

**Msamiati wa Teknolojia  
Dijitali**

—○—  
A **Lexicon** of Key Words  
in Kiswahili

**Contributors:**

Rocha Chimerah

Mwanahija Juma

Consolata Mushi

Kithaka wa Mberia

Alfred Mtwali

Kimani Njogu

Salome Nduku

Rayya Timmamy

Rachael Ndichu-Ngugi

Duncan Ogweno

**Coordinated by Nanjala Nyabola**

**Assisted by Eunice Njomo**

**Designed by Kedolwa Waziri**

## **1. Alogaridhimu (n)**

a. Utaratibu wa kufumbua mafumbo ya hisabati (kama vile kupata kigawo kikubwa cha nambari zote) kwa hatua zilizobainishwa, ambao mara nyingi hujumuisha kurudia ukokotoaji fulani; utaratibu wa hatua baada ya hatua wa kusuluhisha tatizo au kutimiza lengo fulani. Kanuni zinazotumiwa na kompyuta kuchambua fumbo la hisabati.

### **Algorithm**

a. A procedure for solving a mathematical problem (as of finding the greatest common divisor) in a finite number of steps that frequently involves repetition of an operation broadly: a step-by-step procedure for solving a problem or accomplishing some end. The rules used by a computer to sort through a mathematical problem.

## **2. Upendeleo wa Alogaridhimu (n)**

a. Hurejelea makosa ya utaratibu na yanayoweza kurudiwa katika mfumo wa kompyuta ambayo huzalisha matokeo yasiyo na usawa, kama vile kunufaisha kikundi kimoja cha watumiaji zaidi ya kingine. Upendeleo unaweza kujitokeza kwa sababu nyingi, kama vile muundo wa alogaridhimu au matumizi yasiyonuiwa au yasiyotarajiwa au maamuzi yanayohusiana na jinsi data ilivyoainishwa, kukusanywa, kuchaguliwa au kutumiwa kufundisha alogaridhimu. Mifano ya upendeleo wa alogaridhimu ni pamoja na kutafsiri maneno yanayotaja jinsia kama ya kiume kama chaguo msingi, au kupatia matamshi ya chuki kipaumbele cha juu kuliko habari kwenye mitandao ya kijamii.

## **Algorithmic Bias**

b. Describes systematic and repeatable errors in a computer system that create unfair outcomes, such as privileging one arbitrary group of users over others. Bias can emerge due to many factors, including but not limited to the design of the algorithm or the unintended or unanticipated use or decisions relating to the way data is coded, collected, selected or used to train the algorithm. Examples of algorithmic bias include translating gender neutral pronouns as masculine by default, or promoting hate speech over news in social media networks.

## **3. Uchanganuzi**

a. Mchakato wa kuchambua data ya msingi ili kupata maana yake. Uchambuzi makini na kamili wa data kwa kutumia kielelezo, kwa kawaida hufanywa na kompyuta; habari inayotokana na uchambuzi huu.

### **Analytics**

b. The process of analysing raw data in order to make sense of that information. A careful and complete analysis of data using a model, usually performed by a computer; information resulting from this analysis.

## **4. Ufiche**

a. Hali ya kubaki bila kukujulikana na watu wengine walio wengi. Ufiche mtandaoni ni hali ya kuficha data yako ya kibinafsi, kama vile mahali ulipo, anwani yako ya IP, n.k. ili isionekane na tovuti unazotumia au watumiaji wengine.

### **Anonymity**

b. The state of remaining unknown to most other people. Online anonymity refers to hiding your personal data like your location, IP address, etc. from the websites you use or from other users.

## 5. Akili unde/ Utafiti wa Akili Unde (n)

a. Utafiti na ukuzaji wa mifumo ya kompyuta ambayo inaweza kuiga tabia za binadamu mwenye umaizi.

### **Artificial intelligence**

b. The study and development of computer systems that can copy intelligent human behaviour.

## 6. Mtambowavu/ mitambowavu (n)

a. Programu ya kompyuta inayotekeleza kazi za kiotomatiki kwenye wavuti, kama vile kudumisha uwepo kwenye mitandao ya kijamii.

### **Bot/bots**

b. A computer program that runs automated tasks over the internet like maintaining a presence on social media.

## 7. Uwandaraia (n)

a. Uwandaraia ni mazingira ya kisiasa, ya utungaji sheria, ya kijamii na ya kiuchumi yanayowawezesha raia kujumuika, kushiriki masilahi yao na masuala yanayowatatiza na kutenda kibinafsi na kwa pamoja kushawishi na kuelekeza uundaji wa sera. Uwandaraia huhimiza watu kuzingatia mitazamo mbalimbali, ambayo wakati mwingine hukinzana.

### **Civic space**

b. Civic space is the political, legislative, social and economic environment which enables citizens to come together, share their interests and concerns and act individually and collectively to influence and shape the policy-making. Civic space encourages people to pursue multiple, at times competing, points of view.

## **8. Idhini ya Creative Commons (n)**

a. Leseni mbalimbali zinazowawezesha watu kushiriki kazi zao za hakimiliki ili ziweze kunakiliwa, kuhaririwa, kuendelezwa, n.k., huku wakibaki na hakimiliki ya kazi ya asili (mara nyingi hutumiwa kwa kumtambua mwenye hakimiliki).

### **Creative Commons**

b. A set of various licenses that allow people to share their copyrighted work to be copied, edited, built upon, etc., while retaining the copyright to the original work (often used attributively).

## **9. Ukatili mtandaoni (n)**

a. Shughuli ya kutumia ujumbe kwenye mitandao ya kijamii, barua pepe, ujumbe mfupi, n.k. kumtisha au kumfadhaisha mtu.

### **Cyberbullying**

b. The activity of using messages on social media, emails, text messages, etc. to frighten or upset somebody.

## **10. Ulinzi mtandaoni (n)**

a. Ulinzi mtandaoni ni shughuli za kulinda mitandao, vifaa na data dhidi ya ufikiaji usioruhusiwa au dhidi ya matumizi yaliyo kinyume cha sheria. Vilevile ni mbinu za kuhakikisha usiri, ukamilifu na upatikanaji wa habari.

### **Cyber security**

b. Cybersecurity is the act of protecting networks, devices, and data from unauthorized access or criminal use and the practice of ensuring confidentiality, integrity, and availability of information.

## **11. Usalama mtandaoni (n)**

a. Hatua za kujaribu kuwa salama mtandaoni na vitendo vya kuongeza ufahamu wa mtumiaji kuhusu hatari zilizopo kwa usalama wake binafsi na kwa habari za kibinafsi na miliki inayohusiana na matumizi ya intaneti, pamoja na juhudi za kujilinda dhidi ya uhalifu wa kompyuta.

### **Digital/ Internet safety**

b. The Act of trying to be safe on the internet and is the act of maximizing a user's awareness of personal safety and security risks to private information and property associated with using the internet, and self-protection from computer crime.

## **12. Data (n)**

a. Ukweli au habari, haswa inapochunguzwa na kutumiwa kubainisha mambo au kufanya maamuzi.

### **Data**

b. Facts or information, especially when examined and used to find out things or to make decisions.

## **13. Faragha data (n)**

a. Faragha data au faragha ya habari ni tawi la ulinzi wa data linalohusika na utunzaji mzuri wa data - idhini, ilani na masharti ya kisheria. Hususan, masuala ya faragha data mara nyingi yanahusu ikiwa data inashirikiwa au jinsi inavyoshirikiwa na wengine.

### **Data privacy**

b. Data privacy or information privacy is a branch of data security concerned with the proper handling of data – consent, notice, and regulatory obligations. More specifically, practical data privacy concerns often revolve around whether or how data is shared with third parties.

## **14. Ulinzi data (n)**

a. Udhhibiti wa kisheria unaolinda faragha ya habari iliyohifadhiwa kwenye kompyuta na kuweka mipaka ya wanaoweza kuisoma au kuitumia.

### **Data Protection**

b. Legal controls that keep information stored on computers private and that limit who can read it or use it.

## **15. Kuchunga data (n)**

a. Mchakato ambao kwa kawaida hufanyika kiotomatiki ambapo teknolojia huchukua data kutoka programu au tovuti fulani kwa matumizi mabalimbali; matokeo ya mchakato huu kwa kawaida huwa mkusanyiko wa data inayoweza kuchambuliwa.

### **Data Scraping**

b. A usually automated process where a technology takes data from a particular program or websites for a variety of uses that usually results in aggregation for analysis.

## **16. Limbiko data (n)**

a. Limbiko data ni mkusanyiko wa data iliyopangwa kwa utaratibu na ambayo kwa ujumla inahusishwa na kazi ya kipekee.

### **Data Set**

b. A dataset is a structured collection of data generally associated with a unique body of work.

## **17. Hifadhidata (n)**

a. Hifadhidata ni mkusanyiko wa data iliyohifadhiwa kama limbiko data nyingi. Limbiko data hizo kwa ujumla huhifadhiwa na kupatikana kielektroniki kwenye mfumo wa kompyuta unaoruhusu data kufikiwa, kubadilishwa na kusasishwa kwa urahisi.

## **Dataset**

b. A database is an organized collection of data stored as multiple datasets. Those datasets are generally stored and accessed electronically from a computer system that allows the data to be easily accessed, manipulated, and updated.

### **18. Ughushi mbizi (n)**

a. Media ya kubuniwa ambapo taswira ya mtu aliye katika picha au video ya asili hubadilishwa na kuwekwa taswira ya mtu mwingine, iliyoungwa kwa ufunzaji wa kina wa kompyuta na Akili Unde.

## **Deepfakes**

b. Synthetic media in which a person in an existing image or video is replaced with someone else's likeness, created by deep learning and AI.

### **19. Utambulisho dijitali (n)**

a. Ni jumla ya habari mtandaoni kuhusu mtu binafsi, shirika au kifaa cha kielektroniki.

## **Digital identity**

b. Is the body of information about an individual, organization or electronic device that exists online.

### **20. Umaizi dijitali (n)**

a. Umaizi dijitali ni uwezo wa kutumia teknolojia ya habari na mawasiliano kupata, kutathmini, kuzalishaa na kutoa habari; huhitaji ujuzi wa utambuzi na wa kifundi.

## **Digital literacy**

b. Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

### **21. Taarifa Potoshi (n)**

a. Habari ya uongo inayotolewa kwa makusudi.

## **Disinformation**

b. False information that is given deliberately.



## **22. Ufichuzi Harabu (n)**

a. Kitendo cha kufichua hadharani habari za kibinafsi zilizokuwa za faragha hapo awali kuhusu mtu au shirika; kwa kawaida hufanyika mtandaoni.

### **Doxing**

b. The act of publicly revealing previously private personal information about an individual or organization, usually through the Internet.

## **23. Ufichamishaji Kamili (n)**

a. Ulinzi wa data inayotumwa kupitia majukwaa dijitali ili iweze kusomwa na mtumaji na mpokeaji tu, hususan kuzuia mmiliki wa jukwaa asisome habari hizo na pia wengine wasiweze kuziingilia na kuzisoma.

### **End-to-End Encryption**

b. The protection of data sent over digital platforms so that only the sender and the receiver can read it, particularly excluding the owner of the platform but also third party interference from reading the information.

## **24. Uhuru wa Kutangamana (n)**

a. Haki ya kukutana na watu na kuunda mashirika bila kuhitaji idhini kutoka kwa serikali.

### **Freedom of Association**

b. The right to meet people and to form organizations without needing permission from the government.

## **25. Uhuru wa Kunena (n)**

a. Nguvu au haki ya mtu kutoa maoni bila udhibiti, kizuizi au adhabu ya kisheria.

### **Freedom of Expression**

b. The power or right to express one's opinions without censorship, restraint, or legal penalty.

## **26. Uhuru wa maoni (n)**

a. Haki ya kutoa maoni yoyote kwa umma bila udhibiti au kizuizi kutoka kwa serikali. Pia huitwa uhuru wa kujieleza.

## **Freedom of Opinion**

b. The right to express any opinion in public without censorship or restraint by the government. Also called free speech.

### **27. Unyanyasaji (n)**

a. Kitendo cha kumkasirisha au kumfadhaisha mtu kwa kumshinikiza au kwa kumsema au kumfanyia mabaya.

#### **Harassment**

b. The act of annoying or worrying somebody by putting pressure on them or saying or doing unpleasant things to them.

### **28. Wizi wa utambulisho (n)**

a. Wizi wa utambulisho hufanyika mtu anapoiba taarifa zako za kibinafsi kwa madhumuni ya kufanya ulaghai. Mwizi wa utambulisho anaweza kutumia taarifa zako kuomba mkopo, kutuma ripoti za kodi au kupata huduma za matibabu. Vitendo hivi vinaweza kuharibu hadhi yako ya kupata mikopo na kukugharimu wakati na pesa kurejesha jina lako zuri.

#### **Identity Theft**

b. Identity (ID) theft happens when someone steals your personal information to commit fraud. The identity thief may use your information to apply for credit, file taxes, or get medical services. These acts can damage your credit status, and cost you time and money to restore your good name.

### **29. Uchochezi (n)**

a. Kitendo cha kumhimiza mtu afanye jambo la vurugu, lililo kinyume cha sheria au baya.

#### **Incitement**

b. The act of encouraging somebody to do something violent, illegal or unpleasant.

### **30. Milki Dhihini (n)**

a. Wazo, muundo au kitu kama hicho ambacho mtu amekiunda na ambacho sheria inazuia watu wengine kukinakili.

## **Intellectual Property**

- b. An idea, a design, etc. that somebody has created and that the law prevents other people from copying.

### **31. Taarifa harabu (n)**

- a. Habari ambayo ina msingi wa ukweli, inayotumiwa kudhuru mtu, shirika au nchi.

#### **Malinformation**

- b. Information that is based on reality, used to inflict harm on a person, organization or country.

### **32. Taarifa Potofu (n) (Kutoa taarifa potofu (k))**

- a. Habari zisizo sahihi juu ya jambo fulani; kitendo cha kutoa habari hizo zisizo sahihi.

#### **Misinformation**

- b. The act of giving wrong information about something; the wrong information that is given.

### **33. Usawa wa Mtandao (n)**

- a. Kanuni ya kuwa watoa huduma za mtandao wanapaswa kuruhusu ufikiaji wa tovuti na programu zote bila kujaribu kuzuia au kukuza tovuti au bidhaa fulani.

#### **Net Neutrality**

- b. The principle that internet service providers should allow access to all websites and programs without trying to block or promote particular sites or products.

### **34. Mtandao (n)**

- a. Kikundi cha watu, kampuni, n.k. kinachohusiana kwa karibu na ambacho hubadilishana habari na mambo mengine.

#### **Network**

- b. A closely connected group of people, companies, etc. that exchange information, etc.

### **35. Usawa Mtandaoni (n)**

- a. Kanuni ya kuhakikisha kwamba kila mtu anaweza kupata intaneti bora bila kuzingatia utambulisho wake wala mahali alipo.

#### **Network Equality**

- b. A situation in which everyone has reasonable access to quality internet without respect to whom and where they are.

### **36. Ufikivu Huria (n/kv)**

- a. Ukweli wa jambo kupatikana kwa mtu yeyote ambaye anautaka.

#### **Open access**

- b. The fact of something being available to anyone who wants it.

### **37. Programu Huria (n/kv)**

- a. Hutumika kueleza programu ambayo misimbo chanzo yake inapatikana kwa mtu yeyote bila malipo.

#### **Open Source**

- b. Used to describe software for which the original source code is made available to anyone for free.

### **38. Ubashiri/Bashara (n)**

- a. Taarifa inayosema kile unachofikiri kitatokea; kitendo cha kutoa taarifa hiyo.

#### **Prediction**

- b. A statement that says what you think will happen; the act of making such a statement.

### **39. Kanuni**

- a. Sheria rasmi iliyotolewa na serikali au mamlaka mengine.

#### **Regulation**

- b. An official rule made by a government or some other authority.

## **40. Ugono Kisasi (n)**

a. Picha au video za mtu zinazoonyesha uchi au za kingono zilizochapishwa kwenye wavuti, mara nyingi huchapishwa na mtu aliyekuwa na uhusiano wa ngono naye hapo zamani, bila idhini ya mhusika na ili kumtesa au kumwaibisha.

### **Revenge Pornography**

b. Revealing or sexually explicit images or videos of a person posted on the internet, typically by a former sexual partner, without the consent of the subject and in order to cause them distress or embarrassment.

## **41. Mitandao ya Kijamii (n)**

a. Tovuti na programu zinazotumiwa kwa mawasiliano na maingiliano ya kijamii.

### **Social Media**

b. Websites and software programs used for social networking.

## **42. Udukizi (n)**

a. Ufuatiliaji wa tabia, shughuli au habari kwa kusudi la kukusanya taarifa, kushawishi, kusimamia au kuelekeza. Hii inaweza kujumuisha uchunguzi kutoka mbali kupitia vifaa vya kielektroniki, kama vile kamera za CCTV au kunyaka taarifa inayosambazwa kielektroniki, kama vile data inayopita mtandaoni. Inaweza pia kujumuisha njia rahisi za kiufundi, kama vile wanadamu kukusanya taarifa za kijasusi na kuiba barua za posta.

### **Surveillance**

b. Monitoring of behaviour, activities, or information for the purpose of information gathering, influencing, managing or directing. This can include observation from a distance by means of electronic equipment, such as closed-circuit television (CCTV), or interception of electronically transmitted information, such as Internet traffic.

It can also include simple technical methods, such as human intelligence gathering and postal interception.

### **43. Ukeraji Mtandaoni (n)**

a. Kuandika ujumbe wa uongo au wa kuchukiza kwenye mtandao ili kuwakasirisha wengine.

#### **Trolling**

b. To write false or offensive messages on the internet in order to make other people angry.

### **44. Wavuti**

a. Mtandao wa kompyuta wa mwawasiliano yenye taarifa mbali mbali za kimataifa.

#### **Internet**

b. The global system of interconnected computer networks that uses the Internet protocol suite to communicate between networks and devices.

### **45. Nukuu (n) /Unukuzi (kt)**

a. Mchakato wa kubadilisha maudhui ya sauti kwenye matangazo ya runinga au wavuti, filamu, video, CD-ROM, DVD, tukio linalotangazwa moja kwa moja au kazi zingine zilizotayarishwa kuwa maandishi na kuonyesha maandishi hayo kwenye skrini, kiwambo au mfumo mwingine wa onyesho.

#### **Captions**

b. The process of converting the audio content of a television broadcast, webcast, film, video, CD-ROM, DVD, live event, or other productions into text and displaying the text on a screen, monitor, or other visual display system.

### **46. Kisoma kiwambo (n)**

a. Kisoma kiwambo ni aina ya teknolojia saidizi ambayo hutoa maandishi na picha kama matamshi au breli. Visoma kiwambo ni muhimu sana kwa watu wenye ulemavu wa kutoona na huwasaidia watu wenye matatizo ya kuona, wasiojua kusoma na kuandika au wenye ulemavu wa kujifunza.

## **Screen Reader**

b. A screen reader is a form of assistive technology (AT) that renders text and image content as speech or braille output. Screen readers are essential to people who are blind, and are useful to people who are visually impaired, illiterate, or have a learning disability.

### **47. Mnemba (kv)**

a. Kuwa au kuigwa kwenye kompyuta au mtandao wa kompyuta, -a kutokea au kuishi mtandaoni kimsingi.

#### **Virtual**

b. Being on or simulated on a computer or computer network, occurring or existing primarily online.

### **48. Usimbaji Fiche (n)**

a. Mchakato wa kuvuruga au kufumba data ili iweze kusomwa tu na mtu aliye na njia ya kuirudisha katika hali yake ya asili.

#### **Encryption**

b. Encryption is the process of scrambling or enciphering data so it can be read only by someone with the means to return it to its original state.

### **49. Kikuza Kiwambo (n)**

a. Kikuza kiwambo ni programu inayoingiliana na picha inayotolewa na kompyuta na kuonyesha maudhui yaliyoongezwa ukubwa kwenye kiwambo. Kwa kupanua sehemu ya kiwambo (au kiwambo chote), watu wenye matatizo ya kuona wanaweza kuona maneno na picha vizuri zaidi.

#### **Screen Magnification software**

b. A screen magnifier is software that interfaces with a computer's graphical output to present enlarged screen content. By enlarging part (or all) of a screen, people with visual impairments can better see words and images.

## **50. Onyesho la Breli (n)**

a. Maonyesho ya Breli huwezesha ufikiaji wa habari kwenye kiwambo cha kompyuta kwa kuinua na kushusha mipangilio tofauti ya pini kwenye nukta nundu za breli kielektroniki.

### **Braille Display**

b. Braille displays provide access to information on a computer screen for visually impaired people by electronically raising and lowering different combinations of pins in braille cells.

## **51. Vifaa Mbadala vya Kuingiza Data (n)**

a. Vifaa mbadala vya kuingiza data ni maunzi au programu zinazowawezesha watumiaji walio na aina mbalimbali za ulemavu kutumia kompyuta kwa njia tofauti. Vifaa mbadala vya kuingiza data humwezesha mtu mwenye ulemavu kutumia kompyuta kwa njia yoyote inayomfaa zaidi, kama vile kwa kutumia miguu, kichwa, jicho, mdomo, pumzi, kidole gumba au kidole kimoja.

### **Alternate Input Devices**

b. Alternative input devices are hardware or software solutions that allow users with a variety of disabilities or impairments to access a computer in a different way. Alternative input devices allow the user to access a computer in whatever way works best for them such as using his/her feet, head, eye, mouth, breath, thumb, or a single finger.

## **52. Nyongezo kicharazio (n)**

a. Programu au vifaa vinavyoongezwa kwenye vicharazio vya kompyuta ili kuvifanya viweze kutumika na watu wenye ulemavu.

### **Keyboard enhancements**

b. Software or hardware that is added to computer keyboards in order to make them accessible to persons with disabilities.