

(1) Business managers direct the work of others (if any) in order to run the company profitably and efficiently. They should be proficient in the following fields and may even be experts in one or more of them: public relations, marketing, and finance. A corporate manager may also be skilled in the following technical fields: law, science, and computer programming. Business managers may even have control over human resources in some situations. In many firms, the position may be created to release the owner of responsibilities so that they can concentrate on particular elements of business growth. The owner and business manager frequently collaborate to maintain the smooth operation of the company. Efficiency is improved by specialization in a particular area, such as finance, marketing, sales, or public relations. However, in addition to the typical academic qualifications for a company manager, business managers also develop personal traits that are beneficial in carrying out the work effectively. Understanding each of their subordinate employees' tasks and knowing how to collaborate with each employee to successfully complete those tasks are social skills of a company manager. A business manager should have social skills, be organized, honest, and capable of making sound judgments. They should also be open to accepting helpful criticism from staff members. A successful business manager should be prepared to collaborate with their staff members to improve the workplace. *end*

(2) Travel for pleasure or business, as well as the industry that supports and sponsors such travel, is referred to as tourism. The World Tourism Organization defines tourism more broadly as people "traveling to and staying in places outside their usual environment for leisure and not less than 24 hours, business and other purposes for not more than one consecutive year," going "beyond the common perception of tourism as being limited to holiday activity only." International tourism affects a country's balance of payments in both the incoming and leaving directions. Tourism can be domestic (inside the traveler's own country) or international. Tourism numbers fell between the second part of 2008 and the end of 2009 as a result of a severe economic slowdown and the H1N1 influenza virus outbreak, but they gradually increased until the COVID-19 pandemic abruptly stopped the growth. According to the United Nations World Tourism Organization, there might be a 58% to 78% decline in international tourist arrivals worldwide in 2020. For the first time ever in 2012, global arrivals of foreign tourists exceeded the landmark of 1 billion. Emerging source markets' spending has expanded dramatically over the past ten years, including China, Russia, and Brazil.*end*

(3) A concept known as "sustainable tourism" encompasses the entire tourism process, including consideration for economic, social, and environmental issues as well as improvement of visitor experiences and meeting the requirements of host communities. Sustainable tourism should take into

account issues of environmental preservation, social fairness, and quality of life, as well as cultural diversity and a vibrant, healthy economy that provides opportunities for employment and wealth for all. Although there is considerable ambiguity regarding what "sustainable tourism" actually entails, it has its roots in sustainable development. The idea that tourism should be sustainable is now widely accepted. All types of tourism, in fact, have the potential to be sustainable with the right planning, development, and management. To lessen the adverse effects of tourism's expanding influence, such as its environmental implications, tourist development groups are encouraging sustainable tourism practices. Through initiatives like the International Year for Sustainable Tourism for Development in 2017, the United Nations World Tourism Organization highlighted these practices by promoting sustainable tourism as a component of the Sustainable Development Goals. Several of the 17 Sustainable Development Goals (SDGs) and sustainable tourism have a direct relationship. Tourism for SDGs focuses on the role that tourism plays in achieving SDGs 8 ("decent work and economic growth"), 12 ("responsible consumption and production"), and 14 ("life below water"). According to World Travel & Tourism Travel, international tourist arrivals reached 1.5 billion in 2019 (an increase of 3.5 percent), accounting for 10.3 percent of the global GDP. Improvements are anticipated to be gained from appropriate management aspects and the inclusion of sustainable tourism as part of a larger sustainable development strategy.*end*

(4) These keys transform the messages and data into "digital gibberish" through encryption and then restore them to their original form through decryption. Generally speaking, the longer the key is, the more difficult it is to crack the code. This is true because deciphering an encrypted message by brute force would require the attacker to try every possible key. Test messages utilizing the early US Government-approved cipher DES, which has an effective key length of 56 bits, have been deciphered using brute force key search. But as technology improves, so does encryption quality. The development of asymmetric key ciphers, sometimes known as public-key ciphers, is one of the most significant developments in the study of cryptography after World War 2. These techniques encrypt the same message using two keys with close mathematical ties. Because it is very difficult to figure out one key just by knowing the other, several of these algorithms allow disclosure of one of the keys.

A widely accepted standard for encryption became necessary starting in the 1990s as businesses started using the Internet and conducting transactions there. Prior to the release of the Advanced Encryption Standard (AES), only very seldom was information sent via the Internet encrypted, most frequently using the Data Encryption Standard (DES). After a public call for candidates for such a cypher

algorithm and a competition among those contenders, NBS (a US Government agency) had accepted this for its security. Due to complicated disputes concerning the widespread use of high-quality encryption by the general public, DES was approved for a brief time but was in use for a longer time. DES was finally superseded by the AES following a second open competition held by NIST, the organization that would succeed the NBS. Public-key encryption techniques started to be used more frequently in the late 1990s and early 2000s, and soon a combination of the two became the standard method for conducting e-commerce transactions. Online transactions were also made possible by the development of a new protocol known as the Secure Socket Layer, or SSL. SSL was used for a variety of transactions, including buying items, paying bills online, and banking. Additionally, when wireless Internet connections spread throughout homes, the demand for encryption increased because these commonplace circumstances required a certain amount of protection.*end*

(S)In cryptography, hashing is a popular method for fast encoding data using standard algorithms. The "hash value" is often created by applying an algorithm to a string of text. As a result, the message acquires a "digital fingerprint" because the particular hash value is used to identify a particular message. The algorithm's result is also known as a "message digest" or a "checksum". Hashing is useful for figuring out whether data has been altered during transmission. A message has been edited if the hash value differs between when it is sent and received. When the algorithm is applied to the data to be hashed, the hash function generates an output with a specified length. In essence, everything that goes through a hash function should produce an output that is the same length as everything else that goes through the same hash function. It's crucial to understand that hashing differs from encryption. Data is transformed into the compressed message digest by the one-way procedure of hashing. Hashing can also be used to gauge the message's integrity. On the other hand, encryption is a two-way process that converts plaintext into ciphertext and back again. A message's confidentiality is ensured through encryption. Hash functions can be used to validate digital signatures so that they are applied to a specific person when signing documents online. These signatures are confirmed by associating a person with their precise hash code, much like a handwritten signature. Hashing is additionally used for computer system passwords. The UNIX operating system is credited with inventing password hashing. A user would first generate a password on the system. Using an algorithm or key, that password would be hashed before being saved in a password file. Even today, password-required web apps frequently hash user passwords and store them in a database, demonstrating how important this is.*end*