

# [An exploration of ethics behind information technology](https://assignbuster.com/an-exploration-of-ethics-behind-information-technology/)

## Abstract

The purpose of this research paper is to discuss how the increased use of information technology within society can cause ethical dilemmas to arise. Information technology has become widely adopted, and continues to impact several organizations, through the process of gathering and storing information online. Although many individuals would claim this advancement to be beneficial, the use of information technology can lead to serious consequences, if it is not handled properly. The paper will begin with an introduction to information technology, whilst highlighting the many components that make it useful within society. In addition, the paper will then discuss the ethics of information technology, and focus on why ethical concerns may unfold. Lastly, the paper will explore the different ways an organization can approach these ethical dilemmas. Moreover, suggestions on how to prevent ethical issues under information technology will be discussed as well.

Keywords: information technology, privacy, issues, ethics, dilemmas, society, change, positive impacts, negative, workplace, security

In today’s society, information technology has tremendously developed, impacting the way individuals go about their daily lives. The use of this advancement has influenced several industries as well, like: health care, education, business, and more. Information technology allows for large amounts of information to be stored and retrieved in just a short amount of time, which is very convenient. This is the main reason as to why many would claim that information technology is a valuable addition to society. Since information technology has made such an impact, the debate of IT ethics is becoming more notable. Some areas of concern generally include: privacy, security, discrimination, and misuse. It is important that these issues are discussed and prevented. The development of information technology may be essential in society, but because of its prominence, there needs to be ethical regulations put in place.

The use of information technology has been implemented at both an individual and organizational level. At an individual level, usage refers to one’s personal access to information, which can either be through their cellular device, laptop, or any electronic device for that matter. As for an organizational level, usage refers to a group of individuals that have access under the same objective. Although information technology was developed to act as a tool to easily transmit and receive information, it can still be utilized in different ways, and for different reasons as well. According to “ Impact of Information Technology on Society” the article states that, “ Completing tasks using data technology leads to rapid processing and data freedom, in addition to enhanced reliability…” (“ Impact of Information,” 2017). Not only does this statement reveal the main purpose of information technology, it is one of the main reasons as to why it is regularly used in society. It allows for individuals to access information through an interconnected system, making the process efficient and reliable. At an individual level, information technology is utilized throughout the daily lives of many people. Technological innovations, like: cellphones, tablets, laptops, computers, and more, act as an outlet for individuals. This way, they will be able to have access to an interconnected system. If anything, most technological devices will be able to store and retrieve information from others. Furthermore, the article continues to reveal that information technology “…may function an enormous number of operations and functions that an individual can’t do” (“ Impact of Information,” 2017). Again, with this tool, individuals have the ability to access large amounts of information without having to do much work, since the IT system does it all. The information technology system can be beneficial for many reasons, especially under industries that are responsible for substantial amounts of data or information. Industries like: health care, business, or education all utilize this tool for similar motives. This tool contributes to the efficient processes that organizations aim for. Almost all organizations depend on their IT systems to quickly store and retrieve consumer information. Overall, the main beneficial aspect of information technology is the endless possibilities of data (add more…)

It is quite evident as to why many people would claim that information technology positively impacts society. Yet, although information technology provides society with many quick alternatives, there is a questionable side to it as well. Since the use of information technology has become so common in society, it is important for users to distinguish between what is “ right” and “ wrong.” This means that potential ethical issues will eventually need to be considered. In reference to “ Technology Ethics,” author Brian Green states that, “ Given our growing technological power, we need to put more and more attention towards ethics if we want to live in a better future and not a worse one” (Green, B. P., 2018). This implies that the utilization of technology will only continue to increase, so, the implementation of ethics within this field is vital. Technology ethics can act as a monitoring mechanism, helping to prevent IT usage from getting out of control.

Thus, the following paragraphs will discuss the different ethical situations that may occur, as a result of adopting information technology.

Privacy and security tends to be a big ethical concern within information technology, because all stored information is digitized. This makes it easy for anyone to obtain and possibly transmit to unauthorized receivers. At an organizational level, many industries depend on their IT systems to store the personal information of their consumers. For instance, in health care, the digitization process of medical records is becoming more common. This transition has allowed clinicians to access and comprehend patient charts much easier. Like other organizations, the information that hospitals are responsible for, are quite sensitive. If large amounts of patient records were to be obtained by an outsider, because of low security measures, many persons would be affected. According to “ Top 10 IT Issues,” the article reveals that “ Institutions must understand not only what data they possess, but how to care for the data through thoughtful governance and administration” (Grajek, 2016). This statement suggests that organizations should be able to secure the data they are responsible for. Some institutions may recognize that the information they hold is confidential, but fail to establish adequate security. As consumers, many individuals trust that their personal information is being stored safely. In the article, “ Ethical Problems in Computing,” author Lou Berzai states that “ This puts people’s personal information in a vulnerable position… If someone hacks into a computer system, all this information is at their disposal” (Berzai, 2017). Similarily, this statement reveals that security measures are crucial in institutions that utilize information technology, because large amounts of consumers are involved. Overall, without any security measures, information technology would not be a viable tool to implement. It is unethical for an organization to collect information from consumers without ensuring privacy and protection.

Since information technology has become such a commonly used tool in society, the possibility of individuals or organizations taking advantage of its functions is an area of concern. If this tool were to be used for the wrong reasons, or used without authorization, it would be considered an unethical dilemma. In reference to the article “ Unauthorized Transmission and Use of Personal Data” author Michael McFarland reveals that, “ The rules governing who can use the data and for what purpose may not be clear or restrictive enough to protect the intentions and interests of the subjects” (McFarland, 2012). This suggests that although there are restrictions, it does not necessarily prevent the accessed information from being used in an unethical matter. Regardless, any type of confidential information should be treated with caution, and without bias. Generally, this issue tends to occur at an organizational level. In the workplace, employers can utilize information technology to their advantage, by uncovering personal information on their employees and applicants. This sheds light on organizational discrimination, which of course, is an ethical dilemma. In addition, McFarland states that, “ When the data is sensitive and personal… this can lead to serious abuse, because it opens the way for the data to be used for purposes quite different from its intended use” (McFarland, 2012). This further implicates that classified data is more likely to be used in a harmful way. Many job applicants have been judged, due to their sexuality, religious beliefs, and other personal material. It is unfair for employers to use information technology as a tool to determine whether or not someone is suitable to work for their organization. This is a prime example that showcases an abuse of power, from the employer’s standpoint.

Although information technology may be beneficial within society, ethical cases, like these, have a high chance of occurring. There are a range of things that can go wrong, if this tool is not utilized properly. According to “ How Information Technology Can Be Used for The Betterment of Society” author Steven Widen states that “ While it allows for the faster spread of information… access to information for all, it also allows the spread of misinformation” (Widen, 2018). Widen’s statement acknowledges the fact that information technology has efficient functions, but he also mentions that the tool has space for errors as well. The spread of misinformation is just one of the many consequences of utilizing information technology, away from its intended use. Likewise, in the article “ The Four Negative Sides of Technology” author Pamela Deloatch states “…with each advantage comes a potential cost… when we understand those costs and can minimize them, we can keep the use of technology positive” (Deloatch, 2015). This statement reveals that it is critical to understand the positive and negative effects of technology, in order to properly utilize the tool. Being able to identify any potential issues beforehand will help avoid unethical situations from arising. Overall, this shows that no matter how useful a tool may be, ethical regulations and monitoring are crucial.

The continuous and rapid growth of information technology has made it difficult for ethical dilemmas to be fully addressed. Since technology has made such a big impact on society, the idea of technology ethics seems too complex. In reference to “ Ethical Problems in Computing” Lou Berzai unveils that “… the area of computer technology is one that is difficult to assign a specific set of moral codes, although it is necessary that ethics be considered…” (Berzai, 2017). This statement implicates that having an ethical guideline of some sort will help in the future. Even though the industry of technology is complex, it is still important to implement regulations. The only way to prevent such ethical dilemmas from happening, is to address potential issues early on. Moreover, in the article “ Digital age ‘ desperately’ needs ethical and legal guidelines” author Joanna Roberts states that “ We all want to benefit from the implementation of a technology, but we don’t necessarily want to change our behavior… to get there” (Roberts, 2018). As a society, it is easy to become consumed by technology, because it is widely adopted by everyone, and used on a daily basis. Yet, when it comes down to discussing policies and regulations, society suddenly become resistant to change. As Roberts stated, many individuals want to utilize technology, but are not willing to adjust their lifestyle to fit the new conditions. This becomes an issue when individuals are so blinded by the benefits of information technology, that they do not see the dangerous side of it. This is one of the main reasons why the demand for ethical regulation is so significant, within society’s culture of technological usage. Similarily, in “ The Ethics of Tech” the article states “ What you want is regulation and other mandatory mechanisms, like ethics standards or review boards… which we can discuss as a society” (Detrow, S., & Zunger, Y., 2018). This statement further emphasizes that technology ethics and regulations need to be addressed, not just within the industry, but within society. Since technology continues to advance at such a rapid pace, this would mean that information technology would most likely continue to develop as well. Because of this, any implementation of ethical guidelines will need to be adaptable, in order to approach or prevent an ethical dilemma from arising.

Ultimately, in today’s society, the use of information technology has grown tremendously. Not only is it utilized on a personal level, but in several organizations as well. As Nayef Al-Rodhan unveils, “…technology has fundamentally altered our lives: from the way we work to how we communicate…” (“ The Many Ethical,” 2015). It is true, information technology, alongside technology as a whole sector, has changed the way society functions. Technology has definitely been impactful, and whether it is believed to have a positive or negative effect on society, the implementation of technology ethics is unquestionable. Since this tool is widely adopted, it is only right to create ethical guidelines and regulations, to prevent adverse events from occurring. As technology innovations continue to progress, society will need to learn how to adjust as well. It is a fact, that the use of information technology amongst individuals is inevitable, because of its normalization. To prepare for the future, technology ethics (finish sentence…)

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