

*Red Herring provides an insider's access to the global innovation economy, featuring unparalleled insights on the emerging technologies driving the economy.*

In fact, most successful organizations rely on technology for almost every aspect of their business. It can all be broken down into understandable chunks of functionality. Computers For most companies, the most useful piece of equipment is also the most understood. Desktop computers loaded with office and productivity software packages allow workers to write letters, analyze financial information, send and receive emails, and design sales presentations. The computer itself could be a desktop model with a separate monitor and keyboard, or a mobile laptop. There are two main types of computers. Software Software is loaded onto a computer to provide specific types of functionality. Productivity tools, such as Microsoft Word, a word processing package, and Microsoft Excel, a financial spreadsheet system, can perform many of the most common tasks a small business requires. Microsoft PowerPoint or Apple Keynote allow users to prepare professional-looking sales presentations quickly and easily. Millions of other titles are available, each developed to perform specific tasks. Networking Computers are often linked to form a network. This can allow people within an organization to share documents or information, provide a central repository to store documents, or for people to communicate using email within an office. They also allow several computers to share a printer or storage device. A network can be limited to computers within a shared office, or span across multiple offices and locations. These systems often include an auto attendant that helps callers find the employee they are seeking and most also include a voice mail system for messages. VOIP phones do not require a telephone line, but instead route all traffic over the Internet to a special handset. Accounting System Although technically software, accounting systems deserve their own mention because of their mission-critical role in any business. Accounting systems keep track of every dollar a company spends along with every dollar of revenue. One popular choice for smaller companies is Quickbooks by Intuit, which is simple to set up and maintain. Larger companies may want to consider SAP Business One or Sage Accpac, both of which allow for more customization and more integration with other systems. When trying to decide which software is right for you, ask your accountant for their recommendation. Inventory Control System If your business sells goods, you may want to explore an inventory control system. These systems keep track of every item in your inventory, ensuring you do not run out of stock, nor you order too much. When new inventory arrives, the system is updated to reflect the additions and when it is sold, it is deducted from the totals. From the moment you obtain information about the customer, the CRM system will track their interactions with you. If a customer calls to order a product or service, or calls for help or a technical question, the CRM system will tell the service representative when the items were shipped, what is back-ordered and any other conversations the customer may have had with your company. CRM systems help build relationships with a customer by assembling all the information your company collects from the customer in one place for use, review and proactive response.

## Chapter 2 : Importance of Information Technology in the Business Sector | Bizfluent

*Technology in business made it possible to have a wider reach in the global market. The basic example is the Internet, which is now a common marketing tool to attract more consumers in availing products and services offered by various businesses.*

In the old times, business took a slow pace, thanks to the lack of tools that would allow for faster business transactions. Everything was done with the help of some mechanical tools and the bare hands, which made it unthinkable to do business instantly. A short course in the history of technology in business would allow one to see the radical yet dramatic shift from the old business procedures to the innovative approaches as seen today. In addition, it would also give one a better understanding of how important the use of technology in business is. Technological Boom Innovations in technology started to rise in the nineteenth century. If you come to think about it, these inventions are rather simple, but their impact on business caused it to transform to what it is today. With a steady rise in the number of patents issued by the United States Patent Office, multiple segments of the economy revolved to gain benefits. Some of the past innovative products and methods that helped to shape the face of business and economy are the barbed wire, cattle farming, railroad air brakes, sleeping cars, the camera, the carpet sweeper, and the typewriter. All of these had influenced the way people worked and led their daily lives. When these innovations were combined, they formed a powerful army that gave way to the massive use of technology in business. Electricity and Communications Industrial processes rely on sources of energy for them to be fully functional. Before electricity was utilized for this purpose, other natural sources such as coal and water were used. This is rather an unconventional way of fueling up factories because the said energy sources are not readily available for industrial use. With the discovery of the incandescent bulb by Thomas Edison, a series of other discoveries and inventions gave way for instant sources of energy. Electric utilities were ushered in during the late 19th century. Although these utilities had a low transmission range and limited power, wide residential use became possible. These utilities were further developed by George Westinghouse that made it possible to supply both residential homes and power-hungry industries the energy that they needed to perform daily business tasks. Communications, on the other hand, was revolutionized with the invention of the telephone by Alexander Graham Bell. It was indeed a giant leap for communication, which ultimately affected the business world in many aspects. A necessary item in any business office, the telephone has certainly bridged the gap between many people and as far as business is concerned, it brought better relationships and opportunities from clients and customers. Current Developments The things that the past brought for the benefit of business using technology did not stop there. Typewriters were replaced by word processors, telephones have gone mobile, and every manual business transaction is being automated with various applications and software. The use of technology in business is innumerable and widespread. Even a short history of this would suffice for one to understand how revolutionary the changes have been. Still, technology is always evolving as it continues to grow not only for business use, but also for the growth and utilization of other fields. Therefore, coping with change is imperative for one to reap the advantages of the use of technology in business.

*It's difficult to imagine a successful business that doesn't rely on technology in some way. If you want to increase productivity, provide better products and services, track sales and assets.*

When you choose to pursue a career in IT, you know you are headed down a career path that will lead you to endless opportunities. This is because of the important role IT plays in business survival. In the fast-paced environment of business operations today, technology makes processes quicker, more effective and easier to document for future review. Read below to learn why technology is essential for businesses to not only survive, but to thrive. **The Role of Technology in Business** In the last two decades, technology has changed the way we interact, the way we shop, the way we do research, and the way businesses operate. Today, technology is central to the success of most businesses. From marketing to security, most business operations start in the digital world. Since the role of IT is so prominent in businesses of all sizes, training for a career in the field means training for a variety of opportunities. These are just a few of the ways the tech industry has changed the face of modern businesses: **Communication Technology** simplifies communication, whether you are keeping in touch with an old friend or catching up on the news. For businesses, IT is key for effective internal and external communications. Internal communication means communication conducted within a business or different parts of a business. For IT professionals, this means keeping up with the technology used for email, internal newsletters, or company-wide digital project platforms. For IT professionals, this means keeping up with email, social media, online newsletters, and other platforms. Digital marketing requires technology support teams to implement and troubleshoot different kinds of software. A capable IT team is imperative to the success of any digital marketing plan. Digital marketing concepts like search engine optimization SEO , blogging, website development, and social media targeting all require experts with the knowledge to provide consults when something goes awry. Tracking success and opportunities is also simplified by using software designed to store marketing metrics over time. This allows companies to plan, adapt, and grow. **Decision Making Technology** streamlines the decision making process within a business. There are many ways to keep track of financial resources, market conditions, and customer satisfaction. With a good IT plan, you can see this data easily. This makes it easier for companies to see what steps they should take to make improvements and reach goals. Digital data collection eliminates some of the fact-checking businesses must do to combat typical human error, again allowing decision makers to act quickly and confidently. Over time, this can help a business advance monumentally. Because of the way businesses are now growing and developing, IT experts are needed to ensure operations are running smoothly, particularly for web-centric companies.

*The ethics of robotics and the power of big tech are under scrutiny.*

Importance of Information Technology in the Business Sector by Annie Sisk - Updated November 02, Just 25 years ago, most business offices would have been stocked with typewriters and carbon sheets, instead of computers and printers. Once computers became mainstream consumer items, the business world adopted the burgeoning technology at a dizzying pace. The modern economy places a premium on the acquisition, processing and proper use of information in all its forms and formats. Today, the sum of all computer-based and digital technology used for the management of information in both the public and private sectors is referred to as information technology, or IT. Information technology is responsible for innovative leaps and improvements to the workplace across multiple sectors of the market and plays a critical role in business organizations. What Is Business Information Technology? The systems that comprise information technology in a business today encompass a number of types of computers, storage and networking equipment. In fact, one definition of business information technology is: The use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. IT, therefore, includes any mechanical or digital method by which a business office collects, maintains, retrieves or uses information. In this context, information can mean written content, documents, databases, spreadsheets, emails, audio or video files, digital forms that are completed and submitted via the internet, and much more. Businesses utilize IT in a number of different contexts and for many different purposes. For example, telephones, radio equipment and VOIP services used for vocal communications are included under the IT umbrella. Of course, when most people think IT, they think of computers: IT also includes the applications and executable programs that are installed on these devices to enable the user to complete the task at hand. In these ways, IT has become critical to the global business community. Video of the Day Brought to you by Techwalla Brought to you by Techwalla Role of Information Technology in an Organization The role of information technology in various sectors has evolved quickly since the last decade of the 20th century. Modern organizations use information technology throughout most, if not all, departments and across most functions. The obvious example is email. Email has become ubiquitous in connecting employees to each other, between departments and between locations or markets. This is true whether a business is entirely local with a single point of presence or maintains offices in multiple locations in multiple countries. But IT goes far beyond mundane operations. The right IT systems give companies a competitive edge, enabling them to enter larger markets and expand products or service lines more efficiently, as well as keep tabs on competitors. IT has now become such a pervasive aspect of business operations that many employees and managers no longer see it as a separate function. Rather, IT has become an indispensable element of every corporate department and function, driving innovation and fostering growth throughout the entire organization. A strong IT system also helps all facets of a company work more productively. By enabling automation and digital tools, tasks that once took hours can now be performed in a matter of minutes.

**Chapter 5 : Technology | Definition of Technology by Merriam-Webster**

*About the Author. Chris MacKechnie is a graduate of Carleton University's Law Program and has been writing professionally for more than a decade.*

September 17, De George, Richard T. Reviewed by Norman Mooradian, unknown The Ethics of Information Technology and Business is an examination of a wide range of ethical questions that arise from the use of information technology in business and the business of information technology itself. Among the many issues discussed, privacy has a central place. Two chapters are devoted to the topic chapter two: Marketing, Privacy, and the Protection of Personal Information; and chapter three: Employees and Communication Privacy. Privacy comes up repeatedly in other chapters of the book as well, such as chapter five, Ethical Issues in Information Technology and E-Business, where Web tracking and data mining are discussed, and chapter six, Ethical Issues on the Internet, in which the issues of anonymity and security are raised. Another central issue is that of intellectual property, in particular, digital assets such as software programs. New, Intellectual, and Other Property focuses exclusively on this issue, though again, as in the case of privacy, it comes up in other chapters as well. The last chapter is a broader reflection on the impact of information technology on society chapter seven: Information Technology and Society: While privacy and intellectual property are central issues that are worked out in detail in the earlier chapters of the book and applied to different cases in later chapters, there are a number of other topics as well, too numerous to list. They include taxation of e-commerce, assigning domain names, the changing nature of work, liability for system failures, and censorship, just to name a few. Four themes pervade the book and provide the closest thing to an overarching structure to its many arguments. MACIT is described in various ways throughout the book. In the preface it is described as a tendency to ignore the ethical dimensions of computing. The reasoning implicit in this mistake is that computers are amoral entities and as such cannot be responsible for the harm they cause. Human agents may be involved in the causal nexus of the harm, but since they are not the direct or central cause, they are not responsible or if so to a minimal degree. TI is described in various places in various ways. Putting a few of the descriptions together, we might say it is a tendency to develop an information technology because it is possible to do so and meets some objective, irregardless of its ethical consequences pages , , et al. On a descriptive interpretation it says that for any given technology, it will be developed if there is a reason to do so, regardless of its ethical consequences. The prescriptive interpretation is that for any technology, it should be developed if it is possible to do so. The other themes, i. When they are mentioned it is usually in support of the other two themes. The hidden substructure topic helps explain MACIT, because much of the causal nexus is unknown to most people. Technological inertia is the flip side to TI, that is, accepting the status quo once it has been established. Also, De George is not always careful to distinguish the themes. This may be because belief that a technology is inevitable might lead to belief that its developers are not morally responsible for its development. In the first chapter, Ethics and the Information Revolution, De George describes his approach to the ethical questions he will discuss. He locates the issues within a common and universal framework of ethical norms. Murder, stealing and other such acts are generally inconsistent with societal norms across societies despite their cultural differences. Within a society, norms exist for many practices that bear certain similarities to new and emerging practices made possible by information technologies. This suggests a two-step method. First, when evaluating a new practice such as monitoring e-mail, one can use analogical reasoning from similar practices and norms; for example, opening and reading private correspondence. De George does not attempt to characterize these considerations, but it is fair to say from the way he argues that they can be described as consequentialist or deontic and that they must cohere with the general framework of fundamental ethical norms. De George then draws a distinction between an empirical approach and an analytical or conceptual approach. The empirical approach is reactive, waiting for harms to be done before a response is formulated. The conceptual approach is proactive. It consists of identifying the logical presuppositions of a practice, institution or system, identifying its structure and the possible ethical weak points of that structure, and considering ways in which values might be built into those structures that would

eliminate or mitigate its weak points. This conceptual approach is the one he endorses. One of the most interesting parts of the book is in chapter one, where De George applies his method of analysis to the general system of IT taken as the basis for the information society. Here he argues that core values of an information-centric society are truthfulness, accuracy, information sharing, and trust. While important in other types of society agricultural, industrial, these values take on greater role in an information economy, in contrast to punctuality, for example, which is critical in an assembly-line industrial economy. Appeal to these values plays a role in a number of arguments throughout the book. He distinguishes between four kinds of privacy: Personal information privacy concerns control over information about oneself. Finally, cyber privacy is similar to some of the others such as space privacy and body privacy and might be thought of as the virtual equivalent of these. After making these distinctions, De George addresses the problem of tracking people in public. Surveillance technologies are often employed in public places to reduce crime or traffic congestion. An argument can be made that there is nothing wrong with such surveillance. One can observe someone in public and can take a picture, and one can even video someone. The argument fails, De George claims, because private and public are not necessarily opposed concepts. One expects a certain amount of anonymity in public, and it is precisely this anonymity that is undermined by aggressive tracking. While De George does not explicitly use the distinctions above, it is clear that they play an explanatory role. The public-public argument assumes that all privacy rights are waived when one enters a public area. Hence it presupposes the frictionless extension of greater and greater observation. It seems plausible because we may be thinking of space privacy, which is certainly waived when we enter most public places. He does not use this description, but his argumentation in a number of places implies it. If privacy can be held in different degrees, it can be valued in different degrees, and hence can be violated in different degrees. He challenges the appropriateness of copyright to software programs by showing that the analogy between computer programs, on the one hand, and literary and artistic works, on the other, is not strong enough to support the full extension of copyright protection mainly its duration to programs. Computers are more like lists of instructions than literary expressions. Defenders of copyright protection argue the value of the particular expression within a program, but, De George argues, people do not buy programs for their literary value. They normally buy object code, not source code, and hence cannot read the programs. De George also argues against patent protection on the grounds that software innovations are so rapid that that the twenty-year duration of patent protection should be unnecessary. Also, deciding what aspect of the program can be patented is a problem. Is it the look and feel of the interface, the architecture of the program, or the specific instructions of any and every subroutine? De George calls for a form of protection especially crafted for software instead of stretching protections designed for different sorts of intellectual property. He does not tell us what shape such protection should take, but his analysis shows that the grounds for such protection should be reasonable compensation for those who work to develop and market software products and fairness to them for investing time, money and effort in such development. What we need to do, therefore, is look at the special circumstances of software development to determine what is needed to afford such protection. Like producers of books, developers are threatened by the unauthorized copying of their software, especially since it is so easy to do. But De George is right in thinking that protection against such copying should not span decades. Software changes quickly and versions older than a few years are usually obsolete. Reverse engineering is also a threat, especially in the form of decompiling code and adopting it into a competing product for sale. However, it should be sufficient to ban particular forms of reverse engineering without using the strong protection afforded by patents, which prevents anyone but the first recognized inventor of the innovation from using it without a license. If someone writes a similar program with similar functions to an existing program, but does not steal code from a competitor, it seems unreasonable to deprive him or her of the benefit of his or her work. De George is correct in thinking that this would stifle competition. Also, it is hard to see how society would be benefited. Software developers do not face the same kinds of cost barriers that producers of pharmaceuticals or manufacturers of computer hardware do, so they do not need the incentive of barring competition to recoup massive investments. They just need to have reasonable assurance that no one can compete with them by stealing their code instead of developing their own. However, it is not clear that each is a single kind of error or that it occurs on a single

level. In fact, it is not clear that they always describe errors in thinking. For example, in the case of TI, it is not always clear where an error is committed when considering the beliefs of agents. Individual developers of a technology are often in the position of seeing an opportunity to create something with clear benefits that also carries with it a hard to define risk of being considered unethical at a later time. There may be no clear norms in place against the technology, the implementation they envision may be unproblematic in itself, and coordination with other groups or individuals for the sake of clarifying the issues may not be feasible. The only answer is for society to establish clear norms in advance. Hence, if there is an error here, it may be in found in the reflective belief that this cannot be done, not in the context-dependent, individual decision making. If TI, as a general claim about technological development, is false, then moral norms can be established in advance of the emergence and deployment of information technologies. For moral norms to be identified, the sort of conceptual analysis De George describes will have to succeed in identifying problems and providing answers. It is probably a bit optimistic to think that this can be done without relying on the reactive, empirical approach of assessing the extent of moral damage done. Nonetheless, De George provides a good example of how to do such conceptual work in the service of identifying and clarifying such issues. This book is certainly a contribution to the field. It is well placed as part of a series on the foundations of business ethics and should prove essential reading to scholars in computer and information ethics, as well as related fields.

## Chapter 6 : A Brief History of the Use of Technology in Business |

*The Business & Technology (B&T) major exposes students to key business disciplines through the strong technology-focused lens for which Stevens is known, giving them a powerful head start in landing their dream jobs.*

As the years go by, the business world is leaning more and more toward it, making it almost impossible to separate the two from each other. Innovation breeds business, and since technology paves the way for it, it can be gathered here that business needs technology to be sustained. Business has always existed since the early times of man. Even though it only began with the simplistic barter system, business would not be the same as it is today without the advancements in technology. All the major industries would fall into a catastrophic collapse if one were to take away technology from business, since majority of business operations and transactions somehow involve the use of technology. Technology as a Business Necessity The role of technology in business caused a tremendous growth in trade and commerce. Business concepts and models were revolutionized as a result of the introduction of technology. This is because technology gave a new and better approach on how to go about with business. It provided a faster, more convenient, and more efficient way of performing business transactions. Some of actions of technology in business include accounting systems, management information systems, point of sales systems, and other simpler or more complicated tools. Even the calculator is a product of technology. It is indeed unfathomable to summon the idea of going back to the days where everything was done manually, which basically means starting all over again from scratch. Security and Support With the automated processes that technology can provide, productivity reaches a higher level. This is due to the minimal resources consumed in processing business activities, allowing room for better products produced and faster services delivered to more clients and customers. Information is also stored with ease and integrity. With this, confidential and sensitive information are less prone to vulnerabilities. The said information can also be instantly retrieved and analyzed to monitor trends and make forecasts, which can be crucial in decision-making processes. A Link to the World Business involves communication, transportation, and more fields, making it a complex web of processes. The technologies pertaining to other fields only pushed business further. Globalization has been realized because of the wonders of technology. Anyone can now do business anywhere within being constricted to the four corners of his room. Technology in business made it possible to have a wider reach in the global market. The basic example is the Internet, which is now a common marketing tool to attract more consumers in availing products and services offered by various businesses. Indeed, technology in business ultimately made living worthwhile. It cannot be denied though that technological threats to business are growing rampant, such as hacking and other malicious activities, so one has to be responsible enough in utilizing the power of technology. The good that technology brings has some excess baggage in the form of bad things that threaten to shake the business world. In the end, it is still responsible use of these that would further allow us to enjoy the benefits that technology can bring.

## Chapter 7 : Technology of Business - BBC News

*In fact, one definition of business information technology is: The use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data.*

## Chapter 8 : The Advantages of Technology in the Business World | It Still Works

*More Technology of Business Amsterdam's boats going electric. 9 October From the section Business; Full article Amsterdam's boats going electric. Why the laundry industry is in a spin to.*

## Chapter 9 : The business of technology | Financial Times

*The use of technology in business has taken a sudden but remarkable upsurge in the history of man. In the old times, business took a slow pace, thanks to the lack of tools that would allow for faster business transactions.*