

INFORMATION SYSTEM MANAGEMENT FOR BUSINESS

DM-103

Trimester-I, End-Term Examination, September, 2018

Time Allowed: 2Hrs. & 30Mins.

SECTION-A

(Marks: 3X5)

- Q.A1 What are the strategic business objectives of Information System?
- QA2. How Amazon.com, Facebook.com, Trivago.com & Simplymarry.com are different from each other in terms of their Business Model? Explain
- QA3. It has been said that the advantage that the leading-edge retailers such as Dell and Walmart have over their competition isn't technology; it's their management. Do you agree? Why or why not?
- QA4. Why companies and services need to maintain big data? What business benefits did they obtain by analysing big data?
- QA5. Has e-commerce transformed marketing? Explain how social networking and the "wisdom of crowds" help companies improve their marketing.

SECTION-B

(Marks: 2X10)

- QB1. How hidden pattern and relationships can predict the future behaviour of the customers, how organisation can be benefited by the data mining techniques, elaborate various types of data mining techniques with suitable examples?
- QB2. Information Technology and Computers have brought information age. The spread of Internet & relative ease of access made Information Breach easier. Our future is not secure, if our information is not secure. Information Resources need to be guarded, protected and controlled. List the precautionary measures to be considered to prevent cybercrime?
- QB3. "Make what we sell, not what we make" justify this slogan in terms of push versus pull based supply chain models. What situation leads to bull-whip effect? How supply chain management systems deal with it?

SECTION-C

(15 Marks)

Case Study

Big Data Gets Personal: Behavioural Targeting

Ever get the feeling somebody is trailing you on the Web, watching your every click? Do you wonder why you start seeing display ads and pop-ups just after you've been searching the

Web for a car, a dress, or cosmetic product? Well, you're right: your behavior is being tracked, and you are being targeted on the Web as you move from site to site in order to expose you to certain "targeted" ads. It's Big Data's dark side.

Individual Web sites and companies whose business is identifying and tracking Internet users for advertisers and marketers are collecting data on your every online move. Google, which handles more than 3.5 billion Web searches each day, knows more about you than your mother does. Many of the tracking tools gather incredibly personal information such as age, gender, race, income, marital status, health concerns (health topics you search on), TV shows and movies viewed, magazines and newspapers read, and books purchased. A \$31 billion dollar online ad industry is driving this intense data collection. Facebook, which maintains detailed data on over 1 billion users, employs its Like button to follow users around the Web even if you log off. Its social networking site is one giant tracking system that remembers what you like, what your friends like, and whatever you reveal on your Wall. (See the chapter-ending case study.) Plus, Google's social networking tool, knows about your friendships on Gmail, the places you go on maps, and how you spend your time on the more than two million websites in Google's ad network. It is able to gather this information even though relatively few people use Plus for their social network.

While tracking firms claim the information they gather is anonymous, this is true in name only. Scholars have shown that with just a few pieces of information, such as age, gender, zip code, and marital status, specific individuals can be easily identified. Moreover, tracking firms combine their online data with data they purchase from offline firms who track retail store purchases of virtually all Americans. Here, personal names and other identifiers are used.

Use of real identities across the Web is going mainstream at a rapid clip. A Wall Street Journal examination of nearly 1,000 top Websites found that 75% now include code from social networks, such as Facebook's "Like" or Twitter's "Tweet" buttons. Such code can match people's identities with their Web-browsing activities on an unprecedented scale and can even track a user's arrival on a page if the button is never clicked.

In separate research, the Journal examined. What happens when people logged in to roughly 70 popular Websites that request a login and found that more than a quarter of the time, the sites passed along a user's real name, email address or other personal details to third-party companies.

Online advertising titans like Google, Microsoft, and Yahoo are all looking for ways to monetize their huge collections of online behavioural data. While search engine marketing is arguably the most effective form of advertising in history, untargeted banner display ad marketing is highly inefficient because it displays ads to everyone regardless of their interests. As a result, these firms cannot charge much for display ads. However, by tracking the online movements of 245 million U.S. Internet users, they can develop a very clear picture of who you are, and use that information to show you ads that might be of interest to you. This would make the marketing process more efficient, and more profitable for all the parties involved.

You're also being tracked closely when you use your mobile phone to access the Internet, visit your Facebook page, get Twitter feeds, Watch video, and listen to music. The mobile Web is working hard to keep track of your whereabouts, locations, habits, and friends in the hope of selling you even more products and services.

New technologies found on smartphones can identify where you are located within a few yards. Performing routine actions using your smart phone makes it possible to locate you throughout the day, to report this information to corporate databases, retain and analyse the information, and then sell it to advertisers. Most of the popular apps report your location. Law enforcement agencies certainly have an interest in knowing the whereabouts of criminals and suspects. There are, of course, many times when you would like to report your location either automatically or on your command. If you were injured, for instance, you might like your cell phone to be able to automatically report your location to authorities, or if you were in a restaurant, you might want to notify your friends where you are and what you are doing. But what about occasions when you don't want anyone to know where you are, least of all advertisers and marketers?

Location data gathered from cell phones has extraordinary commercial value because advertising companies can send you highly targeted advertisements, coupons, and flash bargains, based on where you are located. This technology is the foundation for many location-based services, which include smartphone maps and charts, shopping apps, and social apps that you can use to let your friends know where you are and what you are doing. Revenues from the global location-based services market are projected to reach \$10.3 billion in 2015, according to Gartner.

Both Apple's iPhone and Google's Android phones collect personal, private location data, and both firms are building massive databases that can pinpoint your location. Advertising firms pay Apple and Google for that information and for distributing their mobile ads, and they are becoming increasingly important sources of revenue. In 2012, Google earned \$2.2 billion from its mobile ads. Smartphone apps that provide location-based services are also sources of personal, private location information based on the smartphone GPS capability.

Expect those eyes to follow your movements even more in the future as behavioural targeting becomes even more precise. New software is being developed to help advertisers track users across devices by establishing cross-screen identities. That means that companies will be able to serve ads to your mobile phone based on what they learned about you from surfing the Web on your PC.

Sources: Claire Cain Miller, "The Plus in Google Plus? It's Mostly for Google," *New York Times*, February 14, 2014; Elizabeth Dwoskin, "Internet Users Tap Tech Tools That Protect Them From Prying Eyes," *Wall Street Journal*, March 23, 2014; Claire Cain Miller and Somni Sengupta, "Selling Secrets of Phone Users to Advertisers," *New York Times*, October 5, 2013; Natasha Singer, "Their Apps Track You, Will Congress Track Them?" *The New York Times*, January 5, 2013; Spencer E. Ante, "Online Ads Can Now Follow Your Home," *The Wall Street Journal*, April 29, 2013; Jennifer Valentin-Devries and Jeremy Singer, "They Know What You're Shopping For," *The Wall Street Journal*, December 7, 2013.

CASE STUDY QUESTIONS

1. Why is behavioural tracking such an important ethical dilemma today? Identify the stakeholders and interest groups in favour of and opposed to behavioural.
2. How do businesses benefit from behavioural tracking? Do people benefit? Explain your answer.
3. What would happen if there were no behavioural tracking on the Internet?