



Information Technology (IT) provides a wide range of services for individuals and organisations, helping to improve efficiency and productivity in both daily life and business operations.

Smart TV

Smart TVs connect to the Internet, allowing users to stream videos and music, play games, shop and attend video conferences directly from their television. They come with preloaded apps for various online services.

Gaming

Online gaming features 3D graphics for immersive experiences, with options for customisation via facial, voice and gesture recognition. Cloud gaming services allow users to stream games, overcoming device storage limitations and offering a wider variety without individual purchases.

Image capture and manipulation

Digital cameras on devices such as mobile phones allow easy image capture. Cloud storage platforms (for example Flickr and Amazon Photos) provide backup and substantial storage. Photo editing software enables manipulation to enhance or combine images, used for advertising or artistic expression. Head cameras and drones offer unique perspectives for filming.

Webcam services

Webcams facilitate online video communication, allowing users to see each other, interpret expressions and interact more personally. They can also enhance security through facial recognition for device login, but may pose hacking risks.

Social networking

Social networking sites allow people to interact, share information and promote events or businesses. They are categorised by interests, such as news, media sharing or content curation. Users create accounts and manage privacy settings.

Music and sound

Music streaming services provide wide selection and accessibility without using device memory. Artists can use these platforms to market their music globally, often by uploading directly or via distribution services.

Mobile phones

Smartphones offer a multitude of services beyond calls, including messaging, Internet access, cameras, calendars and numerous apps for communication, entertainment and finance. They enable virtual payments via NFC (near-field communication) and serve as essential tools for both personal and professional use.

Banking

Online banking allows convenient 24/7 financial management, including viewing accounts, transferring funds and paying cheques. It reduces the need to visit physical branches, saving time and travel costs.

E-commerce services

E-commerce facilitates online buying and selling of goods and services, operating 24/7 worldwide. It benefits businesses through low start-up and running costs, and provides customers with convenience.

Payroll

Payroll software automates employee payment calculations, deductions and payslip generation. Cloud-based systems save time and allow remote management. Some organisations use external payroll providers.

Modern mail handling methods

Physical mail services, or 'snail mail', use automated sorting systems for faster processing. Apps allow users to track items, buy postage and book collections. Courier companies offer similar services, with tracking information often sent via mobile devices.

Control processes (feedback)

Control systems regulate environments using feedback. For example, smart thermostats adjust heating based on temperature readings. Many home devices, such as security cameras, lighting and appliances, can be controlled remotely via apps.

Robotics and bionics

Robotics involves designing and using robots to perform tasks usually done by humans, often in manufacturing or dangerous environments. Bionics combines engineering and electronics to create mechanical systems, such as prosthetic limbs, that function like living organisms.

Artificial intelligence (AI) and expert systems

AI enables computers or robots to perform human-like tasks, such as decision-making and voice recognition (for example self-driving cars and smart assistants). Expert systems are computer programs that solve complex problems using a database of expert knowledge, often used in diagnostics.

Online shopping and searching for products on websites

Online shopping offers convenience, the ability to compare prices and access to customer reviews from home. Augmented reality (AR) can provide immersive experiences, allowing users to virtually 'try on' clothes or place furniture.

Booking online

Online booking systems manage reservations for services such as entertainment, travel and medical appointments, often including online payment options. Users should verify the authenticity of websites to avoid scams.