Appendix 13A referenced in Section 13

Glossary: Information Management and Digital Implementation

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Version notes:

1. "Glossary" section of Appendix 13A, extracted and to be separately reproduced on the InBoK website as per Mr Rao's comment

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Appendix 13-A: Glossary: Information Management & Digital Implementation

| Abbreviation / Term | Applies to | Explanation |
|---|--|---|
| 2G [Network] | Industry jargon; Communication | The 2nd Generation of wireless networks designed to improve on analogue with digital circuit-switched solutions. The three main 2G technology standards are Global System for Mobile Communications (GSM), time division multiple access (TDMA) and code division multiple access (CDMA). 2G services typically support data rates of 9.6 Kbps, 14.4 Kbps and up to 64 Kbps in certain rare deployments. |
| 3G [Network] | Industry jargon; Communication | The 3rd Generation of wireless networks support peak data rates of 144 Kbps at mobile user speeds, 384 Kbps at pedestrian user speeds and 2 Mbps in fixed locations (peak speeds). |
| 4G [Network] | Industry jargon; Communication | The 4th generation (4G) Long Term Evolution-Advanced (LTE-A) standard is for local- and wide-area mobile platforms supporting high peak data rates of 100 Mbps in WANs and 1 Gbps in fixed or low-mobility situations. 4G is mostly implemented as LTE-A. |
| 5G [Network] | Industry jargon; Communication | 5G is the next-generation cellular standard after 4G. It has been defined across several global standards bodies, with the official ITU specification, International Mobile Telecommunications-2020, targeting maximum downlink and uplink throughputs of 20 Gbps and 10 Gbps, respectively. |
| ADM (Application Data Management) | Information Management; Business Processes | ADM is a technology-enabled business discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, governance, semantic consistency and accountability for data in a business application or suite, such as ERP, custom-made or core banking. Application data is the consistent and uniform set of identifiers and extended attributes maintained and/or used within an application or suite. Examples of such entities include customers, suppliers, products, assets, site, and prices. |
| ADSL (Asymmetric Digital Subscriber Line) | Communication | ADSL is a type of digital subscriber line (DSL) broadband technology that is used to connect to the Internet. It uses standard telephone lines to deliver high-speed data communications (up to 24 megabytes per second). |
| Analogue | Communication; Industry jargon | Analogue is a conventional method of transmitting data relating to or using signals or information represented by a continuously variable physical quantity such as voltage, current, frequency, amplitude, etc. Standard landline telephones use analogue technology. It is distinct from digital technology, which provides for greater quality and speed of data transmission. |
| API (Application Programming Interface) | Software Applications | API is an interface used by a software program to enable interaction with other software. For example, mobile developers can embed Google Maps into a GPS-based mobile application by implementing the Google Maps API. An API defines the kinds of calls or requests that can be made, how to make them, the data formats that should be used, the conventions to follow. |
| AR (Augmented Reality) | Digital Tools & Tech | AR is the real-time use of information in the form of text, graphics, audio and other virtual enhancements integrated with real-world objects. It is this "real world" element that differentiates AR from virtual reality (VR). AR integrates and adds value to the user's interaction with the real world, versus a simulation. |

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| Abbreviation / Term | Applies to | Explanation |
|---|---|--|
| AI (Artificial Intelligence) | Analytics | AI applies advanced analysis and logic-based techniques, including machine learning, to interpret events, support and automate decisions, and take actions. |
| Assistive technology | Digital Tools & Tech | Assistive technology refers to any software or hardware that acts to assist and improve the functional capabilities of people with disabilities. Examples include smart wheelchairs, prosthetics, voice-to-text technology and text-to-speech technology. |
| Authentication | Networking; Software Applications; Information Security | The process of identifying yourself and the verification that you're who you say you are. Computers where restricted information is stored may require you to enter authentication factor (e.g. your username and password) to gain access. There are five common factors used for authentication: Something you know (such as a username and/or password); Something you have (such as a smart card, or a PIN sent to your mobile); Something you are (such as a fingerprint or other biometric method); Somewhere you are (e.g. by Geo-location, or IP Address, or MAC ID of device); Something you do (not so common, but used e.g. user gestures) Multi-factor Authentication relies on simultaneous use of more than one authentication factor. |
| Backward compatible | Software Applications | If software is backward compatible, it is compatible with earlier (superseded) versions of the same software. For example, the Microsoft word-processing program Word 2010 can read files created in the 2003 version of the same program, so it is backward compatible. |
| Bandwidth | Networking; Communication | Bandwidth refers to the maximum amount of data that can be transmitted over a network at any given time. The higher the network's bandwidth, the greater the volume of data that can be transmitted. Network bandwidth is usually expressed in bits per second (bps); modern networks typically have speeds measured in the millions of bits per second (megabits per second, or Mbps) or billions of bits per second (gigabits per second, or Gbps). |
| Big Data | Information Management; Analytics | Big Data refers to data sets that are so large and complex they surpass the storage and analysis threshold of typical/conventional database software. The business advantage of big data analysis is that it provides organizations the ability to identify complex trends and actionable intelligence from the data collected, for smarter decision-making. |
| Bionic | Industry jargon; Digital Tools & Tech | Bionic, (coined from a combination of biology and electronic), commonly refers to the application of engineering technology denoting an artificial, typically electromechanical, body part or parts interconnected with (human) body parts or functions. |
| BIM (Building Information Modelling) | Information Management; Multi-dimensional model; Design & Engineering | BIM is a process supported by various tools, technologies and contracts involving the generation and management of digital representations of physical and functional characteristics of places. Building information models (BIMs) are computer files (often but not always in proprietary formats and containing proprietary data) which can be extracted, exchanged or networked to support decision-making regarding a built asset. BIM software is used by individuals, businesses and government agencies who plan, design, construct, operate and maintain buildings and diverse physical infrastructures, such as water, refuse, electricity, gas, communication utilities, roads, railways, bridges, ports and tunnels. |

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| Abbreviation / Term | Applies to | Explanation |
|--|---|---|
| Bluetooth | Communication | Bluetooth is a is a low-power wireless networking / communications technology intended to replace cables. It allows short-range connections via radio waves between two or more Bluetooth-compatible devices such as mobile phones, tablets, headsets or medical equipment. Bluetooth enables ad hoc networking of up to eight devices (supporting voice and data). |
| BLE (Low-energy Bluetooth) [commonly known as LE] | Communication; Digital Tools & Tech | Bluetooth low energy (LE) is a specification that enables low-power peripherals with a battery life of months to years to communicate with Bluetooth in handsets or other devices. Bluetooth LE opens up a new range of devices and applications such as on-body medical sensors and sports and fitness |
| Blockchain | Industry jargon; Information Security | equipment. A blockchain is an expanding list of cryptographically signed, irrevocable transactional records called blocks, that are linked using cryptography, and shared by all participants in a network. Each block contains a cryptographic hash of the previous block's timestamp and transaction data. By design, a blockchain is resistant to modification of the data. With this information, anyone with access rights can trace back a transactional event, at any point in its history, belonging to any participant. A blockchain is one architectural design of the broader concept of distributed ledgers. |
| Boolean | Software Applications | Most search engines (e.g. Google) allow you to fine-tune your search or make it more specific by using words such as "AND", "OR" and "NOT". These words are known as Boolean operators because of their origin as terms in logic in Mathematics. |
| Bot | Software Applications; Business Processes | A software robot or simply 'bot', is a software application that runs automated tasks (scripts) over the either a computer, or the internet. Typically, bots perform tasks that are simple and repetitive, much faster than a person could. Among the most extensive use of bots is for web crawling, in which an automated script fetches, analyses and files information from web servers. More than half of all web traffic is generated by bots. Bots are also used in automating workflows involving data migration between multiple applications, etc. |
| Broadband | Networking; Communication | Broadband is a type of (high-speed) internet / communications technology whereby a single wire or wireless channel can carry more than one type of signal at once; for example, audio, video and data. |
| Cache | Computing Hardware | A set of files saved on your hard disk that help your browser display pages you have already visited more quickly. It displays the files from your hard disk instead of the web. The act of storing data for fast retrieval is called "caching". e.g. When you download (read) a web page, the data is "cached," meaning it is temporarily stored on your computer. The next time you want that page, instead of requesting the file from the web server, your web browser just accesses it from the cache, so the page loads quickly. The downside to this is that if the cached web page is often updated, you may not be accessing the latest version. |
| CAD / CADD (Computer-aided Design / Computer- aided Drafting & Design) | Software Applications; Design & Engineering | CAD is a type of software that allows users to create 2D and 3D design and modelling. CAD is used by architects, engineers, artists and other professionals to create precise technical drawings. Interchangeably referred to as CADD |

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| Abbreviation / Term | Applies to | Explanation |
|--|---|--|
| CAE (Computer-aided Engineering) | Software Applications; Design & Engineering | It commonly refers to computer software that are used to aid engineering tasks |
| CAM (Computer-aided Manufacturing) | Computing Hardware; Software Applications; Digital Tools & Tech | Is the use of software to control machine tools and related ones in the manufacturing of work pieces. CAM may also refer to the use of a computer to assist in all operations of a manufacturing plant, including planning, management, transportation and storage. CAM is used in many organisations alongside Computer-Aided Design (CAD) to create objects. |
| CCTV | Digital Tools & Tech | Closed-circuit television (CCTV), also known as video surveillance, is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors. It differs from broadcast television in that the signal is not openly transmitted, though it may employ point-to-point (P2P), point-to-multipoint (P2MP), or mesh wired or wireless links. |
| CDE (Common Data Environment) | Industry jargon; Information Management | CDE is defined as a single source of information for the project, used to collect, manage and distribute documentation, the graphical model and non-graphical data to the whole project team. This collaboration of data helps minimise risks and avoids mistakes/duplication. Every data element is mastered (or edited) in only one place. Any possible linkages to this data element across the information system are by reference only. Because all other locations of the data just refer back to the primary 'source of truth' location, updates to the data element in the primary location propagate to the entire system without the possibility of a duplicate value somewhere being forgotten, or existing in conflict with the primary value. |
| CFIHOS (Capital Facility Information Handover Specification) | Industry jargon; Business Processes | CFIHOS is a standard for supply chain participants of process industries to provide a consistent, electronic approach to information handover among the companies that own, operate, construct, design and provide equipment for process facilities. |
| Cloud [a.k.a. Cloud Computing] | Industry jargon; Networking | A common short-form for a provided cloud computing service (or even an aggregation of all existing cloud services) is 'The Cloud'. Cloud computing is the delivery of computing as a real-time web service, whereby shared resources like data, software, and storage services are provided to computers and other devices over the Internet. Cloud computing extends IT's existing capabilities by allowing users to access information, without necessarily having the storage space or even the knowledge to configure this information themselves. Examples of Cloud services include Apple iCloud, Dropbox, Netflix, Amazon Cloud Drive, Google Drive, Microsoft Office 365, and Dropbox. |
| CNC (Computer Numerical Control) | Computing Hardware; Digital Tools & Tech | CNC is the automated control of machining tools (such as drills, boring tools, lathes) and/or 3D printers by means of a computer. A CNC machine processes a piece of material (metal, plastic, wood, ceramic, or composite) to meet specifications by following a coded programmed instruction and without a manual operator. |
| COBIT | Industry jargon; Business Processes | Control Objectives for Information and Related Technology, (or COBIT), originated as an IT control framework, and evolved into a broader IT governance and management framework for the purpose of ensuring that an organization's investment in IT will enable the achievement of its goals. |

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| Abbreviation / Term | Applies to | Explanation |
|----------------------|--|---|
| Compression | Information Management; Software Applications | Compression is the process of performing/achieving reduction of the size of a file. Compressed files take up less disk space and can be downloaded or sent over the Internet more quickly. |
| Connected Worker | Industry jargon; Communication; Digital Tools & Tech | Connected Worker literally means 'a worker connected to someone or something'. Connected Worker solutions are datadriven solutions that enable workers to collaborate safely & efficiently from remote locations; with instant access to actionable data & remote guidance from SMEs, and thereby make more informed decisions in less time. |
| Cookie | Networking; Software Applications | A small piece of code or data created by a web server that a user may be asked to accept when connecting to certain servers via a web browser. It is stored on the user's computer and used throughout the session as a means of identifying the user. A cookie is specific to, and sent only to the server that generated it and is used to keep track of the user's usage patterns and preferences. |
| Cybersecurity | Industry jargon; Information Security | Cybersecurity is the combination of people, policies, processes and technologies employed by an enterprise to protect its cyber assets. This involves preventing unintended and unauthorised access, change and damage to hardware, software and data. |
| Dashboards | Information Management; Analytics; Business Processes | Dashboards are a reporting mechanism that aggregate and display metrics and key performance indicators (KPIs), enabling them to be examined at a glance. Dashboards help improve decision making by communicating contextual information and insights into business performance using intuitive visualization, including charts, dials, gauges or 'traffic lights' that indicate the progress of KPIs toward defined targets. |
| Digital [vs. Analog] | Industry jargon; Communication; Digital Tools & Tech | Digital', in information theory and information systems, is the discrete, discontinuous representation of information, particularly in the form of binary digits forming information units called 'bits'. Digital data can be contrasted with analogue signals which behave in a continuous manner, and with continuous functions such as sounds, images, and other measurements. |
| Digital Twin | Industry jargon; Digital Tools & Tech; Multi-dimensional model; Business Processes | A digital twin is a dynamic, virtual (digital) replica of a living or non-living physical entity. It could be the replica of potential and actual physical assets (physical twin), processes, people, places, systems and devices that can be used for various purposes. Digital twins integrate IoT, artificial intelligence, machine learning and software analytics with spatial network graphs to create living digital simulation models that update and change as their physical counterparts change. |
| Domain | Networking | A domain is a set of computers on a network that are managed as a unit. In the context of the Internet, a Domain is a part of the network hierarchy of the internet. The network hierarchy consists of domains and subdomains. At the top are a number of major categories (e.g., com, edu, gov); next are domains within these categories (e.g., Google, Microsoft); and then there are subdomains. The computer name is at the lowest level of the hierarchy. |
| Drone | Digital Tools & Tech | An unmanned aerial vehicle (see UAV), commonly known as a drone, is an aircraft without a human pilot on board. Drones or UAVs may operate with various degrees of autonomy: either under remote control by a human operator or autonomously by onboard computers. |

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| Abbreviation / Term | Applies to | Explanation |
|---------------------|----------------------------|--|
| EDMS | Information | An EDMS is a computerised system used to receive, track, |
| (Electronic | Management; | manage and store documents and reduce/eliminate/replace |
| Document | Software | paper. They are capable of keeping a record of the various |
| Management | Applications; | versions created and modified by different users and lets them |
| System) | Business Processes | manage access, track and edit information stored. |
| Encryption | Information | Encryption is the manipulation of data by converting it |
| | Security | electronically to an unrecognisable or 'encrypted' form for |
| | | transmission or storage, to prevent accurate interpretation by |
| | | all but those for whom the data is intended of. Encrypted data |
| TD1 CC | T. C | must be 'decrypted' before it can be read in its original form. |
| EPMS | Information | EPMS is a business application layer that integrates |
| (Enterprise Project | Management; | commercial software like ERP, EDMS and in-house |
| Management | Software | applications to cover the entire project life-cycle. This is a |
| System) | Applications; | highly customised application, mirroring the business |
| | Business Processes | execution model of the organisation, and usually allows |
| | | authorised users a seamless single-authentication-based user |
| ERP | Information | interface. |
| (Enterprise | Management; | ERP is usually referred to as a category of business management software—typically a suite of integrated |
| Resources Planning) | Software | applications—that an organization can use to collect, store, |
| Resources Flamming) | Applications; | manage, and interpret data from many business activities. ERP |
| | Business Processes | provides an integrated and continuously updated view of core |
| | Dusiness 1 10ccsses | business processes using common databases maintained by a |
| | | database management system. ERP systems track business |
| | | resources—cash, raw materials, production capacity—and the |
| | | status of business commitments: orders, purchase orders, and |
| | | payroll. |
| Ethernet | Networking; | Ethernet is a type of local area network (LAN) technology, |
| | Computing | providing a simple interface for connecting multiple devices |
| | Hardware | through a wired connection on a network. |
| FE / FEM / FEA | Multi-dimensional | The finite element (FE) method is the most widely used |
| (Finite Element | model; | method for solving problems of engineering and mathematical |
| / FE Modelling | Design & | models. A Finite Element Model (FEM) subdivides a large |
| / FE Analysis) | Engineering | system into smaller, simpler parts that are called finite |
| | | elements which, when put together in a mesh represents the |
| | | entire object. Various parameters are resolved using a system |
| | | of algebraic equations. Simple equations model the finite |
| | | elements and are assembled into a larger system of equations |
| | | that models the entire problem. Studying or analysing a |
| | | phenomenon with an FEM is often referred to as finite element |
| | | analysis (FEA). |
| Federated Database | Information | A federated database is a composite of multiple autonomous |
| | Management; | database systems interconnected via a computer network, and |
| | Software | which may be geographically decentralized, into a single |
| | Applications | virtual database system. There is no actual data integration in |
| | | the constituent disparate databases as a result of data |
| | | federated database systems can provide a uniform user |
| | | federated database systems can provide a uniform user interface, enabling users and clients to store and retrieve data |
| | | from multiple non-contiguous databases with a single query. |
| Firewall | Networking: | A firewall is comprised of hardware, software, or both, and is |
| rnewan | Networking; Information | configured to permit or deny network transmissions based on |
| | Security | a specific set of rules. It acts as a security system to protect |
| | Security | trusted computer systems and networks by blocking |
| | | unauthorised outside connections and untrusted networks, such |
| | | as the Internet. |
| FO | Networking | A fibre-optic cable, also known as an optical-fibre cable, is an |
| (Fibre-optic) | | assembly similar to an electrical cable, but containing one or |
| (I ioi c-opuc) | | assembly similar to an electrical capic, but containing one of |

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| Abbreviation / Term | Applies to | Explanation |
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| | | more optical fibres that are used to carry light. The optical fibre elements are typically individually coated with plastic layers and contained in a protective tube suitable for the environment where the cable will be deployed. Modern fibre cables can contain up to a thousand fibres in a single cable, with potential bandwidth in the terabytes per second. |
| FTP | Industry jargon; Networking | File transfer protocol (FTP) is a common method of transferring files via the internet from one host to another host. |
| Gateway | Networking | A gateway is a device that routes traffic between networks. For example, at home, your router is your gateway. It provides a "gateway" between your LAN and WAN. |
| GPS (Global Positioning Satellite) | Digital Tools & Tech | GPS is a global positioning technology wherein the system uses from two to six geo-stationary satellites to determine the position of a mobile device with a high level of accuracy—of within just a few metres on the surface of the Earth. |
| IOT (Internet of Things) / HOT (Industrial Internet of Things) | Industry jargon; Digital Tools & Tech | IOT is the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment, usually without human intervention. It refers to the billions of physical devices around the world that are now connected to the internet, all collecting and sharing data. IIOT specifically refers to interconnected sensors, instruments, and other devices networked together with computers' industrial applications, including manufacturing and energy management. This connectivity allows for data collection, exchange, and analysis, potentially facilitating improvements in productivity and efficiency as well as other economic benefits. |
| Indexing | Industry jargon; Analytics | An index is a data structure that improves the speed of data retrieval operations on a database table, or information stored on a computer, or network, or the internet. The purpose of storing an index is to optimize speed and performance in finding relevant documents for a search query. Without an index, the search engine would scan every document in the information set, which would require considerable time and computing power. For example, while an index of 10,000 documents can be queried within milliseconds, a sequential scan of every word in 10,000 large documents could take several hours. |
| Industry 4.0 | Industry jargon; Digital Tools & Tech | Also known as the Fourth Industrial Revolution, Industry 4.0 is the ongoing automation of traditional manufacturing and industrial practices, using modern smart technology. Large-scale machine-to-machine communication and the internet of things (IoT) are integrated for increased automation, improved communication and self-monitoring, and production of smart machines that can analyse and diagnose issues without the need for human intervention. |
| Internet | Industry jargon; Communication | It is the worldwide set of interconnected networks that can connect almost any make or model of popular computers from micros to supercomputers and allow computers in different locations to exchange information. The Internet includes services such as the world wide web, electronic mail, file transfer protocol (FTP), chat and remote access to networks and computers. |
| Intranet | Industry jargon; Communication | An Intranet is a network based on internet protocols (referred to as TCP/IP) that is centralized within an organization, and accessible only by the organization's employees or others with authorization. Pages in an intranet look and act just like public |

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| Abbreviation / Term | Applies to | Explanation |
|--|--|---|
| | | web sites, but the firewall surrounding an intranet fends off unauthorized access. |
| ISP | Industry jargon; Networking | An internet service provider (ISP) is a company that provides access to the Internet. |
| IP Cameras | Digital Tools & Tech | An Internet Protocol camera, or IP camera, is a type of digital video camera that receives control data and sends image data via a network. They are commonly used for surveillance but unlike analogue closed-circuit television (CCTV) cameras, they require no local recording device, only a local area network. |
| ISDN (Integrated Services Digital Network) | Networking; Communication | A technical standard and design philosophy for digital networks. ISDN provides high-speed, high-bandwidth channels to every subscriber on a public switched telephone network, achieving end-to-end digital functions with standard equipment interface devices. ISDN networks enable a variety of mixed digital transmission services to be accommodated at a single interface. |
| ISM / ISMS (Information Security Management / Information Security Management Systems) | Business Processes; Information Security | An ISMS describes controls that an organization needs to implement to ensure that it is sensibly protecting the confidentiality, availability, and integrity of assets from threats and vulnerabilities. As part of information security management, an organization may implement an information security management system and other best practices found in the ISO/IEC 27001, ISO/IEC 27002, and ISO/IEC 27035 standards on information security. |
| ITIL | Industry jargon | The Information Technology Infrastructure Library (ITIL) is an IT service management framework that sets forth the best practices and standards for providing IT services. |
| LAN (Local Area Network) | Networking | A local area network (LAN) is a system that connects computers and other devices that share a common communications line and/or a wireless link, generally within a limited geographical area such as a home or office building, for the purpose of sharing resources such as programs, documents, or printers. Shared files often are stored on a central file server. |
| LiDAR / LIDAR (Light Detection and Ranging) | Digital Tools & Tech | Originally coined as a combination of 'Light' and 'Radar', LIDAR is a method for measuring distances (ranging) by illuminating the target with laser light and measuring the reflection with a sensor. Differences in laser return times and wavelengths can then be used to make digital 3-D representations of the target. It has terrestrial, airborne, and mobile applications. |
| LoRa (Long Range) | Networking; Communication | LoRa (Long Range) is a low-power wide-area network protocol based on spread spectrum modulation techniques. LoRa uses license-free sub-gigahertz radio frequency bands and enables long-range transmissions (more than 10 km in rural areas) with low power consumption. |
| Machine Learning (ML) | Analytics | Machine learning is the study of computer algorithms that improve automatically through experience. It is seen as a subset of artificial intelligence. |
| Malware | Information Security | "Malware" is short for malicious software. It refers to a software program that has been developed to do harm to other computers. Types of malware include viruses, worms, trojans and spyware. |
| MAN (Metropolitan Area Network) | Networking | The term is used to describe the interconnection of multiple local area networks in a metropolitan area through the use of point-to-point connections between them. |

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| Abbreviation / Term | Applies to | Explanation |
|--|---|--|
| Metadata | Information Management | Metadata is information that describes various facets of an information asset to improve its usability throughout its life cycle. |
| Modem | Networking; Communication | A modem is a device that allows computers to transmit information to each other via ordinary telephone lines. |
| MR (Mixed Reality) | Digital Tools & Tech | MR is an overlay of computer-generated content that is anchored to and interacts with objects in the real world—in real time. Unlike AR, MR objects visibly adjust with real-world objects (occlusion). |
| NFC (Near-Field Communication) | Communication | NFC is a wireless technology that enables a variety of contactless and proximity-based applications, such as payments, information retrieval, mobile marketing and device pairing. It has an operating range of 10 cm or less. |
| OCR (Optical Character Recognition) | Digital Tools & Tech; Analytics | OCR is the process of reading text from a scanned hard copy or photograph and translating it into a format that a computer can access (e.g., an ASCII file). OCR systems include optical scanners that can process scanned pages for reading text or sophisticated software for analysing images. |
| Operating system | Industry jargon; Software Applications | An operating system (OS) is the software platform that manages all of a computer's processes and allows programs and applications to run. The most prominent operating systems are Microsoft Windows, Mac OS/iOS, Chrome/Android and Linux. |
| PAM / VPAM (Privileged Access Management / Vendor Privileged Access Management) | Software Applications; Business Processes | PAM/VPAM are part of Privileged ID management which is the organizational process for identifying, authenticating and authorizing individuals or groups of people to have access to applications, systems or networks by associating user rights and restrictions with established identities. It is a framework of policies and technologies under the overarching umbrellas of IT security and data management and covers issues such as how users gain an identity, the roles and, sometimes, the permissions that identity grants, the protection of that identity and the technologies supporting that protection (e.g., network protocols, digital certificates, passwords, etc.). |
| PAN (Personal / Premise Area Network) | Networking | A PAN is a computer network for interconnecting electronic devices centred on an individual person's workspace, (devices such as computers, smartphones, tablets and personal digital assistants). PANs can be used for communication among the personal devices themselves, or for connecting to a higher-level network and the Internet where one master device takes up the role as gateway. A PAN may be wireless or carried over wired interfaces such as USB. |
| Phishing | Information Security | Phishing is a type of email fraud in which the perpetrator sends out emails that appear to come from a legitimate service or reputable company, such as a bank or an email service provider. These emails aim to lure recipients to reveal confidential information that the perpetrator can use for their financial advantage - for example, online banking log-in details and passwords. |
| PLM (Plant / Product / Project Lifecycle Management) | Industry jargon; Software Applications; Business Processes | Plant / Product life cycle management (PLM) is a philosophy, process and discipline supported by software for managing facilities or products through the stages of their life cycles, from concept through retirement. Applied to Projects, it covers the processes applicable from the identification/concept up to the commissioning / start-up / handover, and decommissioning (where applicable) phases of the project. |
| Plug-in | Software Applications | A plug-in is a component that adds to a system's functionality. |

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| Abbreviation / Term | Applies to | Explanation |
|---|---|---|
| Protocol | Networking; Communication; Business Processes | A protocol is a standard or set of rules that computers and other devices use when communicating with one another. |
| QR Code / Barcode | Software Applications; Digital Tools & Tech | A barcode or bar code is a method of representing data in a visual, machine-readable form. Initially, barcodes represented data by varying the widths and spacings of parallel lines. Quick response codes (QR codes) are high-density, two-dimensional bar codes that are readable by mobile phones and computer cameras with the correct software in a very efficient and reliable way. |
| Redundancy | Networking; Communication; Software Applications | In the context of software/information, it refers to the portion of the total information contained in a message that can be eliminated without loss of essential information. While referring to hardware/communication, it describes the provision of duplicate, backup equipment or links that immediately take over the function of equipment or transmission lines that fail. |
| RFID (Radio-Frequency Identification) | Digital Tools & Tech | RFID refers to an automated data collection technology that uses radio frequency waves to transfer data between a reader and a tag to identify, track and locate the tagged item. When triggered by an electromagnetic interrogation pulse from a nearby RFID reader device, the tag transmits digital data, usually an identifying inventory number, back to the reader. Tags are of two types: Passive tags are powered by energy from the RFID reader's interrogating radio waves. Active tags are powered by a battery and thus can be read at a greater range from the RFID reader; up to hundreds of meters. Importantly, as contrasted with Barcodes or QR code tags, they do not require a 'line-of-sight' connectivity to be read. |
| Robot | Industry jargon; Digital Tools & Tech | A robot is a machine—especially one programmable by a computer—capable of carrying out a complex series of actions automatically. Robots can be guided by an external control device or the control may be embedded within. Robots may be constructed on the lines of human form, but most industrial robots are machines designed to perform a task with no regard to their aesthetics. |
| RPA (Robotic Process Automation) | Software Applications; Analytics | Robotic process automation (RPA) is a productivity tool that allows a user to configure one or more scripts (commonly referred to as 'bots') to activate specific keystrokes or actions in an automated fashion. The result is that the bots can be used to mimic or emulate selected tasks (transaction steps) within an overall business or IT process as would normally be performed by a human. These may include manipulating data, passing data to and from different applications, triggering responses, or executing transactions. The scripts can run across multiple software applications. |
| Scalability | Networking; Computing Hardware; Business Processes | Scalability is the measure of a system's ability to increase or decrease in performance and cost in response to the requirement of changes in application and/or system processing and/or size of users. Examples would include how well a hardware system performs when the number of users is increased, how well a database withstands growing numbers of queries, or how well an operating system performs on different classes of hardware. Organisations that are growing rapidly, or involved in cyclical businesses like projects should pay special attention to scalability when evaluating hardware and software. |

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| Abbreviation / Term | Applies to | Explanation |
|---|--|---|
| Server | Networking; Computing Hardware | A server is a computer that handles requests for data, email, file transfers, and other network services from other computers. |
| Smart Devices | Digital Tools & Tech | A smart device is an electronic device, generally connected to other devices or networks via different wireless protocols such as Bluetooth, NFC, Wi-Fi, 3G, etc., that can operate to some extent interactively and autonomously. |
| SQL (Structured Query Language) | Information Management; Software Applications | A relational data language that provides a consistent, English keyword-oriented set of facilities for query, data definition, data manipulation and data control. |
| SQL Injection | Information Management; Information Security | SQL injection is a code injection technique, used to attack data- driven applications, in which malicious SQL statements are inserted into an entry field for execution (e.g. to dump the database contents to the attacker). SQL injection attacks allow attackers to spoof identity, tamper with existing data, cause issues such as voiding transactions or changing balances, allow the complete disclosure of all data on the system, destroy the data or make it otherwise unavailable, and become administrators of the database server. |
| UAV (Unmanned Aerial Vehicle) | Digital Tools & Tech | See Drone |
| UI (User Interface) | Industry jargon; Computing Hardware; Software Applications | UI is the space where interactions between humans and machines occur. Examples include the interactive aspects of computer operating systems, hand tools, heavy machinery operator controls, and process controls. UI modes could include elements that are tactile (touch), visual, auditory etc. See also User Experience (UX) |
| URL | Networking | URL (uniform resource locator) is a means of identifying resources on the Internet or web address. It is in the form of a string of characters you type into a browser to access a particular website or other resource on the Internet. (e.g. http://www.google.com) |
| UX (User Experience) | Industry jargon; Computing Hardware; Software Applications | User experience (UX) is a person's emotions and attitudes about using a particular product, system or service, encompassing aspects like practicality, value, utility, ease of use and efficiency. User experience may be subjective (individual perception) and could vary dynamically over time. Simplified, user experience is about how a user interacts with, and experiences, a product. The quality of the UI greatly influences UX. |
| VBA (Visual Basic for Applications) | Software Applications | Visual Basic (VB) is a programming language developed by Microsoft, in which developers can design programs and applications that use a graphical user interface (or GUI). VBA is the VB interface embedded within Microsoft's standard products like Word, Excel, PowerPoint, Outlook, Access, etc. Users with some programming basics can greatly enhance the functionality and thereby, their own productivity by using VBA to build 'macros' and 'user-functions' within these Applications. |
| Virus | Industry jargon; Information Security | A virus is a malware in the form of a piece of programming code inserted into other programming to cause damage. Viruses can be sent in many forms e.g. via email messages or internet websites, or 'infected' files transferred by media like USB drives that, when opened, may erase data or cause damage to your computer system. Special Antivirus programs are used to detect and eliminate viruses. |

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| Abbreviation / Term | Applies to | Explanation |
|--|--|--|
| VPN (Virtual Private Networking) | Networking | VPN is a means of securely accessing resources on a network by connecting to a remote access server through the Internet or other network. VPNs provide traveling workers or remote office locations access to an organization's central network via the internet. VPNs typically require remote user authentication, and data is often secured with encryption technologies to prevent disclosure of private information to unauthorized users. |
| VR (Virtual Reality) | Digital Tools & Tech | Virtual reality (VR) provides a computer-generated 3D environment (including both computer graphics and 360-degree video) that surrounds a user and responds to an individual's actions in a natural way, usually through immersive head-mounted displays to simulate the look and feel of a real environment. Gesture recognition or handheld controllers provide hand and body tracking, and haptic (or touch-sensitive) feedback may be incorporated. VR headsets nowadays have motion sensors and gyroscopes that pass on the user's orientation and head movements to the VR environment to adjust the display accordingly. Room-based systems provide a 3D experience while moving around large areas, or they can be used with multiple participants. |
| WAN (Wide Area Network) | Networking | WAN is a group of networked computers covering a large geographical area (e.g., the Internet). (See also LAN, PAN, MAN) |
| Wearables | Digital Tools & Tech | Wearables, (or Wearable computers) and their interfaces are designed to be worn on the body, such as a wrist-mounted screen or head-mounted display, to enable mobility and hands-free/eyes-free activities. Traditional uses are for mobile industrial inspection, maintenance, user tracking, etc. Consumer uses include display peripherals, computer-ready clothing / helmets and smart fabrics. |
| WEP | Networking; Information Security | Wired equivalent privacy (WEP) is a security protocol used in wi-fi networks. It is designed to provide a wireless local area network (LAN) with a level of security similar to that of a regular wired LAN. WEP-secured networks are usually protected by passwords. (See also WAP.) |
| WPA | Networking; Information Security | Wi-Fi protected access (WPA) is a security protocol used in wi-fi networks. It is an improvement on WEP because it offers greater protection through more sophisticated data encryption. |
| Wi-Fi (Wireless Fidelity) | Networking | Wi-Fi is a technology that allows computers and other devices to communicate via a wireless signal conforming to any type of the IEEE 802.11 network specifications. Essentially, it means devices can connect to a LAN without the need for physical network cables. Products approved as "Wi-Fi Certified" (a registered trademark) are certified as interoperable with each other for wireless communications. |
| WLAN | Networking | Wireless Local Area Network; the computers and devices that make up a wireless network. Connectivity is limited to between 10 and 200 meters depending on physical infrastructure. The use of Wi Fi repeaters can extend this range |
| XR (Extended Reality) | Digital Tools & Tech | XR is a term referring to all real-and-virtual combined environments and human-machine interactions generated by computer technology and wearables, where the 'X' represents a variable for any current or future spatial computing technologies. It includes AR, VR, MR. |

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