge.

BaaN's attempts to multiply knowledge could be seen in the well maintained library for the purpose. They contain technical as well as non-technical printed material and is used by those employees who crave for knowledge.

"SPANDANA" known as 'reaction' is keenly felt in their monthly meetings. The people talk and they talk openly and freely with the management. They are helpful in extending the sharing of the knowledge which is considered as rich source of knowledge. The meetings also make the people to come out of their shell and express their genuine concern for aspects that the organization stands for. Sharing of knowledge, beyond doubt highlights the
brighter side of the employees vast experiences in a particular field, their updated knowledge, their concern for the system and their sense of responsibility. Periodic seminars and discussions help both in documentation and multiplying the knowledge thus leading to an effective knowledge management.

Case Questions

a. Write about the knowledge management initiatives in the Baan and discuss how their implementation helps in the success of the organization.

OR

b. In the given context how are Knowledge Management and Business intelligence related

Q2. Canon was founded in Japan in 1933, and first made its name in the 1930s as a producer of cameras. It became associated with high levels of innovation and product development, and in 1964 it branched out to produce the Canola 130, the world's first 10-key electronic calculator. During the 1960s Canon became a truly international company with exports accounting for 50% of sales. In 1968 the company moved into photocopying and by the mid-1970s Canon was producing laser printers. During the 1980s and 1990s the company continued to innovate, developing high grade computer systems and more sophisticated cameras, copiers and digital imaging systems.

Increasingly the company has focused on developing environmentally friendly technologies, producing recyclable copiers and other equipment.

Today Canon is known for providing state-of-the-art integrated IT and office solutions, as well as top class photography and imaging systems. In the UK, Canon is an industry leader in imaging products and services for digital environments, both in the office and at home. Canon's technology is designed to enable companies and individuals to achieve their goals - an objective which is encapsulated in the company's "You Can" philosophy. Companies which set out, through their products and services, to help other companies become and remain efficient operators need to be at the forefront of innovation and good practice themselves.

Canon prides itself on the research that it carries out into developing new technologies. It has research centres located in Europe (e.g. France, UK) USA and Japan.

The company operates in a highly competitive environment. It recognises the importance of managing its processes in ways that ensure that its new products come to market quickly, are to the highest technical specifications, and can be competitively priced. Key to this is Canon's appreciation that a good Information Management strategy is an essential component of business success. Today's businesses are faced with a mass of documentation, emails, and other paperwork circulating around them. Canon has developed skills and technologies to take control of this potential information overload, the know-how to manage it and the ability share it throughout the organisation and beyond.

Canon has used its technology, understanding and systems integration skills to help improve its own business processes - aiding it to become more efficient, more productive and more profitable.
Canon prides itself on the research that it carries out into developing new technologies. It has research centres located in Europe (e.g. France, UK) USA and Japan.

(Taken from: http://businesscasestudies.co.uk/canon/integrated-information-systems-seeing-the-whole-picture/operating-the-core-usiness.html#!vzz3pBxDuqO9)

Case Questions:

a. Apply Porter’s five forces model to Canon U.K

OR

b. Explain the concept of vertical and horizontal integration of Information Systems in context of Canon U.K

Q3. IBM Credit finances the computers, software and services sold by IBM Corporation. Processing a finance application used to take between six days and two weeks as the application wound its way from the credit department to the pricing department to an administrator who wrote out a formal quote letter. When IBM Credit realized that processing an application actually took only about 90-minutes and the rest of the normal processing time was spent with the application sitting on a pile on a specialist’s desk waiting to be looked at, they decided to relook the entire process.

Here’s what IBM Credit did: The four specialists who previously processed the application were replaced by a generalist -- called the deal structurer -- who processed the application from start to end using templates on a new computer system which provided all the data and tools each specialist commonly used. For unusual cases, the deal structurer can still call on the specialists to provide additional expertise. The specialist and the deal structurer then team up to develop a customized package as required. This happens only rarely, however.

Case Question

a. Identify and classify the business process change at IBM as Business Process Automation, Business Process Improvement or Business Process Re-engineering. Justify your answer and also give the pre and post business process flow as per the given information.

Q4. While much of the spread of mobile advertising in Asia has been fuelled by the strength of the mobile ad market in Japan, Korea and China, there is significant growth in India, Indonesia, the Philippines and Vietnam. Opera Mediaworks has grouped these countries into a sub-region called The Power 4, or P4. The P4 countries represent 43 per cent of Asia’s population but account for less than 30 per cent of regional internet users. However, over 76 per cent of these users access the internet using a mobile device. Despite the slower adoption of the mobile web (compared to Japan and Korea), smartphone ownership has increased by over 545 per cent since the beginning of 2013. Use of mobile websites and apps tends to be lower in the P4. The Asia region and the P4 have a much higher
percentage of “other” devices (i.e., those with operating systems other than iOS or Android) than our global user base. These devices tend to monetise at lower rates than Android or iOS, and they also tend to drive fewer impressions per user. However, in Asia—and more specifically, in our P4 region—these devices do drive a significant number of impressions.

Globally, there is greater demand for and rapid adoption of mobile video-ad units. Both India and Vietnam exceeded the average across all of Asia (0.41:1). Vietnam and Indonesia have a higher percentage of high-frequency users than the global average, while India and the Philippines contain more low-frequency users. Interestingly, the “regular” frequency group for the P4 are all similar in market share and are also quite close to the global average.

(This article was published in the Business Line print edition dated September 4, 2015)

Case Question
a. Suggest some measures which can help in greater adoption of mobile based services in India.
Q1. CIOs at India Inc are not rushing their investments in cloud computing on security worries, erratic broadband availability and lack of cloud-ready applications. Concerns over data security and privacy and an immature ecosystem are likely to stave the growth of cloud computing in India. Despite the obvious benefits of lower capital expenditure and quicker rollout of new products and services chief information officers (CIOs) are hesitant to make full-scale investments in the new technology. Formeow, they are rolling out pilot projects or waiting for the technology to stabilise before making this radical shift. Unlike traditional information technology, cloud computing relies on storing, managing and retrieving data hosted on the internet, rather than on a local server. As the amount of data generated grows exponentially a McKinsey estimate believes the amount of data will grow 44-fold between 2009 and 2020 companies may find it more viable to store this data virtually in a distant server, rather than buy more servers and storage systems to keep it in-house. As broadband services expanded, more companies across sectors started exploring this possibility.

Questions:

a. What in your view, are the various options available before a company to reduce the total cost of technology ownership?

b. What are the challenges for a company if they chose to implement cloud-based solutions?

Q2. ABC Paints is a multi-national corporation manufacturing paints for both interior and exterior walls. Materials are sourced worldwide and customers are across the globe. With its head office at Beijing, it has manufacturing facilities at five locations worldwide. The two decade old company has witnessed phenomenal growth in the last five years. With expanding markets, widening supplier base, ABC Paints was moving to be the market leader. Cheng, the strategic director of ABC Paints was firm believer in the transformational role of information systems. Though the conservative mindset of employees at ABC was an area of concern Cheng decided to go ahead with a company-wide ERP implementation.

Questions:

a. Which are the key business processes at ABC Paints that would be supported by the ERP system? Elaborate.

b. What are the challenges that Mr. Cheng would face during the implementation and how could he overcome them?

Q3. General Electric's SCISOR analyzes financial news

General Electric's Research and Development Center has developed a natural language system called SCISOR (System for Conceptual Information Summarization, Organization, and Retrieval) that performs text analysis and question-answering in a
limited, predefined subject area (called a constrained domain). One application of this system deals with analyzing financial news. For example, SCISOR automatically selects and analyzes stories about corporate mergers and acquisitions from the online financial service of Dow Jones. It is able to process news in less than 10 seconds per story. First, it determines whether the story is about a corporate merger or acquisition. Then, it selects information such as the target, suitor, and price per share. The system allows the user to browse and ask questions such as, "What price was offered for Polaroid?" or "How much was Bruck Plastics sold for?" The system's effectiveness was demonstrated in testing, when it proved to be 100 percent accurate in identifying all 31 mergers and acquisitions stories that were included in a universe of 731 financial news releases from the newswire service. A similar application is a Web-based personalized news system that was developed in Singapore to track business news available in English, Chinese, and Malay, summarize it, and extract desired personalized news in any of these languages.

Questions:

(a) What are the benefits of analyzing financial news via a machine? What other applications might be developed with this type of system?
(b) How could such a system be combined with an Internet news dissemination portal such as money.cnn.com?

Q4. An insurance company has a team of 100 sales staff working from home. The insurance company operates three legacy systems each containing customer information and policy details. A call centre, located at the insurance company's Head Office, uses the information contained in the legacy systems to telephone customers and arrange appointments for sales visits. This is time-consuming as there is duplication of information between the three legacy systems. Details of appointments are sent by SMS messages to the cell phones used by the sales staff. The sales staff have laptops containing customer information, but this information is usually out-of-date as it is updated only once a month from the legacy systems. Each day the sales staff have to upload the details of any sales they have made to the relevant legacy system; this takes time and the sales staff frequently make mistakes that annoy customers and cause additional work. Both the call centre staff and the sales staff complain about the continued use of the legacy systems and the out-of-date information held on the laptops.

Questions:

(a) What are the issues the insurance company is facing due to legacy systems?
(b) Discuss the various options the insurance company could implement to overcome the issues with the three legacy systems.

Q5. A car repair company has introduced a database management system in order to maintain customer records. It is using a flat-file database. A table from the database of the car repair company is shown below.

<table>
<thead>
<tr>
<th>Registration</th>
<th>Make</th>
<th>Model</th>
<th>Engine</th>
<th>Year</th>
<th>Name</th>
<th>Phone</th>
<th>Repair</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ 1234</td>
<td>Chevrolet</td>
<td>Camaro</td>
<td>4000</td>
<td>1976</td>
<td>Jones</td>
<td>921654</td>
<td>New carburetor</td>
<td>07/06/06</td>
</tr>
</tbody>
</table>
XY 3095  Volkswagen Jetta  1400  1992  West  663174  Body Repair  07/06/06
MX 9054  Peugeot  206  1000  2003  Ortega  954231  Fuel pump  07/06/06
BZ 2007  Mercedes  SLK  1000  2003  Jones  921564  Head Gasket  13/06/06
RP 3005  Ford  Cortina  2000  1976  West  663174  Paintwork  14/06/06
FH 4832  Ford  KA  1300  2003  Ortega  954231  Stereo fitting  15/06/06
GP 3291  Vauxhall  Cavalier  1600  1997  Jones  921564  Exhaust pipe  15/06/06

Questions

(a) The car repair company has found that data redundancy has become a problem. Describe two problems that may be caused by data redundancy referring to the table.

(b) Explain the benefit to the car repair company of using electronic files compared to using paper files.
Institute of Management Technology
Management Information System
End Term Exam — PGDM Term I (Aug. 2013)
Batch: 2013-15
[Open Book/Printed material/Laptop with no internet connectivity]

Time period: 2.5 hours
Max marks: 40

Attempt any 3 Questions:
In case of doubt, state suitable assumptions and proceed.

All the Best!

Q1. Read the case let 1- The Apple of Your i and answer the following questions of the case let 1.

a. What do you think are the three most important factors in Apple’s incredible success? Justify your answer. A huge question for many investors is whether the company can be successful without Steve Jobs. What is your opinion, how can Apple respond to this loss? [6.3]

b. Microsoft took an early lead in the development of state like iPad and it had world’s leading operating system and applications for over twenty years. Provide reasons why Microsoft has not been able to achieve the same success as Apple has. Most industry analysts agree that the skills and abilities of Microsoft employees are as good as Apple’s. [7]

Q2. Read the case let 2- Data Mining in the Real World and answer the following questions of the case let 2.

a. Summarize the concerns expressed by this case let. Do you think the concerns raised here are sufficient to avoid data mining projects altogether? Justify your answer. [6.3]

b. If you were a junior member of a data mining team and you thought that had been developed was ineffective may be even wrong what would you do. If your boss disagrees with your beliefs would you go higher in the organization? What are the risks of doing so what else might you do? [7]

Q3. Answer the questions (a) & (b) based on the case study given below:

PAVECA of Venezuela uses wireless in sales force automation
PAVECA, Venezuela’s largest paper goods manufacturer and exporter manufactures toilet paper, paper towels, tissues, and other paper products. The company enjoys a significant amount of market share, and seeking to maintain that, it chose to use some e-commerce technologies to cut operational costs and improve customer service at the same time. PAVECA implemented a wireless system that allows its sales reps to use their wireless PDAs to connect to the Internet while they are in the field. Via the Internet connection, the salespeople can log directly into the company’s intranet to get all the information they need in real time. Orders can then be entered directly into the system and real time. The system revolves around two pieces of software from iWork Software (iworksoftware.com): an automatic data collection system, and a workflow integration solution. The...
combination allows sales people to automatically register sales transactions into the ERP system as they occur. Each sales person has a PDA that connects them directly to the company’s ERP system in real time. When an order is entered into a PDA, it goes into the ERP system and follows a predefined workflow. The savings produced by the new system as compared to the ERP / manual system were dramatic. For example, order processing time was reduced by 90 percent, order approval time by 86 percent, shipment time by 50 percent, and the time between orders taken and order posting was reduced from three days to 20 seconds. The faster order processing time not only lead to faster order approval but also increased the number of daily shipments out of their warehouse.

While the main goal was to improve workflow, there’s another potential benefit here: better customer service. Because of that direct links and integration, customers can get their orders faster, and there’s less chance of errors occurring. Customers are happier and more loyal, and so indirectly, the company’s profits increases because customers are more likely to place additional orders in the future. Finally, the transmitted data enter directly into the corporate DSS models, enabling quick decisions in response to the field reports filed by the sales people.

Questions:

a. What are the benefits of PAVECA’s new system?  
[63]
b. What are the advantages of using wireless systems?  
[7]

Q4. The manager of a car showroom uses a database to store data about cars he sells. This is part of the database.

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
<th>Size of engine</th>
<th>Registration</th>
<th>Price($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opel</td>
<td>Vectra</td>
<td>1.8</td>
<td>VSE 648</td>
<td>19000</td>
</tr>
<tr>
<td>Opel</td>
<td>Zafira</td>
<td>2.0</td>
<td>BFK 297</td>
<td>29000</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>Golf</td>
<td>1.4</td>
<td>SBA 5526</td>
<td>15000</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>Polo</td>
<td>1.2</td>
<td>DDB4978</td>
<td>11000</td>
</tr>
<tr>
<td>Volkswagen</td>
<td>Jetta</td>
<td>1.6</td>
<td>BG8447</td>
<td>19000</td>
</tr>
<tr>
<td>Renault</td>
<td>Magane</td>
<td>1.4</td>
<td>1233CD33</td>
<td>17000</td>
</tr>
<tr>
<td>Renault</td>
<td>Cilo</td>
<td>1.2</td>
<td>6289XF54</td>
<td>11000</td>
</tr>
</tbody>
</table>

(a) How many tuples are there in this part of the database?  
[2]

(b) How many attributes are there in this part of the database?  
[2]

(c) The records shown are to be sorted in descending order of size of engine. What will be the registration of the first record in the database after it has been sorted?  
[2]

(d) Suggest a field from the above table, which can be set as the primary key.  
[1.3]

(e) Explain the importance of Data Base Management Systems in the current business scenario. How does data redundancy lead to data inconsistency? How the problem of data redundancy can be solved?  
[6]
The Apple of Your Eye

A quick glance at Apple's stock history in Figure 4-27 will tell you that Apple, Inc. is a very successful company. You might be surprised to learn, however, just how successful.

In roughly 4 years, Apple has tripled its market capitalization (the number of outstanding shares times the stock price) to more than $600 billion, making Apple the largest public company in the world. To put that number in perspective, Microsoft—for years the market capitalization leader of software companies—has a market capitalization of $663 billion, and Google has a market capitalization of $225 billion. In late June 2011, numerous market analysts were predicting that the then-$332 stock would increase another $100 within 6 months. In fact, by August 2012, it was trading around $600. Apple has been so successful that the NASDAQ stock exchange concluded that it was overinfluential in the computation of the NASDAQ-100 Index and reduced Apple's weight in that index from 20 to 12 percent. That's success!

Alas, it wasn't always that way.

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**Notes:**

Early Success and Downfall

At the dawn of the personal computer age, in the early 1980s, Apple pioneered well-engineered home computers and innovative interfaces with its Apple II PC for the home and its Macintosh computer for students and knowledge workers. At one point, Apple owned more than 20 percent of the PC market, competing against many other PC vendors, most of which are no longer relevant (or in business).

However, Apple lost its way. In 1985, Steve Jobs, Apple's chief innovator, lost a fight with the Apple board and was forced out. He founded another PC company, NeXT, which developed and sold a groundbreaking PC product that was too innovative to sell well in that era. Meanwhile, Apple employed a succession of CEOs, starting with John Sculley, who was hired away from Pepsi-Cola where he'd enjoyed considerable success. Sculley's knowledge and experience did not transfer well to the PC business, however, and the company went downhill so fast that CNBC named him the 4th worst American CEO of all time. Two other CEOs followed in Sculley's footsteps.

During this period, Apple made numerous mistakes, among them not rewarding innovative engineering, creating too many products for too many market segments, and losing the respect of the retail computer stores. Apple's market PC share plummeted.

Steve Jobs, Second Verse

In 1996, Apple bought Jobs' NeXT computing and gained technology that became the foundation of Mac OS X, today's Macintosh operating system. The true asset it acquired, however, was Steve Jobs. Even he, however, couldn't create an overnight miracle. It is exceedingly difficult to regain lost market share and even more difficult to regain the respect of the retail channel that had come to view Apple's products with disdain. Even by 2011, Apple's PC market share was in the range of 10 to 12 percent, down from a high of 20 percent in the 1980s.

In response to these problems, Apple broke away from the PC and created new markets with its iPod, iPhone, and iPad. It also countered retailer problems by opening its own stores. In the process, it pioneered the sale of music and applications over the Internet.

iPod, iPhone, and iPad devices are a marvel of creativity and engineering. They exude not only ease of use, but also now/cool/innovativeness. By selling hot music for the iPod, Apple established a connection with a dynamic segment of the market that was willing to spend lots of money on bright,
The ability to turn the iPhone on its side to read images probably sold more iPhones than anything else. With the iPad, portable devices became readable, and the market responded by awarding Apple a 44 percent (and growing) share of the mobile market. And Apple’s success continues with the iPhone 5, which as of this writing is selling well.

All of this success propelled Apple’s stores not only beyond the lofty heights of T.J. Maxx & Co. In 2011, Apple stores were grossing more than $4,000 per square foot, compared to $3,000 for T.J. Maxx and a mere $800 for Best Buy. As of 2011, Apple operates over 300 such retail outlets and has welcomed over 1 billion customer visits.

Apple encourages customer visits and loyalty with its open and inviting sales floor, its Genius Bar help desk, and its incredibly well-trained and disciplined sales force. Salespeople, who are not commissioned, are taught to be consultants who help customers solve problems. Even some vocabulary is standardized: When an employee cannot solve a customer’s problem, the word unfortunately is to be avoided; employees are taught to use the phrase as it turns out, instead. Try that on your next exam!

Apple has sold 15 billion songs through its iTunes online store, 130 million books through its iBookstore, and a mere 14 billion applications through its App Store, the latter in less than 3 years. Apple is now the number one PC software channel and the only place a customer can buy the Mac X Lion, which sells for $30 instead of the $130 for the earlier OS X that sold through the software channel.

To encourage the development of iPhone and iPad apps, Apple shares its revenue with application developers. That would be $2.5 billion paid to developers in less than 3 years! Developers responded by creating 445,000 iOS applications, and an army of developers are at work building thousands more while you read this.

By the way, if you want to build an iOS application, what’s the first thing you need to do? Buy a Macintosh. Apple closed its development to any other development method. Adobe Flash? No way. Apple claims that Flash has too many bugs, and perhaps so. Thus, Flash developers are excluded. Microsoft Silverlight? Nope. Microsoft developers are out in the cold, too. The non-Apple development community was hostile, and Apple’s response was, in essence, “Fine, we’ll pay $1.5 billion to someone else.”

The bottom line? Every sales success feeds every other sales success. Hot music fed the iPod. The iPod fed iTunes, creating a growing customer base that was ripe for the iPhone. Sales of the iPhone fed the stores, whose success fed the developer community, which fed more applications, which fed the iPhone and set the stage for the iPad, which fed the App Store, which enabled the $30 price on the OS X Lion, which led to more loyal customers, and, of course, to more developers. No wonder some shareholders want Steve Ballmer to sign as CEO over at Microsoft.²

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²Apple presentation at the Apple Worldwide Developers Conference, June 6, 2011.
⁵Apple presentation at the Apple Worldwide Developers Conference, June 6, 2011.
⁷Apple presentation at the Apple Worldwide Developers Conference, June 6, 2011.
"I'm not really a contrarian about data mining. I believe in it. After all, it's my career. But data mining in the real world is a lot different from the way it's described in textbooks.

There are many reasons it's different. One is that the data are always dirty, with missing values, values way out of the range of possibility, and time values that make no sense. Here's an example: Somebody sets the server system clock incorrectly and runs the server for a while with the wrong time. When they notice the mistake, they set the clock to the correct time. But all of the transactions that were running during that interval have an ending time before the starting time. When we run the data analysis, and compute elapsed time, the results are negative for those transactions.

Missing values are a similar problem. Consider the records of just 10 purchases. Suppose that two of the records are missing the customer number, and one is missing the year part of the transaction date. So you throw out three records, which is 30 percent of the data. You then notice that two more records have dirty data, and so you throw them out, too. Now you've lost half your data.

Another problem is that you know the least when you start the study. So you work for a few months and learn that if you had another variable—say the customer's zip code, or age, or something else—you could do a much better analysis. But those other data just aren't available. Or, maybe they are available, but to get the data you have to reprocess millions of transactions, and you don't have the time or budget to do that.

Overfitting is another problem, a huge one. I can build a model to fit any set of data you have. Give me 100 data points and in a few minutes, I can give you 100 different equations that will predict those 10 data points. With neural networks, you can create a model of any level of complexity you want, except that none of those equations will predict new cases with any accuracy at all. When using neural nets, you have to be very careful not to overfit the data.

Then, too, data mining is about probabilities, not certainty. Bad luck happens. Say I build a model that predicts the probability that a customer will make a purchase. Using the model on new customer data, I find three customers who have a .7 probability of buying something. That's a good number, well over a 50-50 chance, but it's still possible that none of them will buy. In fact, the probability that none of them will buy is .3 x .3 x .3, or .027, which is 2.7 percent.
Tesco

Founded in 1919 in London, Tesco plc is a British-based international grocery and general merchandising retail chain. With revenues of £60 billion (2009), it is the largest British retailer by both global sales and domestic market share, with profits exceeding £3 billion. With almost 500,000 Employees (2009) and over 4000 stores, Tesco is currently the third largest global retailer. Originally specializing in food and drink, it has diversified into areas such as clothing, consumer electronics, financial services, telecommunication, home, health and car insurance, Internet services, and software.

Tesco’s UK stores are divided into six formats, differentiated by size and the range of products sold: Tesco Extra stores are larger, mainly out-of-town hypermarkets that stock nearly all of Tesco’s product ranges; Tesco superstores are standard large supermarkets, stocking groceries and a much smaller range of non-food goods than Extra stores; Tesco Metro stores are sized between Tesco superstores and Tesco Express stores. They are mainly located in city centers and on the high streets of small towns; Tesco Express stores are neighborhood convenience shops, stocking mainly food; One Stop stores are the only category which does not include the word Tesco in its name. These are the very smallest stores. In addition, Tesco has a banking arm called Tesco Personal Finance; operates as an ISP, mobile phone, home phone and VoIP businesses; sells petrol and diesel at their own petrol stations; and offers a loyalty card-scheme to customers. Customers can collect one Club card point for every £1 they spend in a Tesco store. Tesco Petrol or Tesco.com. Tesco has operated on the internet since 1994 and was the first retailer in the world to offer a robust home shopping service in 1996. Tesco.com was formally launched in 2000.

In common with most other large retailers, Tesco draws goods from suppliers into regional distribution centers, for preparation and onward delivery to stores. Tesco is extending this logistic practice to cover collection from suppliers (factory gate pricing) and the input to suppliers, in a drive to reduce costs and improve reliability. Radio-frequency identification (RFID) technology is taking an increasing role in the distribution process.

Tesco’s international expansion strategy has responded to the need to be sensitive to local expectations in other countries by entering into joint ventures with local partners. Tesco operates in the following markets: China, Czech Republic, Hungary, India, Japan, Malaysia, Poland, Republic of Ireland, Slovakia, South Korea, Thailand, Turkey, UK, and USA.
The business is dependent on efficient Information Technology (IT) systems. Any significant failure in the IT processes of their retail operations (e.g. barcode scanning or supply chain logistics) impacts ability to trade. Tesco recognizes the essential role that IT plays across the Group in allowing efficient trade and achievement of commercial advantage through implementing IT innovations which improve the shopping trip for customers and make life easier for employees. The company has extensive controls in place to maintain the integrity and efficiency of IT infrastructure and share world-class systems across international operations to ensure consistency of delivery.

Q1. How IT and IS may be used to help the company operate and achieve its objectives?

Q2. Summarize the main purposes of Information Systems in organizations.

Q3. Which of Tesco's systems are most likely to give competitive advantage to the company?

Q4. Suppose Tesco is considering opening a branch in Italy. List out the several typical activities involved in each phase of the decision. And also, relate the concept of a knowledge subsystem to front line decision support.
Institute of Management Technology
Management Information System
End Term Exam - PGDM Term I (Aug 2012)
[Open Book]

Max Marks: 30
- Question 1 is compulsory.
- Attempt any 1 question from the remaining 3 Questions.
- In case of any doubt, write your assumption and proceed.
- All the best.

Q1. Summato Ltd Co. is operating globally. It has shifted on electronic platform to carry out its business operations globally.

We are aware, global business needs integration of technologies to be successful and competitive. Till now company was operating on manual platforms. They have implemented new systems and have been fully tested and installed in all the branches. These systems are operated through user interface technology integrated with each user application. You are the HR HEAD and it is required to carry out training of operational level so that they are able to conduct their routine work through the use of applications. Once the training is completed, you are required to carry out the analysis of feedback of training programme. It is therefore, important to design an MIS on training programme and incorporate in the system. The organization is operating on standard training program procedure. This is known to you as an HR expert.

Questions:

1. (a) Name any four files appropriate to training programme.
   (b) Identify appropriate attribute in each file.
   (c) Identify primary key in each file.
   (d) Logically arrange the attribute in each file so that you have four tables with Name, attribute, primary key and these are logically arranged.

2. Design two formats (tables) so that you get the feedback as information for further analysis on training programme.
   (a) Name of information (table) format (only two)
   (b) Appropriate attribute of each format and logically arrange the attribute in each (table) format.
   (c) Primary key in each format.

3. Write one constraint applicable to this training programme to be incorporated in the system.

Q2. Tires Inc. began as a small auto repair and tire shop in a small city outside of Chicago. While the original goal of the shop was to gain a reputation for quality repair, the owner stressed meeting customer needs on the sale of tires. Tires Inc. carries a very wide selection of tires so that customers can always be served on the spot. Its staff is highly trained and very knowledgeable about tires. Selling tires has turned out to be more profitable than auto repairs. Although the owner plans to maintain the auto repair business, he wants to use the Internet to expand tire sales and to capitalize on his staff’s understanding of customer needs. Management believes the correct Web strategy could help Tires Inc. improve customer service locally, increase its customer base, and help it create retail outlets in new locations.

Questions:

1. Discuss the importance of setting up a Web strategy for Tires Inc. also differentiate between Enterprise Resource planning and eCommerce.
2. As further expansion of its business, Tires Inc. would like to introduce eCommerce to provide better services to its customers. Describe various kinds of security measures that can be taken to protect the data and eCommerce site.

Q3. Baan is a world leader in powerful, innovative, business software. They are the cutting edge of business technology used by industry leaders all over the world promoting collaboration between customers and suppliers, linking people and processes across the world, and using the Internet to make business faster and more cost-effective.

They have turned towards Knowledge Management, in keeping with the demands of time. Two departments viz 'Knowledge Transfer' and 'Knowledge Development' are projected for this purpose. Their main objective is to empower the members with skills necessary to meet the external world. They have a centralized database system christened as "SCOPHSC Intranet facility is provided for the members with their identify and password to use the system.

One of the features of Baan is the encouragement provided to the employees for knowledge management. "ASK HER" is one such technique that provides a chance to the employees to make use of public folders and register their doubts and genuine problems. Longer duration training programs are provided for new recruits. The others receive short or mini programs to update their knowledge.

Baan's attempts to multiply knowledge could be seen in the well maintained library for the purpose. They contain technical as well as non-technical printed material and is used by those employees who crave for knowledge.

"SPANDANA" known as 'reaction' is keenly felt in their monthly meetings. The people talk and they talk openly and freely with the management. They are helpful in extending the sharing of the knowledge which is considered as rich source of knowledge. The meetings also make the people to come out of their shell and express their genuine concern for aspects that the organization stands for. Sharing of knowledge, beyond doubt highlights the brighter side of the side of the employees vast experiences in a particular field, their updated knowledge, their concern for the system and their sense of responsibility. Periodic seminars and discussions help both in documentation and multiplying the knowledge thus leading to an effective knowledge management.

Questions

1. Write about the knowledge management initiatives in the Baan and discuss how their implementation helps in the success of the organization.
2. Find the relational ship between knowledge management and Business intelligence.

Q4. A company that fully understands the importance of value chain in business is the Coca-Cola Company. A global leader in the beverage industry, the Coca-Cola Company further indulges in enhancing their value propositions as an instrument to create 'virtuous cycles of geographic expansion' and thus greater advantage. Coca-Cola owns the most important elements of the value chain such as the brand, the technology, the management, the marketing expertise and the relationships.

Customers include large, international chains of retailers and restaurants, as well as small, independent businesses. Some of our customers are major corporations as globally familiar as the name Coca-Cola; others are the corner market or the local push cart vendor. Suppliers include those business partners who supply system with materials, including ingredients, packaging and machinery as well as goods and services.

Coca-Cola is geographically split into five geographic operating segments, also known as strategic business units (SBUs). The five SBUs are North America, Africa, Asia, Europe, Eurasia and Middle East and finally Latin America. If all these departments perform in the correct way then that will continue the success of Coca-Cola.

Apply Porters five forces model to Coca-Cola as a company.