

Terminology Cross Domain

October 2014 · International Symposium Richard Pearce-Moses

Today and Tomorrow

- Brief up date on progress
- Touch on key terms
 - Underlying rationale
 - Call for comments
 - Call for additional terms
- Full text
 - http://arstweb.clayton.edu/interlex/
 - http://168.28.245.230/interlex/

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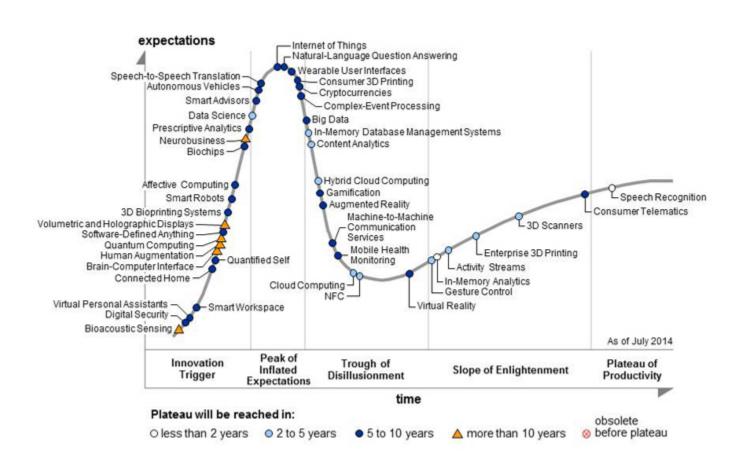
Goals

- Thinking carefully about the meaning of terms often used casually
- Document nuances of and relationships between terms
- Promote consistency in use of terms in dissemination products

Definitions

- Substitutability: essence, not explanation
 - Notes can provide a gloss
- Literary warrant
 - Definitions based on use
 - Authoritative sources

Evolving, conflicting uses



Work to date

- 223 terms (not counting cross references)
 - 56 draft, revised definitions
 - 42 IP2 definitions
- 288 sources of citations
 - 720 citations in context

acceptable risk
anonymity
attestation
audit
big data
blind trust
certification
certification (records)
certification (systems)
chain of custody
cloud
cloud broker
cloud bursting

cloud carrier
cloud computing
cloud consumer
cloud provider
cloud service
cloud storage
community cloud
confidentiality
data
data governance
data management plan
data mining
data obfuscation

disposition schedule
good faith
governance
hybrid cloud
information
information governance
infrastructure as a
service
inherent risk
open
open data
open government
open government data

operational risk
platform as a service
privacy
private cloud
pseudonymity
public cloud
qualitative risk
assessment
quantitative risk
assessment
residual risk
right to be forgotten
right to privacy

risk
risk analysis
risk assessment
risk management
risk mitigation
risk tolerance
software as a service
storage as a service
structured data
text mining
trust
unstructured data

Terms to talk about

- Trust and Risk
- The Cloud
- Data and information
- Openness
- Privacy

trust

- blind trust
- fiduciary trust
- interpersonal trust
- social trust
- trust
- trust law
- trust relationship
- trusted computing
- trustworthiness
- trustworthy trustees

trust

n. ~ Confidence of one party in another, based on alignment of value systems with respect to specific actions or benefits, and involving a relationship of voluntary vulnerability, dependence and reliance, based on risk assessment.

– v. ~ To have confidence in another party with respect to specific actions or benefits

Notes: Trust is subjective, as indicated by the fact that we describe individuals on a scale that ranges from trusting, (to the point of gullibility) to skeptical (to the point of paranoia or conspiracy theory).

trustworthiness

1. [IP2] The accuracy, reliability and authenticity of a record.

2. Dependability, reliability, honesty, and truthfulness.

good faith

Honest dealings, implying a lack of deceit in purpose, faithfulness to duty or obligation, and observance of generally accepted practices, without intent to defraud or to seek unfair advantage.

Notes: Observance of "generally accepted practices" includes social customs appropriate for a given scenario. It suggests that an individual acting in good faith will not "game the system" by taking actions that subvert common, often implicit, expectations. 'Good faith' is sometimes synonymous with bona fides, although in US English that term refers to an individual's credentials. Good faith is the antithesis of 'bad faith', a dishonest purpose or intent, untrustworthy performance, disregard of standards of practice, or attempt for unfair advantage.

risk

- acceptable risk
- enterprise risk management
- inherent risk
- operational risk
- qualitative risk assessment
- quantitative risk assessment

- residual risk
- risk
- risk analysis
- risk assessment
- risk management
- risk mitigation
- risk tolerance

risk

n. ~ Uncertainty associated with the results arising from intentional or unanticipated events, threats, or vulnerabilities, and their impact or probability.

Notes: The ISO 31000 standard on risk management changes the previous definition of risk from the "chance or probability of loss" to "the effect of uncertainty on objectives", suggesting that risk could have either positive or negative consequences.

risk management

n. ~ A program and supporting, integrated activities to identify the likelihood of some event (typically a threat or vulnerability) occurring, assess its impact and priority, and plan a variety of responses.

cloud

- cloud auditor
- cloud broker
- cloud bursting
- cloud carrier
- cloud computing
- cloud consumer
- cloud portability

- cloud provider
- cloud service
- cloud storage
- community cloud
- hybrid cloud
- private cloud
- public cloud

cloud

n. ~ A broad range of infrastructures and services distributed across a network (typically the Internet) that are scalable on demand and that are designed to support management of high volumes of digital materials.

Notes: Meaning is so broad that it is exceptionally nebulous. To the extent the term has been appropriated by marketing, a specific technical definition may be lost in hype.

Prefer a more specific term.

cloud computing (NIST)

n. ~ A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This cloud model is composed of five essential characteristics, three service models, and four deployment models.

Essential characteristics: · On-demand self-service · Broad network access · Resource pooling · Rapid elasticity · Measured service

Service models: · Software as a Service (SaaS) · Platform as a Service (PaaS) · Infrastructure as a Service (laaS)

Deployment Models: Private cloud · Community cloud · Public cloud · Hybrid cloud

Service models

infrastructure as a service

n. ~ A low-level cloud service, with fundamental resources, such as processing, storage, and networks, managed by the provider, giving the consumer the ability to rapidly and conveniently deploy the platform and software.

platform as a service

n. ~ A mid-level cloud service with fundamental infrastructure resources, along with an operating system and commonly with basic utilities such as support for web services, databases, and programming languages that are managed by the provider, leaving the consumer to rapidly and conveniently deploy applications

software as a service

n. ~ A high-level cloud service, managed and hosted by the provider, that offers consumers on-demand access to applications.

Deployment models

public cloud

n. ~ A deployment model in which services (infrastructure, platform, or software) are managed by a third-party provider and made available to the general public.

private cloud

n. ~ A deployment model in which a provider manages and supports infrastructure, platform, or software as a service for the exclusive use of a consumer.

community cloud

n. ~ A deployment model in which a specified group of organizations with common privacy, security, or legal concerns, collaborate to share resources that may be managed by the organizations or a third party, on or off premises.

hybrid cloud

n. ~ A deployment model in which two or more clouds (private, community, or public) remain unique entities, but are connected by standardized or proprietary technology that enables data and application portability.

big data

n. ~ An approach to integrate and analyze diverse datasets that are so large that performance requirements becomes a significant factor when designing and implementing a data management and analysis system.

Notes: Usage is often ambiguous as it is often used for marketing more than as a defining concept. The volume of 'big data' varies with context, and not determined by a specific, quantitative measure. "The key feature of the paradigmatic change is that analytic treatment of data is systematically placed at the forefront of intelligent decision-making. The process can be seen as the natural next step in the evolution from the 'Information Age' and 'Information Societies' (Hilbert 2013). 'Big data' also suggests that "traditional" data management and analysis practices are inadequate; it may be more appropriate to recast this as "requiring innovative data management and analysis practices."

data mining

n. ~ Search to discover patterns, often nonobvious, in information implicit in very large data sets (big data) through a variety of techniques of analysis, categorization, clustering and correlation.

Notes: Search to discover unexpected, unknown patterns information implicit in very large data sets (big data) through a variety of techniques of analysis, categorization, clustering and correlation.

Governance v. Management Data v. Information

data governance

n. ~ A formal program that establishes roles and responsibilities to manage data assets at the enterprise level, including creation, storage, use and disposition, data integrity and quality, and security.

information governance

n. ~ The specification of decision rights and an accountability framework to ensure appropriate behavior in the valuation, creation, storage, use, archiving and deletion of information, including the processes, roles and policies, standards and metrics that ensure the effective and efficient use of information, consistent with the organization's strategic directions. (From Gartner and The Sedona Conference.)

open

- n. ~ 1. Available and accessible for use due to absence of restrictions.
- 2. Available and accessible for use as the result of license.

Note: The Open Knowledge Institute has released a revised definition on 7 October. This entry has not yet been reviewed.

open government

n. ~ An approach to provide greater access to unrestricted information held by public bodies designed to promote transparency, accountability, and citizen engagement and participation, to accomplish a larger outcome of building and enhancing citizens' trust in their governments.

open data

n. ~ Data that is available to anyone, for any purpose, in a structure that facilitates use, and at little or no charge.

Notes: The Open Data Institute asserts that works must be licensed to be <u>open</u>, and considers a work to be open in terms of how the license addresses key principles, including: access, redistribution, reuse, absence of technological restriction, attribution, integrity, no discrimination against persons or groups, no discrimination against fields of endeavor, distribution of license, license must not be specific to a package, and license must not restrict the distribution of other works.

open government data

n. ~ Data that has been created or accumulated in the public sector and that is available to anyone, for any purpose, in a structure that facilitates use, and at little or no charge.

Notes: Open government data is distinguished from open data on the basis that it must meet different expectations, based on principles that the data must be complete, primary, timely, accessible, machine processable, non-discriminatory, non-proprietary, and license free.

privacy

n. ~ 1. A quality or state of seclusion, of keeping to one's self, and being free from intrusion or public scrutiny. – 2. Control over access and use of one's personal information.

Note: In US law, invasion of privacy includes an unauthorized appropriation of an individual's name or likeness for personal benefit; the interference in a person's seclusion or personal affairs that is offensive and intentional; the public disclosure of private information, especially for offensive purposes; and presenting to the public information that places another person in a false light.

confidentiality

n. ~ The expectation that private facts provided to another will be kept secret and will not be shared without consent.

right to be forgotten

n. ~ An individual's claim of privilege to control personal information by demanding that access to such information must be restricted unless there are particular reasons justified by a preponderant interest of the public, including freedom of expression and freedom of information.

Note: The European Court of Justice limits this right to information "that is especially information that is inaccurate, inadequate, irrelevant, or excessive in relation to data processing."

More online

Full database

- http://arstweb.clayton.edu/interlex/pubcomment.php
- http://168.28.245.230/. . . .

Recently drafted, revised entries

http://arstweb.clayton.edu/interlex/pubcomment.php

Full report

http://arstweb.clayton.edu/interlex/flatfile.php

Providing feedback

- Email (rpearcemoses@clayton.edu)
- Cut and paste into a document, with redlined comments, notes in margins
- WebEx or phone discussions
- Scrum meetings
 - Most Mondays, 6:15pm Pacific Time

http://arstweb.clayton.edu/interlex/http://168.28.245.230/interlex/