### Digital Age Dictionary – definitions to help you understand the digital world

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# A

- Active digital footprints trails on the Internet users leave when sharing information (personal data) on websites or social networking sites (see Passive digital footprints)
- Ad block software that blocks advertisements on websites, web pages or mobile applications, thus improving the user experience when browsing the Internet
- Administrator a user of a digital device having administrator privileges (e.g. installing programs and applications, changing settings, adding new user accounts and managing them; parental controls are set from an administrator account that is password protected)
- Advanced search enables obtaining specified search results according to the selected criteria (e.g. language, file type, domains, etc.) (see Basic searching)
- Algorithm a set of rules or steps that need to be taken when solving a problem
- App or mobile application a computer program specially designed to work on mobile devices such as smartphones, tablets, smart watches, the so-called wearable technology (see Wearable technology)
- Artificial intelligence computer programs enabling computers to 'behave' in a way that could be characterized as intelligent (solving complex tasks, learning, concluding), performing nonroutine tasks instead of humans
- Assistive technology technology (instruments, devices, tools) adapted to the needs of persons with disabilities of different types, aimed at overcoming their functional restrictions and improving the quality of their life (see Digital assistive technology)
- Augmented reality a real world extended with computer generated data and objects (text, image, sound); an example of augmented reality is the *Pokemon Go* video game that allows users to capture Pokemon in the real world using their smartphones (iOS and Android)
- Automatic privacy settings privacy settings automatically set when buying a device, i.e. installation of programs, web browsers, social network profiles; in order to better protect user

privacy, it is recommended to change the default privacy settings

 Avatar – a graphic representation of a user; an icon or figure representing a particular person in the digital environment (e.g. in a video game, Internet forum, personal profile, etc.)

# B

- **Basic searching** online search performed by entering a keyword, i.e. querying in the search box, without specifying the search criteria
- **Bit,** abbreviation of **Binary digit** literal meaning: 'binary number'; the smallest amount of information
- Bitcoin, abbreviated BTC the best known cryptocurrency, a type of digital currency that was created in 2009; it is produced by members of the bitcoin network in the so-called process of 'mining'
- Blog weblog; literal meaning: online journal; keeping a personal journal on a web page that is open to the public with the content edited chronologically; social exchange platform; more information about blogs is available on the web page: <a href="http://webciklopedija.zajednicaucenja.edu.rs/saradnja/blog">http://webciklopedija.zajednicaucenja.edu.rs/saradnja/blog</a> (see Vlog, Microblog and Moblog)
- Bot (Internet bot, web robot) a short name for a software robot that is integrated on web pages, acting as a human; bots have artificial intelligence elements; they can be 'good-natured' (e.g. technical support for a particular website or product, bots in computer games that imitate opponents) or 'malicious' (e.g. advertising, creating automatic accounts on web pages, and leaving a large number of messages); popular meaning of the term bot: a member of a political party who leaves comments that support his party/leader on websites and/or social networking sites

# C

- CAPTCHA a security check to determine whether the device user is a human or machine (malicious virus, spam); the user is required to enter several characters that are displayed on a distorted image, which a computer is unable to do
- **Chatting** a form of communication between two or more users via computer or other digital device (such as a smartphone, tablet), taking place in 'real time' (users are online at the same

time); today there is a large number of chat applications (e.g. Viber, WhatsApp, Skype, Snapchat, etc.)

- Clickbait a link to a website (click-through banner) designed to attract as many users as
  possible to visit a particular website or video in order to increase reading or viewing; clickbaits
  often contain words 'shocking' or 'you won't believe', although they actually contain some
  banal information or no information at all
- **Cloud computing** storing personal data or applications in the so-called data cloud, so that they can be accessed via the Internet from any place or device
- Coding writing a set of instructions (source codes written in programming languages) that enable the computer to perform various tasks, solve problems, interact with the user; the term is often used as a synonym for computer programming
- **Collaboration** cooperation in a digital environment; using digital technology for collaborative processes, mutual creation of content in a digital format (e.g. Google Drive)
- Competence a set of knowledge, skills, attitudes and responsibilities
- **Cookies** pieces of text files that are stored in the user's web browser when viewing a website in order to collect user information and his/her preferences (see **Third-party cookies**)
- Copyright the right of an author of some work (artistic, literary, scientific) to protect the work from unauthorized use; the symbol © indicates that the work is protected by copyright and that it is necessary to request the author's permission for its use (copying, downloading, sharing); most of the content on the Internet is protected by copyright (see CC licence)
- Creative commons (CC) licences copyright licences enabling authors to retain some of the rights, but also to allow other authors to copy, share or modify their work under certain conditions; there are several types of CC licences
- Cryptocurrency a type of digital currency, developed on cryptography (encryption), which
  makes it difficult to counterfeit; in most countries, cryptocurrencies are not legally regulated,
  i.e. there is no regulatory authority nor law governing trade with virtual money (in some
  countries the use of Bitcoin is illegal and punishable under the law); Bitcoin is the first
  decentralized cryptocurrency
- Cybercrime any unlawful behaviour in relation to the computer system and network, including illegal possession, supply and distribution of information through computer systems and networks (computer forgeries, theft, technical manipulation of devices or electronic

#### D

- Dark web dark Internet, encrypted online content that is not indexed on conventional web browsers (e.g. Google, Yahoo, Bing); a tiny part of the so-called deep web, serving to promote illegal activities, e.g. anonymous forums, online drug trafficking, exchange of child abuse photos, etc. (see Deep web)
- Deep web all content on the web requiring a certain type of authentication or identity confirmation (registration or payment) and is 'hidden' from conventional web browsers (does not appear in search results), e.g. for security reasons (private data) or for better user experience
- Digital assistive technology digital technology functioning as assistive technology (e.g. customized keyboards, mice, monitors, voice recognition programs, monitor zoom in, text-to-voice conversion, etc.) (see Assistive technology)
- Digital communication communication that takes place via digital devices and the Internet; it can be: synchronous people who communicate are online 'at the same time' (e.g. chatting) and asynchronous 'not at the same time' (e.g. email communication)
- Digital competence one of the eight key competences for lifelong learning (European Framework of Key Competences, 2006), the most common meaning: reliable and critical use of digital technology in different contexts (the term 'digital literacy' is often used as a synonym)
- Digital content any content in digital format (e.g. websites, databases, e-books, video games, computer programs, etc.)
- Digital currency electronic currency that is not part of the national financial system and therefore not regulated by state authorities, e.g. central bank (there are two types of digital currency: virtual and crypto currency)
- Digital device an electrical device that receives, stores, processes or sends information in digital format (e.g. smartphone, tablet, smart watch, etc.)
- Digital divide in the original sense, the difference between those who have and those who
  do not have access to digital technology (the first-level digital divide differences in access to

digital technology, between those who have and those who do not have access; **the secondlevel digital divide** – differences in digital skills; **the third-level digital divide** – differences in use of digital technology to solve real life problems)

- Digital environment context or 'location' provided by technology and digital devices
- Digital footprints the trails we leave behind when using the Internet; they form our digital reputation and the way other people perceive us (see Active digital footprints and Passive digital footprints)
- Digital identity the identity of a person in a digital environment in which others create an image of us based on the content of our profiles on the social networks, texts, photos and videos we share, our comments, 'likes', 'statuses', 'friends', the groups we are included in, the websites we visit, the activities we follow and participate in (see Online identity)
- Digital immigrants the term introduced by American technologist Marc Prensky (2001) who, under digital immigrants, implied generations born before the emergence of digital technology and the Internet (see Digital natives)
- Digital literacy a set of knowledge, skills and attitudes necessary for critical, safe and creative use of digital technology; modern meaning of the term 'literacy' is far more complex than the traditional understanding of it as the skill of reading, writing, calculating; nowadays, literacy corresponds to the notion of competence
- Digital money money that is available only in digital form; unlike traditional money (e.g. EUR, USD, RSD), digital currency is not part of the national financial system, and therefore not regulated by state authorities; there are two types of digital money: virtual and crypto currency; more information at: <a href="https://www.diplomacy.edu/sites/default/files/AnIntroductiontoIG7">https://www.diplomacy.edu/sites/default/files/AnIntroductiontoIG7</a> th%20edition.pdf
- Digital natives the term originally introduced by American technologist Marc Prensky (2001) who, under digital natives, implied generations born after the emergence of digital technology and the Internet; digital natives' mother tongue is 'digital technology language' (see Digital immigrants)
- Digital reputation the reputation a person has in a digital environment, developed by his/her behaviour within it as well as the content that person posts or shares (about self or others) on the Internet
- Digital resiliency resilience to potential challenges in digital environment; a digitally resilient

child is more likely to remain safe in the digital environment because he/she is able to recognize risks and hazards and respond adequately to them (i.e. has appropriate strategies and mechanisms for overcoming digital challenges)

- **Digital rights** the term is most often used in the context of describing child rights within the digital environment
- Digital technology a comprehensive term including digital devices such as computers, mobile phones, tablets, as well as activities provided by digital devices (e.g. the use of the Internet, social networking websites, etc.)
- Digital tools digital technology tools; Webcyclopedia is the largest catalogue of web-tools in the Serbian language: <u>http://vebciklopedija.zajednicaucenja.edu.rs/</u>
- **Digital violence** the use of digital technology in order to disturb, hurt, humiliate or incur a damage to another person
- Disruptive technology technology that pushes out the existing technology by its appearance, a revolutionary product creating an entire new industry (e.g. the personal computer replaced the typewriter and completely changed the way we communicate and work; the mobile phone replaced the landline phone)
- Distance learning gaining knowledge and skills through delivered information and instructions using different technologies and other forms of distance learning; one should bear in mind that distance learning dates back to the 17th century and is not related only to digital technology
- **Distractors** obstructing factors; in a digital context they refer to unnecessary and undesirable content on a website (e.g. advertising content); web browsers contain tools that block such content

# E

- Emoticon (derived from emotion and icon) a graphic representation of a human face expressing different feelings (the best known is the so-called smiley <sup>(3)</sup>)
- Encryption the process of converting data or information into a code, an unreadable form (for people who do not have the 'key'); in order to become usable and understandable, the encrypted data have to be decoded through the so-called decryption process; encryption provides protection of privacy, but is also used within illegal activities (criminal, terrorist)

 Explicit content on the Internet – unwanted content, e.g. explicit sexual and pornographic content, violent content on the Internet...

# F

- Fake news false, often sensational, information disseminated under the guise of news reporting (Collins Dictionary announced *fake news* the word of the year in 2017) (fake news vs. real news)
- False identity on the Internet an image a person creates about himself/herself on the Internet that does not correspond to reality
- Filtering disabling or restricting access to a part of the Internet, i.e. certain content or services; the term block access is also used
- Flipped classroom a model of teaching where the process of lecturing does not take place in the classroom (which is typical for traditional teaching), but at home – teachers' lectures are presented and viewed via digital devices, while school lessons are used for exercising, discussing, researching, learning in cooperation with others...

## G

- GDPR (General Data Protection Regulation) general regulation on protection of personal data in the European Union, entered into force in May 2016; its implementation began on 25 May 2018; this Regulation stipulates new, stricter rules for those who handle and process other people's data; it also applies to the processing of EU citizens' data by companies outside the EU
- Grooming contact with children via the Internet that includes a series of predatory motivated actions, i.e. preparatory actions aimed at establishing communication and gaining trust, with the ultimate goal of physical contact, i.e. committing sexual abuse of a child

#### Η

- Hacker a person who gains unauthorized access to someone else's data using vulnerabilities in a computer system or network
- Hacking modifying computer programs, illegally entering other security and personal operating systems, unlawful use of the information of others

- Hyperlink a link to another hypertext document or a specific place in the same document; a link to a picture, video or sound recording, an email address (one click on a hyperlink brings you to the desired position)
- **Hypertext** the text containing a hyperlink

I

- Identity on the Internet a person's identity formed upon photos, textual content, audio and video content posted on the Internet by that person (or someone else), e.g. on social network profiles, personal websites (see True identity and False identity on the Internet)
- Identity theft illegal use of another person's private information (e.g. name and surname, username and password, photographs, bank account numbers, pin codes, etc.) for the purpose of commiting fraud (e.g. stealing money from the account)
- Information literacy a set of integrated abilities necessary for finding, storing and
  organizing information, understanding of how information is produced and critically valued
  and the ethical use of information in applying and creating new knowledge
- Interactive digital devices digital devices that 'respond' to user actions by presenting content such as text, images, animation, video, audio
- Interactivity a type of dialogue taking place between the user and a digital device or application
- Internet a global system of interconnected computer networks that use Internet Protocol (TCP/IP) to connect billions of devices worldwide
- Internet etiquette a code of conduct, a set of rules of conduct on the Internet that are similar to those that apply outside it, referring to the relationship with oneself (personal data) and others; way of communication, digital orthography, etc. (see Netiquette)
- Internet of Things, abbreviated IoT a network (usually wireless) of physical devices or things with built-in electronics, software, sensors and network connectivity that allows data collection and exchange; it is applied in households (e.g. smart fridge, thermostat, smart washing machine, lock), healthcare (e.g. smart hospital beds, insulin pumps, watches), industry (e.g. machine fault identifying sensors, soil quality testing); today there is much talk about using the Internet of things to create the so-called smart cities adapted to the modern

lifestyle conditions, making it possible through sensors that monitor a variety of parameters (e.g. air quality, traffic jams...)

- Internet of Toys, abbreviated IoToys toys connected to the Internet (the use of the Internet of things on toys for children); wireless connecting of toys with other toys and devices that allow data transmission; a child can interact with the toy (e.g. *Hello Barbie*, the first interactive doll able to communicate with a child, appeared on the market in 2015)
- Internet predator a person using the Internet (social networks, chat services, chat rooms) in order to establish contact with children and youth with the ultimate goal to abuse or sexually exploit them
- Internet protocol address, abbreviated IP address a unique numeric tag assigned to each device that is connected to the Internet; its function is to identify and recognize computers (e.g. 192.168.1.1)

## <mark>Ј, К</mark> ////

### L

- Licence a software licence granting the right to use software; some licences are obtained upon purchase of a program; there is also an 'open source software licence' allowing the user to modify and distribute software
- Live streaming transmitting live content (audio and video) from the provider to the end user,
   via the Internet
- LMS Learning Management System (e.g. Moodle); a system that enables storage of educational content, monitoring progress of students (or course participants), interaction among students and between students and teachers, etc.

### M

- Malware software that is specifically designed to deliberately disrupt, damage or interfere with a computer system (collects data or gains unauthorized access to private files without knowledge or permission of the owner)
- Microblog a blog comprised of short messages, pictures, videos; Twitter is a popular microblog

service where messages (so-called tweets) were originally limited to 140 characters, and by the end of 2017, the number of characters was doubled for all languages, except for Japanese, Korean and Chinese

• **Moblog**, abbreviation of **Mo**bile **blog** – the type of blog or vlog on which the content is uploaded using mobile devices (e.g. mobile phones or other handheld devices) (see **Blog** and **Vlog**)

#### N

- Net neutrality the principle by which Internet service providers (Internet providers) treat all data or content on the Internet equal or 'neutral', which means they are not able to block, slow down or charge access to specific web pages or content
- Netiquette a set of rules of socially accepted and desirable behaviour on the Internet (see Internet etiquette)

# O

- **One-to-one marketing** a marketing strategy by which companies, on the basis of the analysis of personal data and using digital technology, offer and distribute products to current or prospective customers in accordance with their individual characteristics and needs
- Online identity identity (image of a person) formed on the basis of photographs, textual content, audio and video content posted online by that person (or someone else), activities of a user on the Internet; it may differ from the so-called offline identity the identity of a person in the real world
- Open data data that are available to users free of charge and can be reused with respect to copyright
- **Open educational resources** educational content available on the Internet free of charge, intended for people who want to learn independently

#### P

• **Parental consent** – the consent of the parent/guardian for the child's use of an Internet service; there is currently no consensus on the age under which parental consent is required

(ranging from 13 to 16 years of age) among EU Member States (in which GDPR – General Data Protection Regulation – applies)

- Parental control technical protection measures allowing adults to protect children during the use of the Internet by limiting the time they spend online or content they can access, post or share via the Internet, as well as the activities of the child on the Internet (disabling chatting with strangers, spending money on apps, etc.)
- **Passive digital footprints** trails on the Internet users leave unintentionally and unconsciously, stored without their knowledge (e.g. the IP address of the device accessing the Internet)
- Phishing fishing for passwords; one of the methods of identity theft used by hackers or cyber criminals who try to use fake but often very convincing email or chat messages and websites to make the victims leave valuable personal information (passwords, pin codes, credit card numbers) or install malicious virus on their devices; e.g. the user receives a phishing email that appears to be sent from a known institution, bank, or social network that contains a link to a fake website (e.g. National Bank of Serbia fake website: <a href="http://www.nds.rs/">http://www.nds.rs/</a>; the real website: <a href="http://www.nds.rs/">http://www.nds.rs/</a>)
- Privacy the degree of control that a person has over access and use of his/her personal information on the Internet
- Privacy policy rules that refer to handling personal information of users of a service, platform, social networking site (e.g. which information is collected, for what purposes, the ways users can manage their data); the terms users agree to when registering to an Internet service (users often give their consent without previously being informed of the terms they agree to, which is completely wrong)
- **Privacy settings** the control users have over their personal data, limiting access and the amount of information available to others (e.g. personal profile settings on social networks)
- Profiling any form of personal data automatic processing aimed at assessing and predicting the performance, material status, health, personal preferences, interests, behaviour, location or mobility of a person
- Public domain all creative works to which no exclusive intellectual property rights apply (e.g. commonly known symbols, titles, names, calendars, etc.); they represent a public good and can be freely used; such works use a tag

- **QR code**, abbreviation of Quick Response a link that leads to a website or a social network page, e.g. Facebook or Twitter; it can be found on packages of various products, books, printed advertisements; it is necessary to install a free QR Code Reader application on a mobile device using Android operating system (such as mobile phone or tablet) in order to read this code; the QR Code Reader is also found within some applications (e.g. Viber)
- **Query** a request sent to the web browser or entered into the search box (e.g. the keyword we use to search for some information)

#### R

- Right to be forgotten the right of the users to require a web search engine to delete personal data from the Internet if they estimate their privacy is endangered; The European Court of Justice enabled EU citizens to exercise this right
- Robotification of childhood the growing presence of the so-called social robots and toys connected to the Internet in a child's development (see Internet of toys)

## S

- Safe searching a type of search that provides the possibility to block explicit or inappropriate content on the Internet (using technical protection measures), i.e. filtering search results
- **Scam** an attempt to deceive users inducing them to spend money
- Sexting sending or uploading photos, messages or videos with explicit sexual content
- Sharenting sharing personal information and photos of children on the Internet by their parents/guardians (most often on social networking sites, blogs)
- Smartphone a mobile phone with Internet access; other so-called smart devices include: smart bulbs, smart fridges, washing machines, smart personal assistants (e.g. Amazon Echo), smart homes, etc.
- Social robot a robot with the ability to independently participate in social interactions with people (e.g. social robots used to care for the elderly, participate in the treatment of children with autism, etc.)
- Social technology the so-called web 2.0 technologies which enable communication and collaboration with other users on the Internet

- Spam sending numerous unwanted or malicious messages to a large number of recipients; it is most commonly associated with email, but also applies to social networks, instant messaging, mobile phones; most email services use effective spam filters
- Spinning literal meaning: to 'spin' a story or information aimed at gaining publicity; a form of
  propaganda, manipulation and deception used to achieve the goal (e.g. to convince public
  opinion against or in favour of an organization or a public figure)
- Strong password a password containing at least 8 characters without words that can be found in a dictionary or words that refer to personal life, username or a real name; a combination of uppercase and lowercase letters, numbers and symbols
- Surface web online content that is easily found through conventional web browsers, i.e.
   content appearing in search results

#### Т

- **Terms of use** the conditions under which Internet services (e.g. search engines, social networks) offer their services to users; by using the services, users accept the terms and agree to abide by them (although they are often uninformed about the content of the terms)
- Third-party cookies cookies placed on the web page a user visited by a website from a domain other than the one user is visiting (e.g. Facebook places its cookie on the user's device via the Like
   Page button that can be found on many websites, thus collecting data about the user who liked the page)
- **Tools for collaboration** tools used for working together and creating digital content
- Troll a person whose behaviour disrupts normal communication in an online community
- Trolling a form of harassment on the Internet; posting provocative, inflammatory, unauthorized comments on the Internet forums, blogs, wikis or mailing lists in order to deliberately provoke emotional responses and create a breakdown among participants in communication, discrediting people who think differently, making a discussion unproductive...
- **True identity on the Internet** contains accurate information about a person, reflecting the person as he/she is in the 'real' world (see False identity on the Internet)

<mark>U ///</mark>

- Virtual currency a type of digital currency, virtual money that is not part of the national financial system and therefore not regulated by the state authorities (it is different from electronic money which is controlled by a central bank)
- Virtual reality a computer-generated environment or reality designed to simulate the physical presence of a person in a particular environment, perceived as real
- Visual programming languages programming languages that do not require typing commands (contrary to textual programming languages); it is enough to stack blocks of commands that are visually presented (similar to puzzles or cubes) and develop a program; Scratch is one of the best known programming languages for children (<u>https://scratch.mit.edu/</u>)
- Vlog, abbreviation of video blog unlike in a blog, posts are in video format; in the beginning, vlogs were popular on YouTube, now they can also be found on services such as Vine, Instagram, Facebook, Pinterest...

#### W

- Wearable technology technology embedded in garments or accessories, modern wearable devices for monitoring user activities such as smart watches, fitness trackers (used to measure pulse, number of steps, number of calories burned, etc.)
- Web 1.0 tools the first stage in web development characterized by static web pages (usually written in HTML), slow page loading, minimal interaction between owners and users, users can only read and view content on the web
- Web 2.0 tools the second generation of web services (the so-called social web) that made significant changes in the way the Internet is used: users are enabled not only to read and browse content on the web, but also to create, publish and share content, interactivity, communication, and collaboration and networking. The most popular web 2.0 tools are social networking sites (such as Facebook, Twitter), Wiki, blog, communication tools, messaging (e.g. Google Hangouts) and photos (e.g. Flickr), etc.
- Web 3.0 tools the term that is still being debated, without a clearly defined meaning; it is described as development and expansion of Web 2.0 and a new phase in web development (more info at: <a href="https://rm.coe.int/internet-literacyhandbook/1680766c85">https://rm.coe.int/internet-literacyhandbook/1680766c85</a> page 25)
- Web browser web page reader, a piece of software used to view and interact with web pages

(e.g. Firefox, Internet Explorer, Chrome)

- Web search engine a web tool (service, website) enabling the search of information on the web (e.g. Google, Yahoo, Bing are web search engines that 'track' and record user activities or remember their previous searches; there are also web browsers that 'do not track' user activities, such as DuckDuckGo)
- Webinar, web-based seminar a lecture or workshop streamed online; it can be watched in real time or viewed/downloaded later from the Internet
- World Wide Web one of most frequently used Internet services that allows viewing hypertext documents (documents containing text, images and multimedia content, interconnected by hyperlinks); web is often equated with the Internet, which is wrong, because web is just one of the Internet services

#### X, Y, Z ///