Advantages and disadvantages of telecommunications essay sample

I. Introduction ” Humans communicate with each other in many different ways. The simplest forms of communication involve talking out loud, using hand signs and writing down messages. Technology is used to increase the number of ways people can communicate. People have invented devices and systems that allow individuals to talk to each other when they are not together. Communications technology is an important part of both today's and tomorrow's society.” Telecommunication plays a vital role in keeping the balance of the renewed society since it has helped billions of people to keep in touch with each other although they are a million of miles away, even stresses out overseas. Although humanity has benefited from the resources and convenience provided by telecommunication, contradicting these are the disadvantages of telecommunication if misused, brutalized and abused. ” Communication ties together the parts of the society just as the nervous system ties together the parts of an individual. From earliest times, when the only form of communication was speech, to the present, when electronic signals carry information instantly to practically any point on Earth, communication has been the way people have organized their cooperative activities.”

A. Purpose of the Study The researchers aim to edify about the different effects of using technology as a means of communication. They also aim to expand the awareness of the people of how they use telecommunication in their day to day living. The researchers main purpose is to expose the truth about telecommunication whether it is an advantage or a disadvantage in today's generation. B. Thesis Statement Although telecommunication has been of great aid and is a huge advantage to the fast-growing societal

modernization, its expansion has influenced the minds of the people and are somehow abusing it which leads to its own deprivation from the society. The researchers aim to answer the following questions: 1. What are the different means of telecommunication? 2. Is telecommunication an effective means? 3. How is telecommunication an effective means of communicating? 4. What are the advantages of telecommunication? 5. What are the disadvantages of telecommunication? 6. Is telecommunication an advantage or disadvantage? II. Methodology Telecommunication has a big share in the development of our society but it has also its own disadvantages that is why the researchers conducted this research to further elaborate the effectiveness as well as the detriment of telecommunication.

In order for them to achieve their purpose, they conferred information from books, encyclopedias and other reading materials from their school library. They also referred to educational sites found in the internet for additional supplementary informations. They also made use of their own observations as part of the society. These efficient techniques helped the researchers come up to their findings. III. Research Findings Different Means of Telecommunication Using electricity- " People often need to communicate with each other over very long distances. One way to do this is to send electrical signals along a wire. The telegraph was one of the first devices that could do this. Telegraphs are relatively simple devices. Pushing down on a telegraph lever causes the devices to flow. This current travels very fast through a wire. At the other end of the wire is a telegraph receiver. There are also wireless telegraph systems. A wireless telegraph system allows people to pass signals through the air." " The telegraph, invented by Samuel Morse

in 1837 was an early device that used the flow of electricity to transmit messages from sender to receiver.

Operators tapped on keys to spell out messages in combinations of short and long electrical pulses called dots and dashes. They corresponded to letters and numbers in a system known as Morse code message. Inventors figured out how to transmit the human voice over telegraph wires in the 1870's and the long distance telephone service was developed. Facsimile, or fax machines are able to send and receive documents. Early system enabled newspapers to exchange photographs of events around the world. Faster and cheaper machines that used regular telephone lines became common during 1980's. By the 1990's, faxes could be sent and received using computers connected to telephone lines." Using Light Waves-" Fiber-optic technology uses pulses of light generated by a tiny laser. These pulses are transmitted over very tiny strands of glass called optical fibers, which are able to carry much more information than cables or microwaves. A device detects the light and converts the signal back into electrical pulses." Using Radio Waves-" In 1901, Guglielmo Marconi sent a message in dots and dashes across the Atlantic Ocean using radio waves.

Radio broadcasts of voices and music became a source of entertainment, but radio also provided a vital link for vehicles such as ships and planes because it enabled them to communicate without wires. Pagers, which are pocket-sized devices that display word messages or alerts, are a newer application of radio transmitter-receivers that cover small areas, or cells, are also very popular. Inventors began to experiment with broadcasting moving pictures

over radio waves in the early part of the 20th century. Television was widely available by the middle of the century: Today, it is the leading source of news and entertainment. Even in the remotest television signals directly from satellites using dish-shaped antennas. Two kinds of relay systems are used to transmit radio signals over long distances: microwaves and satellites. Microwaves are radio waves with very short wave lengths. They travel in narrow, straight lines(like a beam) and carry signals between towers spaced many miles apart. Satellites are positioned 22, 300 miles (36, 000 km) above the Earth and circle the planet at the same rate as Earth rotates, remaining faced over one spot.

Ground stations send them microwave transmissions that are then relayed to other stations." Digital Communications-" The greatest recent change in telecommunications has been the move from analog to digital signals. Analog signals are electrical currents or electromagnetic waves that change smoothly n their amplitude or frequency. Digital signals in strings of Is and Os, which are known as bits.. Bits correspond to " on" and " off" electrical pulses and can represent a sound wave's changing amplitude and frequency or the letters and numbers of computer data. Development of methods of data compression, or reducing the number of bits needed to send a message, and of error correction means that messages can now be sent with great speed and accuracy." Advances in Telecommunication Early methods of transmitting data were imprecise and telecommunication was rather limited. However, telecommunications advanced and changed, becoming far more beneficial. For example, telegraphs and Morse code allowed people throughout the country to communicate and even allowed for international

dialogue. The telephone and radio broadened the telecommunications industry even more, opening up a host of new forms of telecommunication options.

Television changed the landscape again, and the advent of the internet made telecommunications more interactive then ever before. These advances allowed more people to both send and receive data, which are the two essential elements of telecommunication. These new mediums of telecommunication also greatly extended the advantages of telecommunication." The Advantages of Telecommunication in Health Care A growing need for virtual care " According to the American Telemedicine Association, about 200, 000 people nationwide receive treatment in their homes via mobile monitoring units – including telehealth units. Experts say an aging population, increasing prevalence of chronic diseases, the high cost of health care and technological advances are fueling growth. Harry Wang, a health research analyst with Parks Associates in Dallas, projects the broader home health monitoring market – such as services and equipment to track if an individual has fallen or isn't taking medications – will increase from $770 million in revenue in 2009 to $2. 6 billion in 2014. The use of telecommunications in health care has grown exponentially in recent years and has enhanced opportunities for patients, health care professionals and management of the health industry in general.

Telehealth, a term that refers to the use of medical information exchanged via electronic communications, expands patient access to better health care and enhances providers' roles and abilities to supply better care. Telehealth

and Telemedicine Defined Among clinical care technology, telehealth includes electronic transmission of information that gives health care professionals improved working capabilities like continuing education, electronic medical records systems and research collaboration. The clinical side of telehealth is called telemedicine, defined by the American Telemedicine Organization as " the use of medical information exchanged from one site to another via electronic communications to improve patients' health status." Specific examples of telemedicine include video consultations, remote patient data monitoring, nursing call centers and searching for or saving personal health information online. Benefits for Patients The greatest benefits telemedicine provides for patients are in expanded access to primarycare, specialists, education, research resources and technology. People in rural areas and homebound patients can communicate via telephone, email or video consultations with primary care doctors, nurses and specialists whose expertise would not be available to them otherwise.

The Internet expands these capabilities even further, affording the patient population access to lab results online, the ability to research their symptoms and conditions from home, access to medical advocacy groups and the opportunity to benefit from websites and platforms designed to engage and educate consumers with health-related interests. Benefits for Providers Providers benefit from health care telecommunications as well, in their organization and management of information, and in electronic tools supporting clinical care. Electronic medical records allow for easier retrieval of patient information and are typically integrated into billing systems and

scheduling. A health care professional can also access continuing education and attend seminars online, and contact specialists for disease information outside his area of expertise. He also has more control over the continued management of health intervention and knowledge of patient progress. In an interview with educators who served as telemedicine case managers for adults with diabetes, the nurses and dietitians calling these patients reported satisfaction with both the feasibility and effectiveness of telemedicine.

Advantages specifically named were " more frequent contact with patients, greater relaxation and information due to the ability to interact with the patients in their own homes, increased ability to reach the underserved, more timely and accurate medical monitoring, and improved management of data. Empowerment and the e-Patient This increased access to information and level of collaboration between patient and provider has brought about a more patient-driven health care system. Patients are taking more interest in their conditions and medicines, taking more responsibility for their health and engaging with online health-related communities and social networks. This change has given rise to the term " e-patient," describing someone who actively seeks out health information and communication online. Advantages include emotional support and information sharing, access to physician Q&A forums, online records to capture progress and goals and access to clinical trial databases. A sense of empowerment is the common thread running through these patient portals that connect patients to providers and to each other.

The Advantages of Telecommunication in a Business Telecommunication in a business is no longer restricted to traditional voice calls. The latest telecommunication systems run on the same networks as video and data systems, enabling companies to integrate voice, data and video in sophisticated communication applications that improve productivity, collaboration and customer service. Mobile telecommunications devices and networks extend the reach of the company telecommunication system, offering employees and professionals at home or in the field the same communication facilities as their colleagues in an office. Efficiency The latest telecommunication devices combine a wide range of functionality on a single handset. Employees can use smartphones linked to a network to make conventional voice calls, send emails, visit websites, join a videoconference, access data, or work on documents. Using a single device improves efficiency and productivity, in addition to reducing equipment costs. Collaboration Telecommunication helps employees in different departments or separate locations work together more effectively. Employees can use networked telecommunication systems to send and receive emails, share documents, and collaborate via videoconference or teleconference. This can speed up decision-making and reduce the time to complete projects, such as new product development programs.

Time Telecommunication systems reduce the time it takes to find information or contact colleagues. The latest telecommunication systems incorporate a feature called " presence," which enables callers to determine if the person they wish to contact is available via email, telephone, instant messaging, or another communication channel. Employees post their status

on the telecommunication system with messages such as " free for calls," " busy," " away," or " do not disturb." Customer Relationship An efficient telecommunication system can strengthen customer relationships. By using call-center facilities such as call management, call routing, or interactive voice response, customer service teams can make it easier and more convenient for customers to contact a company. The contact center can then provide an efficient response for service requests, telephone orders, requests for information, or complaints. Agents in a call center can use quiet periods during shifts to make courtesy calls to customers to update them on new products or ask if they were satisfied with the service they received from the company.

Flexibility Mobile telecommunication increases flexibility and choice for employees. If they wish to work from home or join meetings while they are away from the office, they can use smartphones to participate in video conferences or carry out work that requires secure access to a corporate database. Mobile telecommunication also reduces travelling costs, as employees no longer have to travel to meetings or visit the office to carry out computer-based tasks. Distance Learning The competitive advantages of telecommunications technology began with the ability to take college courses from the comfort of home. Through distance learning, universities are helping people who cannot travel to conventional classes to pursue higher education. Mothers with small children, veterans with disabilities and elderly people who are unable to commute can participate in programs that award degrees in fields ranging alphabetically from anthropology to zoology. Mobile Offices The modern office is the place that has been most profoundly

affected by telecommunications technology. Sales staff can check the company inventory before placing a large order; executives can stay in touch with the office while attending a business convention or even attend local meetings from a hotel room thousands of miles from where the meeting is being held.

The competitive advantage of writing and distributing an important memo without requiring each person to check in at the office improves production; it also saves money for the company and broadens the reach of the company to include employees who are not anywhere near the office. Internet Technology The Internet has blossomed into a massively influential tool for business. The competitive advantages of having an online store include the ability to serve customers who are in faraway places or cannot come into your physical location. For example, the practice of drop shipping allows you to own a virtual store without maintaining an inventory or ever even having the products you sell in your possession at all. The advantage to you is that you can sell products that are produced in another country to customers anywhere in the world. The store, the product and the customer are all accessed via telecommunications, including the sale of the product and setting up the pickup time for a delivery company or courier. Advantages of Telecommunication in General There are a great many advantages of telecommunication that caused it to spread across almost every field of daily life.

Telecommunications have improved people's ability to stay in touch with friends and family. Grandparents can receive pictures, emails, and videos of

their grandchildren over the Internet. Families spread across continents can communicate inexpensively via email or with phone cards. Telecommunications has changed the landscape of entertainment. People can access hundreds of television stations with the push of a button, getting instant access to enjoyable information. The information contained in MP3 files can be transmitted in seconds over the Internet, enabling listeners to enjoy music anytime and anywhere. Telecommunications has also changed the way in which people work. It is now possible to commute from a beach in Florida, from home, or from anyplace where a computer, a phone or Internet service is available. These advances in telecommunications have not only untethered people from desks, but they have also made it possible for people who might traditionally be unable to be in the workforce- such as those who are caring for children, or those who are disabled- to have exciting jobs and contribute to the business community.

Disadvantages of Telecommunication Telecommunication makes it possible for colleagues and clients to work from a remote location as well as to speed up workflow and communication in the office. Telecommunication for the purposes of telecommuting in particular offers economic benefits, since you save money on parking, transportation, clothing and sometimes childcare. It also may give you flexibility on your work hours and your work setting. Despite these benefits, telecommuting has several significant disadvantages to consider before committing to working away from the office. Separating Work and Home It's not difficult to fall into the trap of overworking yourself. If you work from home rather than a coffee shop or library, you may find yourself checking emails, working on projects or simply thinking about work

well into your " off" time. It may also be difficult to define concrete work hours and avoid distractions at home. Family members or social interruptions may distract you, or you may be tempted to take care of chores and errands around the home, putting off your work until later. Social Isolation When you telecommute, you get the freedom of less supervision.

However, you also may become socially isolated. While some workers thrive on being able to work alone, you may not feel part of a professional community or miss the face to face interaction you get in a traditional office setting. Connect with other telecommuters to avoid isolation. If you're a freelancer, seek out forums, websites and blogs of others in your situation or utilize clients' resources to communicate with others in your industry. Inadequate Work Environment When you work in an office, most of the setup is done for you because you're already in an office or cubicle. At home, it's up to you to create an efficient environment specifically for work. It needs to be well-equipped and suit your work needs. Arrange for sufficient Internet connectivity, offering bandwith that adequately handles uploads and video streaming.

Install a phone line for faxes and purchase equipment like a fax machine, copier or phone system if needed. If you transcribe or have call center duties, you also need job specific equipment like a transcription pedal or digital calling software. Your employer may provide this to you, but if you're a freelancer, this may not be the case. Staying Informed If you telecommute in an office where most other employees do not, your company may not have an adequate infrastructure and communication system to keep you

abreast. You may not receive interoffice mail in a timely manner, for instance. Conference calls also present problems when poorly managed. Colleagues who aren't aware of call etiquette may speak over one another or forget to mute their phones to eliminate background noise. Ask your employer or client what infrastructure they have in place to assure proper communication.

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