

Alphabet of Innovation

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Alphabet of Innovation Glossary

Artificial Intelligence

- The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between language. OxfordDictionaries.com. Oxford University Press, n.d. Web. 28 Feb. 2018.
- The ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. *Britannica.com*. Encyclopaedia Britannica, 23 Feb. 2018. Web. 28 Feb. 2018.

AudioContext Fingerprinting

- Tracking technique that harvests the audio signature of an individual machine and uses that as an identifier to track a web user. Lomas, Natasha. "Audio fingerprinting being used to track web users, study finds." *Techcrunch.com*, 19 May 2016.

Augmented Reality

- A technology that superimposes a computer-generated image on a user's view of the real world, thus providing a composite view. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.
- A live direct or indirect view of a physical, real-world environment whose elements are "augmented" by computer-generated perceptual information, ideally across multiple sensory modalities, including visual, auditory, haptic, somatosensory, and olfactory. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Behavioral Advertising

- Also known as behavioral targeting.
- The tracking of a consumer's online activities over time in order to deliver advertising targeted to the individual consumer's interests. "Self-Regulatory Principles for Online Behavioral Advertising." Federal Trade Commission, Feb. 2009.
- When a consumer visits a web site, the pages they visit, the amount of time they view each page, the links they click on, the searches they make, the things that they interact with, and other factors create a "profile" that links to that consumer's web browser. As a result, site publishers can use this data to create defined audience segments based upon visitors that have similar profiles. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Big Data

- Extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.
- Also refers to large corporations that aggregate and sell data.

Blockchain

- A digital ledger in which transactions are recorded chronologically and publicly. *Dictionary.com*. Dictionary.com, n.d. Web. 28 Feb. 2018.
- A continuously growing list of records, called "blocks," which are linked and secured using cryptography. Each block typically contains a cryptographic hash of the previous block, a timestamp, and transaction data which is inherently resistant

to modification of the data. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Bots

- Short for robot.
- A device or piece of software that can execute commands, reply to messages, or perform routine tasks, as online searches, either automatically or with minimal human intervention. *Dictionary.com*. Dictionary.com, n.d. Web. 28 Feb. 2018.

Canvas Fingerprinting

- Tracking technique that works via JavaScript through a capability in web browsers known as the Canvas API that can access a computer's graphics chip. The script gets the computer to generate a unique image that's then used to track the computer's browsing activity. Because the image is not stored with cookies, clearing the computer's cache or blocking cookies is not sufficient to eliminate canvas fingerprinting. Franco, Michael. "How to Reclaim your Digital Privacy from Online Tracking." *Lifehacker.com*, 12 Dec. 2017.

Contextual Advertising

- An advertisement that dynamically appears on a Web site. *Webopedia.com*. Webopedia, n.d. Web. 28 Feb. 2018.
- Contextual ads show the user content similar to what they are currently viewing/browsing based on the page's content and relevant keywords. "Contextual Targeting vs. Behavioral Targeting." *Databilities.net*, 23 Sep. 2016.
- Frequently confused or equated with behavioral advertising.

Cookies

- Also known as HTTP cookies, web cookies, Internet cookies or browser cookies.
- A packet of data that a computer receives and then sends back without changing or altering it, which allows the sender to keep track of the user. Different types of cookies keep track of different activities. Session cookies are used only when a user is actively navigating a website; tracking cookies may be used to create long-term records of multiple visits to the same site; authentication cookies track

whether a user is logged in, and if so, under what name. *Norton.com*. Symantec, n.d. Web. 28 Feb. 2018.

Cryptocurrency

- A digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.
- A defining feature of a cryptocurrency is its organic nature; it is not issued by any central authority, rendering it theoretically immune to government interference or manipulation. *Investopedia.com*. Investopedia, n.d. Web. 28 Feb. 2018.

Disruptive Technology

- Technology that displaces an established technology and shakes up the industry or a ground-breaking product that creates a completely new industry. *WhatIs.com*. TechTarget, n.d. Web. 28 Feb. 2018.

Drone

- Unmanned aerial vehicle (UAV).

Haptic

- The study or use of tactile sensations and the sense of touch as a method of interacting with computers and electronic devices. *Dictionary.com*. Dictionary.com, n.d. Web. 28 Feb. 2018.

Hashing

- A technique for locating data in a file by applying a transformation, usually arithmetic, to a key. *Dictionary.com*. Dictionary.com, n.d. Web. 28 Feb. 2018.
 - Used to index and retrieve items in a database because it is easier to find the item using the shortened, “hashed” key than using the original value. *Techopedia.com*. Techopedia, n.d. Web. 28 Feb. 2018.

Internet of Things (IoT)

- The interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.
- A system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. *Whats.com*. TechTarget, n.d. Web. 28 Feb. 2018.

Machine Learning

- A type of artificial intelligence (AI) that allows software applications to become more accurate in predicting outcomes without being explicitly programmed. The basic premise of machine learning is to build algorithms that can receive input data and use statistical analysis to predict an output value within an acceptable range. *Whats.com*. TechTarget, n.d. Web. 28 Feb. 2018.

Mixed Reality

- The merging of real and virtual worlds to produce new environments and visualizations where physical and digital objects co-exist and interact in real time. Mixed reality takes place not only in the physical world or the virtual world, but is a mix of reality and virtual reality, encompassing both augmented reality and augmented virtuality via immersive technology. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Native Advertising

- Material in an online publication which resembles the publication's editorial content, but is paid for by an advertiser and intended to promote the advertiser's product. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.
- An ad format that must be created specifically for one media channel in terms of the technical format and the content; both must be native to the channel on which they appear, and unable to be used in another context. Joel, Mitch. "We Need a Better Definition of 'Native Advertising'." *HBR.org*, Harvard Business Review, 13 Feb. 2013.

Online Influencers

- Individuals that have influence over potential buyers, and are used as a form of marketing to target a certain demographic rather than target a market as a whole. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Phishing

- An attempt to trick the target into doing what the phisher wants, which might be handing over passwords to make it easier to hack a company, or altering bank details so that payments go to fraudsters instead of the correct account. Palmer, Danny. “What is phishing? Everything you need to know to protect yourself from scam emails and more.” *ZDNet.com*, 6 Sep. 2017.
- “Ph” comes from the hacker term “phreaks” + “fishing” = “phishing.”

Pixels

- An invisible 1x1 image that is placed on a confirmation page of some sort, which relays a code back to the master URL that shows that the pixel was pinged. *Quora.com*. Quora, n.d. Web. 28 Feb. 2018.

Programmatic Advertising

- The process of leveraging an algorithmic-based purchase and sale of digital advertising to target specific audiences, such as segments across age, gender, social or geographic locations; programmatic advertising buyers basically set key parameters such as bid price, reach, specific audience data, platform and dozens of other variables to match buyers algorithmically with inventory. *Webopedia.com*. Webopedia, n.d. Web. 28 Feb. 2018.
- Automated buying and selling of ad inventories across mobile, desktop, search, display and video allow the demand side (advertisers) and supply side (publishers) to transact in real-time. Herman, Ian. “Programmatic Advertising Explained.” *Medium.com*, 4 June 2017.

Spear Phishing

- A type of phishing technique; a targeted attempt to steal sensitive information such as account credentials or financial information from a specific victim, often for malicious reasons. This is achieved by acquiring personal details on the victim such as their friends, hometown, employer, locations they frequent, and what they have

recently bought online. The attackers then disguise themselves as a trustworthy friend or entity to acquire sensitive information, typically through email or other online messaging. Giandomenico, Nina. “What is Spear-Phishing? Defining and Differentiating Spear-Phishing from Phishing.” *DigitalGuardian.com*, 27 Feb. 2018.

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. *OxfordDictionaries.com*. Oxford University Press, n.d. Web. 28 Feb. 2018.

Web Beacons

- A number of techniques used to track who is reading a web page or email, when, and from which computer. They can also be used to see if an email was read or forwarded to someone else, or if a web page was copied to another website. *Wikipedia.org*. Wikimedia Foundation, n.d. Web. 28 Feb. 2018.

Zombie Cookies

- Cookies that regenerate after users delete them. Finley, Klint. “Verizon’s Zombie Cookies Will Finally Be Easier To Kill.” *Wired.com*, 3 March 2016.