

Appendix A: Glossary of Terms

The Emerging Technology Open Working Group helped the City realize that a lot of the terminology that technologists and government use is hard to understand. This glossary is intended to help translate some of the common terms used between government, community, and technology.

Accessibility

Easily used or accessed. This includes enabling access for people with disabilities.

Adaptive Technology

Name for products which help people who cannot use regular versions of products, primarily people with disabilities.

Section 508 of the Rehabilitation Act

A federal law that requires federal agencies to make their electronic and information technology accessible to people with disabilities.

Agile

Agile software development is an approach to software development. It advocates adaptive planning, evolutionary development, early delivery, and continual improvement, and it encourages rapid and flexible response to change.

Algorithm

A sequence of instructions telling an application what to do.

Americans with Disabilities Act

A federal civil rights law that prohibits discrimination based on disability. It requires that state & local governments, and public accommodations ensure effective communication with individuals with disabilities, including equal access to services or information.

Artificial Intelligence

Computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

Assistive Technology

Any item, piece of equipment, or product system that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

Augmented Reality

A technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view.

Autonomous Delivery Robots

A technology service that uses robots to deliver products from point A to point B without direct human navigation.

Biometrics

An evolving form of authentication that uses distinctive, measurable characteristics used to identify an individual.

Blockchain

A blockchain is a decentralized, distributed and public digital ledger that is used to record transactions across many computers so that any involved record cannot be altered retroactively, without the alteration of all subsequent blocks.

Board of Supervisors

The legislative branch of the City and County of San Francisco. The Board consists of 11 members. Each member is elected on a non-partisan basis from a district where he or she lives.

Cease & Desist

A document sent to an individual or business to stop purportedly illegal activity ("cease") and not to restart it ("desist").

Communities of Concern

The definition of "communities of concern" is intended to represent a diverse cross-section of populations and communities that could be considered disadvantaged or vulnerable in terms of both current conditions and potential impacts of future growth.

Community Engagement

A dynamic relational process that facilitates communication, interaction, involvement, and exchange between an organization and a community for a range of social and organizational outcomes.

Data Ethics

Refers to systemizing, defending, and recommending concepts of right and wrong conduct in relation to data, in particular personal data.

Deaf

A particular group of deaf people who share a language – sign language and a culture.

Digital Divide

The gulf between those who have access to digital technologies and the skills to use them effectively, and those who do not.

Digital Economy

Refers to an economy that is based on digital computing technologies, although we increasingly perceive this as conducting business through markets based on the internet.

Digital Equity

Full and equal access to technology and its benefits for all people, regardless of demographics, with additional support for those who need it most.

Director’s Order

Public Works Orders represent formal and official acts of the Department. For example, there are Orders that recommend that the Board of Supervisors approve something within Public Works’ jurisdiction, Orders that announce Public Works/Administrative hearing officer hearings or decisions, and Orders that adopt Public Works regulations implementing various programs or laws, among other actions.

Disability

In California disabilities are broadly defined as conditions that limit a major life activity, including physical and mental disabilities, as well as medical conditions such as cancer or HIV/AIDS. California wdefinitions and protections can be broader than protections under federal law.

Drones

A drone is a flying robot that can be remotely controlled or fly autonomously through software-controlled flight plans in their embedded systems, working in conjunction with onboard sensors and GPS. Drones are more formally known as unmanned aerial vehicles (UAV) or unmanned aircraft systems (UAS).

Emerging Mobility

Emerging Mobility Service or Technology is one that automates three or more of the following services:

- Driving
- Routing
- Reservations/orders
- Vehicle tracking
- Billing
- Customer feedback
- Matching/sharing
- Crowd-sourced routing
- (Un)locking

Examples of Emerging Mobility Services and Technologies include ride-hail services, autonomous vehicles, bike share, and ride-pooling services.

Emerging Technology

Technologies that are perceived as capable of changing the status quo. These technologies are generally new but include older technologies that are still controversial and relatively undeveloped in potential.

Ethical Algorithm

Government leaders and staff who leverage algorithms are facing increasing pressure from the public to better understand the implications of using an algorithm, and be able to clearly articulate the potential risks and identify ways to mitigate them.

Facial Recognition

A biometric application that identifies or verifies a person by comparing and analyzing patterns based on the person's facial contours.

Jurisdiction

The official authority granted to a legal body to administer justice within a defined field of responsibility, e.g., California tax law. In federations like the United States, areas of jurisdiction apply to local, state, and federal levels.

Limited English Proficient (LEP)

Individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English can be limited English proficient, or "LEP." These individuals may be entitled language assistance with respect to a particular type or service, benefit, or encounter.

Low-Income

Low-income is considered twice the level of the federal poverty level. The official poverty thresholds do not vary geographically, but they are updated for inflation.

Machine Learning

Machine learning is an application of artificial intelligence that provides systems the ability to automatically learn and improve from experience without being explicitly programmed.

Ordinance/Resolution

A piece of legislation enacted by a municipal authority.

Personal Identifiable Information (PII)

Information that can be used on its own or with other information to identify, contact, or locate a single person, or to identify an individual in context.

Pilot

Also called a feasibility study or experimental trial, is a small-scale, short-term experiment that helps an organization learn how a large-scale project might work in practice.

Public Domain

The state of belonging or being available to the public as a whole, and therefore not subject to copyright. Public domain refers to all the creative works to which no exclusive intellectual property rights apply. Those rights may have expired, been forfeited, expressly waived, or may be inapplicable.

Public Health

Public health promotes and protects the health of people and the communities where they live, learn, work and play. While a doctor treats people who are sick, public health workers try to prevent people from getting sick or injured in the first place.

Public Right of Way

Type of easement granted or reserved over the land for transportation purposes, this can be for a highway, public footpath, rail transport, canal, as well as electrical transmission lines, oil and gas pipelines. A right-of-way can be used to build a bike trail.

Public Space, Public Realm

The space around, between and within buildings that are publicly accessible, including streets, squares, parks and open spaces. These areas and settings support or facilitate public life and social interaction.

Request for Information (RFI)

Request for Information is a standard business process whose purpose is to collect written information about the capabilities of various suppliers. An RFI is primarily used to gather information to help make a decision on what steps to take next. Normally it follows a format that can be used for comparative purposes.

Request for Proposal (RFP)

A request for proposal is a document that solicits a proposal, often made through a bidding process, by an agency or company interested in procurement of a commodity, service, or valuable asset, to potential suppliers.

Robotic Process Automation

Robotic process automation (or RPA) is an emerging form of business process automation technology based on the notion of software robots or artificial intelligence workers.

Sandbox

A sandbox is a testing environment that isolates untested code changes and outright experimentation from the production environment or repository.

SF Digital Service

Is a team within the City that works with other City departments to improve public services through technology. The team is re-building the City's website and is re-thinking how public services are designed, by understanding what users need.

Sunshine Ordinance

It is an ordinance to insure easier access to public records and to strengthen the open meeting laws. The Sunshine Ordinance also outlines a procedure for citizens to follow if they do not receive public records they have requested.

Transgender

Denoting or relating to a person whose sense of personal identity and gender does not correspond with their birth sex.

Transportation Network Company

An organization that pairs passengers via websites and mobile apps with drivers who provide such services. Transportation network companies are examples of the sharing economy and shared mobility. Sometimes known as a mobility service provider (MSP) or ride-hailing service. Uber and Lyft are prominent examples.

Universal Design

An approach that ensures complete user experience, inclusive of people with disabilities and all users in mind. This approach can be applied to any product, whether that be a building, service or tool, solutions designed using this approach serves not only the needs of a single minority group, but creates an environment that is accessible and convenient for all. Universal Design is based on these 7 Principles:

- 1) Equitable Use - The design is useful and marketable to people with diverse abilities.
- 2) Flexibility in Use - The design accommodates a wide range of individual preferences and abilities.
- 3) Simple and Intuitive Use - Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills or current concentration level.
- 4) Perceptible Information - The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- 5) Tolerance for Error - The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- 6) Low Physical Effort - The design can be used efficiently and comfortably and with a minimum of fatigue.
- 7) Size and Space for Approach and Use - Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Usability Testing	Usability testing is a technique used in user-centered interaction design to evaluate a product by testing it on users. This can be seen as an irreplaceable usability practice, since it gives direct input on how real users use the system.
Virtual Reality	The computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.
Vision Zero SF	Vision Zero SF is the City's road safety policy that builds safety and livability into the streets, protecting the one million people who move about the City every day. The City and County of San Francisco adopted Vision Zero as a policy in 2014, committing to build better and safer streets, educate the public on traffic safety, enforce traffic laws, and adopt policy changes that save lives. The goal is to create a culture that prioritizes traffic safety and to ensure that mistakes on our roadways don't result in serious injuries or death. The result of this collaborative, citywide effort will be safer, more livable streets as we work to eliminate traffic fatalities by 2024.
Voluntary Product Accessibility Template (VPAT)	A self-assessment document completed by a vendor that provides relevant information on how their product or service claims to conform to Accessibility Standards.
Waterfall	The waterfall model is a relatively linear sequential design approach for certain areas of engineering design. In software development, it tends to be among the less iterative and flexible approaches, as progress flows in largely one direction ("downwards" like a waterfall) through the phases of conception, initiation, analysis, design, construction, testing, deployment and maintenance.
World Wide Web Consortium (W3C) standards	The World Wide Web Consortium (W3C) develops international standards for the Web: HTML, CSS, and many more. It includes the Web Content Accessibility Guidelines (WCAG) 2.0 and 2.1 which explains how to make web content and applications more accessible to people with disabilities.