

Chapter1

Technology, Mobile Phone



Chapter1 INTRODUCTION A mobile phone also known as a cellular phone, cell phone and a hand phone is a device that can make and receive telephone calls over a radio link whilst moving around a wide geographic area. It does so by connecting to a cellular network provided by a mobile phone operator, allowing access to the public telephone network. By contrast, a cordless telephone is used only within the short range of a single, private base station. In addition to telephony, modern mobile phones also support a wide variety of other services such as text messaging, MMS, email, Internet access, short-range wireless communications (infrared, Bluetooth), business applications, gaming and photography. Mobile phones that offer these and more general computing capabilities are referred to as Smart phones. The first hand-held mobile phone was demonstrated by Dr Martin Cooper of Motorola in 1973, using a handset weighing around 1 kg. In 1983, the DynaTAC 8000x was the first to be commercially available. In the twenty years from 1990 to 2011, worldwide mobile phone subscriptions grew from 12.4 million to over 5.6 billion, penetrating the developing economies and reaching the bottom of the economic pyramid. All mobile phones have a number of features in common, but manufacturers also try to differentiate their own products by implementing additional functions to make them more attractive to consumers. This has led to great innovation in mobile phone development over the past 20 years. The common components found on all phones are: A battery, providing the power source for the phone functions, an input mechanism to allow the user to interact with the phone. The most common input mechanism is a keypad, but touch screens are also found in some high-end smart phones, Basic mobile phone

services to allow users to make calls and send text messages, All GSM phones use a SIM card to allow an account to be swapped among devices. Some CDMA devices also have a similar card called a R-UIM, Individual GSM, WCDMA, iDEN and some satellite phone devices are uniquely identified by an International Mobile Equipment Identity (IMEI) number. Low-end mobile phones are often referred to as feature phones, and offer basic telephony. Handsets with more advanced computing ability through the use of native software applications became known as smart phones. Several phone series have been introduced to address a given market segment, such as the RIM BlackBerry focusing on enterprise/corporate customer email needs; the Sony Ericsson Walkman series of music phones and Cyber shot series of camera phones; the Nokia Nseries of multimedia phones, the Palm Pre the HTC Dream and the Apple iPhone. Mobile phones are used for a variety of purposes, including keeping in touch with family members, conducting business, and having access to a telephone in the event of an emergency. Some people carry more than one cell phone for different purposes, such as for business and personal use. Multiple SIM cards may also be used to take advantage of the benefits of different calling plans—a particular plan might provide cheaper local calls, long-distance calls, international calls, or roaming. The mobile phone has also been used in a variety of diverse contexts in society. BACKGROUND OF THE STUDY

Radiophones have a long and varied history going back to Reginald Fessenden's invention and shore-to-ship demonstration of radio telephony, through the Second World War with military use of radio telephony links and civil services in the 1950s. The first mobile telephone call made from a car

occurred in St. Louis, Missouri, and USA on June 17, 1946, using the Bell System's Mobile Telephone Service. In 1956, the world's first partly automatic car phone system, Mobile System A (MTA), was launched in Sweden. MTA phones were composed of vacuum tubes and relays, and had a weight of 40 kg. Martin Cooper, a Motorola researcher and executive is considered to be the inventor of the first practical mobile phone for handheld use in a non-vehicle setting, after a long race against Bell Labs for the first portable mobile phone. Using a modern, if somewhat heavy portable handset, Cooper made the first call on a handheld mobile phone on April 3, 1973 to his rival, Dr. Joel S. Engel of Bell Labs. The world's first commercial automated cellular network was launched in Japan by NTT in 1979, initially in the metropolitan area of Tokyo. In 1981, this was followed by the simultaneous launch of the Nordic Mobile Telephone (NMT) system in Denmark, Finland, Norway and Sweden. The first 1G network launched in the USA was Chicago-based Ameritech in 1983 using the Motorola DynaTAC mobile phone. Several countries then followed in the early-to-mid 1980s including the UK, Mexico and Canada. During the initial marketing of cell phones in the U. S., the Federal Communications Commission capped the number of providers for each city (market area) at two, making it complicated to travel to any extent with your cell service. In 1991, the second generation (2G) cellular technology was launched in Finland by Radiolinja on the GSM standard, which sparked competition in the sector as the new operators challenged the incumbent 1G network operators. Ten years later, in 2001, the third generation (3G) was launched in Japan by NTT DoCoMo on the WCDMA standard. This was followed by 3.5G, 3G+ or turbo

3G enhancements based on the high-speed packet access (HSPA) family, allowing UMTS networks to have higher data transfer speeds and capacity. The history of cell phones embarks on from the early days of 1920s — a period during which radios were emerging as effective communication devices. The very first usage of radio phones were in taxi/cars using two-way radio communication. Like any other electronic equipment, cell phones evolved over time, and each stage or era was most certainly interesting. The first official cell phone was used by the Swedish police in 1946. They made it functional by connecting a hand-held phone to the central telephone network. It was very similar to the two-way radio phone that was used in cars/taxis for portable communication. Rising from this type of communication technology, the evolution of modern cellular phones began. Communication architecture of Hexagonal Cells was created for cell phones by D. H. Ring, of Bell Labs, in 1947. An engineer from Bell Labs discovered cell towers which had the capability to not only transmit but to also receive the signals in three different directions. Before this discovery, the cell phones only worked in two directions and through an antenna. OBJECTIVE OF THE STUDY GENERAL OBJECTIVES: In this study, we will be able to know what would be the advantages and disadvantages by using cell phones and give some information to the people/person who using cell phones and to know what would be the solution of this problem can affect students in their studies. SPECIFIC OBJECTIVES 1. We will be able to give the information to the people/students who are using cell phones. 2. To know what would be the advantages and disadvantages of using cell phones. 3. To know the solution of this problem that can affect students in their studies. STATEMENT OF THE

PROBLEM From this method by using gathering information through searching internet and interviews about cell phones are the following problems were identified: 1. Cell phone can distract students in their studies. 2. Cell phone can distract persons while driving. 3. Persons who don't have cell phones. **IMPORTANCE OF THE STUDY** The result of this study will help the students to be more convenient of using cell phones through text messaging and calling. As the respondents conducted a study, it has been found out that the cell phone had various problems that were usually encountered such as: students can distract with their studies and also they can cause distraction. Cell phone can also distract person while driving. The researchers came up with this idea to help the persons while using their cell phones that can cause distraction, but sometimes cell phone can help us specially our parents to monitor the safety of their children while still allowing their children to have independence. Cell phones are the perfect way to stay connected with others and provide the user with a sense of security. In the event of emergency, having a cell phone can allow help to reach you quickly and could possibly save lives. However, the importance of cell phones goes way beyond personal safety. Moreover, the success of this study will give more inputs to the researchers and to develop their learning skills to make this study. **SCOPE AND DELIMITATION OF THE STUDY** This study focused on how to use cell phone in order to communicate others especially for the students who using cell phones. There are times that cell phones have some advantages and disadvantages of using cell phones. Sometimes cell phone helps to communicate others that easy for us to communicate them through text messaging and call in case of emergency.

But there are some effects of using cell phone especially to the students that can distract with their studies and also for the person while driving. This cell phone sometimes we use the security code that the user and authorized person who can access this code.

DEFINITION OF TERMS

Cell Phone Small wireless device that has at least the same functions of a standard wired telephone but is smaller and more mobile.

Text messaging Refers to the exchange of brief written text messages between fixed-line phone or mobile phone and fixed or portable devices over a network.

Mobile Phone An electronic telecommunications device, often referred to as a cellular phone or cell phone.

Distraction Is the divided attention of an individual or group from the chosen object of attention onto the source of distraction.

Communication Is the sharing of ideas and information. While many people think of communication primarily in oral or written form, communication is much more. A knowing look or a gentle touch can also communicate a message loud and clear, as can a hard push or an angry slap.