

School of Business

MBA

ETE - Jun 2023

Time : 3 Hours

Marks : 50

Sem II - MSB21T1008 - Management Information System and ERP

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1. Explain the evolution of ERP systems. K2 CO1 (2)
2. Explain features of Business Intelligence. K1 CO4 (2)
3. List benefits of waterfall model. K2 CO3 (2)
4. What are the limitations of having silos environment in organization. K2 CO2 (2)
5. What is the solution to the problem of **sniffing**? K2 CO5 (2)
6. Elaborate the working of 3-Tier architecture of ERP systems. K4 CO2 (5)
7. Explain the components the Information Systems in detail. K3 CO1 (5)
8. Identify various Ethical and Social issues related to Information Systems. K4 CO5 (6)
9. Using suitable business example, explain various types of costs as well as benefits of Information Systems. K5 CO4 (8)
10. **Read the following case and answer the questions:** K5 CO5 (8)

LIFE ON THE GRID: IPHONE BECOMES ITRACK

Do you like your smartphone? Living on the grid has its advantages. You can access the Internet, visit your Facebook page, get Twitter feeds, watch video, and listen to music all with the same “communication and media device.” Less well known is that living on the grid means near continuous tracking of your whereabouts, locations, habits, and friends. At first, the Web made it possible for you to search for and find products, and some friends. Now the mobile Web grid tracks you and your friends to sell you products and services. New technologies found on smartphones can identify where you are located within a few yards. And there is a great deal of money to be made knowing where you are. Performing routine actions using your smartphone makes it possible to locate you throughout the day, to report this information to corporate databases, retain and analyze the information, and then sell it to advertisers. Several firms have adopted business models based on the ability of smartphones to report on your whereabouts, whether you choose to do so. 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 do not 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. But where does the location data come from, who collects it, and who uses it? In April 2011, the Wall Street Journal published the results of its research on smartphone tracking technology

and individual private location data. They discovered that both Apple's iPhone and Google's Android phones were collecting personal, private location data, for a variety of reasons. Both firms are building massive databases that can pinpoint your location, and although Google is already a leader in search across most platforms, Apple is also trying to establish itself in the mobile advertising marketplace. Advertising firms will pay Apple and Google for that information and for distributing their mobile ads. Apple transmits your location data back to central servers once every 12 hours, and it also stores a copy of your locations on the iPhone. Android phones transmit your location data continuously. Apple's files on the iPhone device can be stored for many months. Both Apple and Google have denied that they share this information with third parties, as well as that the information can identify individuals (as opposed to cell phones), and claim the information is being used only to identify the location of cell phones for Wi-Fi-connected phones, and to improve the customer experience of location-based services. Apple's technology reads the signal strength of nearby Wi-Fi transmitters, identifies, and maps their location, and then calculates the location of the iPhone device. The result is a very large database of Wi-Fi hotspots in the United States, and a method for locating iPhones that is not dependent on global positioning system (GPS) signals. Both companies say the location information is needed for them to improve their services. And location tracking is itself improving: newer tracking technologies can automatically detect the places you visit, know when you arrive or leave, track how many times you've been to that location, and even know whether you've been sitting, walking, or driving. Many observers fear these services will operate automatically, without user permission or awareness. The revelation in 2011 that Apple and Google were surreptitiously and continuously collecting personal, private, and location data spurred privacy groups and Congress to launch investigations. Most cell phone users are unaware that their locations and travels are readily available to law enforcement agencies through a simple e-mail request, and without judicial review, and at the expense of the carriers. In June 2012, a U.S. District Judge in California ruled that Apple must defend against a lawsuit accusing it of secretly tracking location data on millions of its iPhone and iPad users, and the Supreme Court ruled that law enforcement may not use GPS devices planted on a car to track suspects without a warrant. To date, wireless location-based services remain largely unregulated. In 2011, the Federal Communications Commission in cooperation with the Federal Trade Commission sponsored a forum to discuss with industry and privacy groups the social impact of location-based services, both positive and negative. Industry representatives from Facebook, Google, and Foursquare argued that existing apps as well as corporate policies were adequate to protect personal privacy because they rely on user permissions to share location data (opt-in services). The industry argued as well that consumers get real benefits from sharing location data, otherwise they would not voluntarily share this data. Privacy experts asked if consumers knew they were sharing their location information and what kind of "informed consent" was obtained. Privacy advocates pointed out that 22 of the top 30 paid apps have no privacy policy, that most of the popular apps transmit location data to their developers after which the information is not well controlled, and that these services are creating a situation where government agencies, marketers, creditors, and telecommunications firms will end up knowing nearly everything about citizens including their whereabouts. The biggest danger they described are services that locate people automatically and persistently without users having a chance to go off the grid, and without being able to turn off the location features of their phones.

Q1: Why do mobile phone manufacturers (Apple, Google, and BlackBerry) want to track where their customers go?

Q2: Do you think mobile phone tracking is a violation of a person's privacy? Why or why not?