UNIVERSITY OF SWAZILAND

FACULTY OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

MAIN EXAMINATION – MAY 2010

COURSE TITLE	: MANAGEMENT INFORMATION SYSTEMS
COURSE CODE	: BA 311– FULLTIME and IDE
CLASS	: DIPLOMA IN COMMERCE
TIME ALLOWED	: THREE (3) HOURS

INSTRUCTIONS:

1. THIS PAPER CONSISTS OF SECTION (A) AND (B)
2. SECTION (A) IS COMPULSORY.

   TOTAL MARKS 40

3. ANSWER ANY THREE (3) QUESTIONS FROM SECTION B.

   TOTAL MARKS 60

4. THE TOTAL NUMBER OF QUESTIONS IN THIS PAPER IS FIVE (5)

NOTE; MARKS WILL BE AWARDED FOR GOOD COMMUNICATION IN ENGLISH AND FOR ORDERLY PRESENTATION

THIS EXAMINATION PAPER SHOULD NOT BE OPENED UNTIL INVIGILATOR HAS GRANTED PERMISSION

SECTION A. - COMPULSORY

The Internet has transformed the music industry. Sales of CDs in retail music stores have been declining while sales of songs downloaded through the Internet to iPods and other portable music players are skyrocketing.

And the music industry is still contending with millions of people illegally downloading songs for free. Will the motion picture industry have a similar fate? Increased levels of high-speed Internet access, powerful PCs with DVD readers and writers, portable video devices, and leading-edge file sharing services have made downloading of video content faster and easier than ever. Free and often illegal video downloads are currently outpacing paid video downloads by four to one. But the Internet is also providing new ways for movie and television studios to distribute and sell their content, and they are trying to take advantage of that opportunity.

In April 2006, six movie studios, including Warner Brothers, Sony Pictures, Universal, MGM, and Paramount, reached an agreement with Web site Movielink to sell movies online via download. Until that time, Movielink had offered movie downloads as rentals, which, like the video-on-demand model, the customer could watch for only 24 hours. Sony, MGM, and Lions Gate also reached agreements with a Movielink competitor, CinemaNow, which is partially owned by Lions Gate. Warner Brothers also expanded its presence by entering into relationships with video downloading services Guba.com and BitTorrent. The studios moved to build on the momentum created by the success of the iTunes music store, which demonstrated that consumers were very willing to pay for legal digital downloads of copyrighted material. At the same time, they hoped that entering the download sales market would enable them to confront the piracy issue in their industry earlier in its development than the music industry was able to do.

What remained a question was whether the studios could replicate the success of iTunes. The initial pricing schemes certainly did not offer the same appeal as Apple's R7.00 per song or R70.00 per CD. Movielink set the price for new movies at R140 to R210. Older movies were discounted to R70. Movielink was counting on the fact that customers would pay more for the immediacy of downloading a movie in their homes, as opposed to visiting a store such as GAME or an online store such as Amazon.com, both of which sell new DVDs for less than R105.

However, even if customers were willing to pay a little extra, they were getting less for their money. Most movie downloads did not come with the extra features that are common with DVD releases. Moreover, the downloaded movies were programmed for convenient viewing on computer screens, but transporting them from the computer to the TV screen involved a more complicated process than most consumers were willing to tackle. Neither Movielink nor CinemaNow offered a movie format that could be burned to a DVD and played on a regular DVD player. In fact, CinemaNow downloads were limited to use on a single computer. To watch these movies on a television screen, users would need to have Windows Media Center, which is designed to connect to a TV, or special jacks and cables.

An additional obstacle for both the technology and the consumer to overcome was data transmission speeds over the Internet. Even using a high-speed Internet connection, high-quality movie files, which generally surpassed 1 gigabyte in file size, required in the neighborhood of 90 minutes to download completely.

Right around the time that the studios were making their foray into Web distribution, a new challenge emerged. YouTube, which started up in February 2005, quickly became the most popular video-sharing Web site in the world. Even though YouTube's original mission was to provide an outlet for amateur filmmakers, digital rights management issues immediately emerged:

Sure enough, video clips of copyrighted Hollywood movies and television shows soon proliferated on YouTube right alongside the video diaries created by teenagers with webcams and the amateur films created by film students. YouTube measures to discourage its users from posting illegal clips included limiting the length of videos to 10 minutes and removing videos at the request of the copyright owner. It was, however, a losing battle. Clips from popular movies and shows were often posted by multiple users, and they could be reposted as quickly as they were removed. And watching a two-hour movie in twelve 10-minute pieces proved to be a small price to pay to view the movie for free.

No one knows how much Hollywood-derived content is submitted to YouTube without the studios' permission. Academics and media executives estimate it ranges from 30 to 70 percent.

When Google purchased YouTube in 2006 for approximately R11.5 billion, the site gained considerable clout in the media world. With YouTube reporting 100 million video views per day and becoming one of the most visited Web sites on the entire Web, the major production studios were not going to stand idly by while someone else profited off of movies that cost them an average of R760 million to make. NBC Universal, for example, assigned three employees to search YouTube every day for property that had been posted without permission. NBC Universal makes over 1,000 requests per month to remove its material from YouTube.

Of course, in the end, the chase probably is not worthwhile. Rick Cotton, NBC Universal's Legal Officer, admitted, "There is only so much we can do." Rather than pursue an unachievable goal, some of the major studios, including NBC Universal, Time Warner's Warner Brothers Entertainment, and News Corporation's Twentieth Century Fox, sought more constructive solutions. They entered into negotiations with YouTube to establish licensing agreements that would make copyrighted content available legally. The licensing model was already in place between YouTube and several major music companies. Furthermore, YouTube had already engineered successful arrangements with major studios to market movies on the site.

The studios clearly recognize the value of getting "exposure for their movies on such a heavily trafficked Web site". Marc Shmuger, chairman of Universal Pictures, noted that his company's marketing team distributed promotional video clips of all its new films to Web sites such as YouTube. Of course, the studios could not expect users to voluntarily ignore illegal clips in favor of the approved ones, or even discern the difference between them. So, it made sense for the movie industry to follow the lead of the music industry, where the focus shifted from killing off illegal uploads to taking advantage of digital music as a new source of revenue.

What happens when the two sides can't agree on terms? In some cases, the studios have to tread lightly because of their diverse interests in the media. For example, News Corporation also owns MySpace, which itself houses untold numbers of unauthorized music and video clips that are posted by users. The delicate balance between vigilance and public relations surfaced in January 2007 when News Corporation filed a subpoena in a U.S. District Court to compel Google to turn over the identity of a user who uploaded episodes of the Fox Television programs ***24*** and ***The Simpsons*** to YouTube. Fox was simply looking to protect its copyrights, but the network risked angering fans of the shows, as well as fans of You Tube, if it pursued the individual too aggressively. Moreover, News Corporation could come across as hypocritical for seeking to punish a YouTube user while so many of users of MySpace were permitted to engage in the same behavior.

In early 2007, YouTube revealed its intention to explore a revenue-sharing model. By sharing revenue with content creators, YouTube might be able to return the focus of the site to its original purpose, and steer users away from the practice of uploading their favorite copyrighted material. Metacafe and Revver, two other video-sharing sites, already had such models in place. Metacafe's producer rewards program pays users R35 for every 1,000 views once their original creations surpass a threshold of 20,000 views. Revver attaches pay-per-click advertisements to the end of videos and then splits evenly the revenue generated by ad clicks with the video creator.

Sharing revenue would improve YouTube's image in the eyes of both advertisers and users. Advertisers would know that they weren't sponsoring stolen material and tacitly approving of You Tube's profiting from content it had no right to possess. Users would be more motivated to produce and upload high-quality original videos knowing that YouTube wasn't getting all of the financial reward. One possible danger is the temptation for users to steal high-quality content and pass it off as their own in order to reap the rewards. Therefore, it is critical for YouTube to continue developing the filtering and digital fingerprinting technology that it has promised.

Whatever the motion picture studios' relationship to YouTube, it remains to be seen whether streaming video can actually be profitable. Screen Digest, a London research firm, forecasts that 55 percent of the video content watched in the United States in 2010 will be in the form of video streams - 44 billion of them. However, that 55 percent of the video content will only account for 15 percent of the revenues produced by video content. A large part of the problem is that the videos that are most popular online are the least attractive to advertisers due to inappropriate or objectionable material (for instance they may contain a lot of uncensored language and/ or pornographic material) or because they are simply dull (such as those targeting real worldly issues, be it politics, gossip, or environmental decay).

For all of the players in the movie game - studios, video-sharing sites, rental companies - partnerships and revenue sharing seem the best choice for maximizing the revenue streams made possible by new technology. However, that hasn't stopped the various players from continuing to seek the next competitive edge in order to get a bigger piece of the pie. Netflix introduced a streaming video service that enables subscribers to watch movies on their PCs instantaneously with no fees beyond what a subscriber is already paying for a membership. The membership level determines how many hours of streaming video the subscriber receives per month.

The studios continue to seek out more partners for movie downloads. The six major studios reached an agreement with Wal-Mart to allow the discount shopping giant to sell movie downloads from its Web site. Wal-Mart joined iTunes, CinemaNow, Amazon, and others who already had such deals. All will now compete on pricing and ease-of-use of their Web sites. Two things are certain: technology will continue to advance, and lawyers will continue to argue concepts such as liability, piracy, fair use etc.

Case adapted mainly from readings in Management Information Systems, Laudon and Laudon, 8th edition.

Case Study Questions

A. Consider Porter's Competitive Forces Model. Discuss 3 competitive forces that have challenged the movie industry and how these forces have been able to do that. As examples, use the players mentioned in the case to pinpoint exactly what they have done. **(21 marks)**

B. **I.** What has been the goal of the movie industry's response to YouTube? **(4 marks)**

II. Has it been successful? Use the case to support your answer **(5 marks)**

C. What lessons does the music industry's dealing with online digital music and copyright infringement provide for the movie industry and other industries in general? Briefly explain only 2. **(10 marks)**

SECTION B – ANSWER ANY 3

QUESTION 2

Discuss 4 activities ***(under headings)*** that happen in the Detailed Design stage of the Systems Development Life Cycle. **(20 Marks)**

QUESTION 3

In tabular format, compare Decision Support Systems to Expert Systems with respect to 4 attributes. Note that you have to explain the attribute under each system. **(20 Marks)**

Suggested Answer layout

ATTRIBUTE (1 mark each)	DECISION SUPPORT SYS. (2 marks each)	EXPERT SYSTEM (2 marks each)
1.		
2.		

QUESTION 4

The Royal Swaziland Police are implementing a system that will allow users to access its services online. The new system is called LEOPARD. To access it, the customer will simply log into LEOPARD, using his/her Driver's License number and password as well as picking the service he/she requires. The system will check if the customer log-in details correspond i.e. whether the Drivers License number corresponds to the password. If it corresponds, the system will then check which service has the customer asked for, thereafter transmit her request to that service centre, keeping a copy temporarily.
The service centre performs the request, and sends a response back into LEOPARD, which ensures that the response is in line with the requested service, and then creates a new password for the customer. But before creating the password the system will bill the customer for the services required, and then transmit to the customer, the new password information and the service charge. The system keeps a copy of the password, so as to use it next time the customer logs in. The customer, on the other hand, will pay the bill and eventually log-off.
Upon receiving payment the system will apply the payment onto the bill, and then send the billing information to the relevant service centre, whilst keeping a copy of the paid bill. Where log-in data does not correspond, LEOPARD immediately sends an error message to the customer.

Draw a data-flow diagram (DFD) to depict this new system. Note the following about your DFD

- Maximum number of Processes – 8
- Maximum number of Sources – 4
- Maximum number of Data stores - 5

(20 Marks)

QUESTION 5

Explain how 3 alternative development approaches can aid an organization address system development challenges.

Suggested Answer layout

DEVELOPMENT APPROACH ***(1 mark each)***	**CHALLENGE IT CAN HELP ADDRESS** ***(2 marks each)***	**HOW IT ADDRESS THE CHALLENGE** ***(4 marks each)***
1.		
2.		
3.		

(20 Marks)