Glossary

Big Data & Analytics

Augmented & Virtual Reality: Augmented Reality creates an immersive digital world and enables visual interaction of the digital and physical world via digital overlays which was superimposed onto real-world images via wearable lenses or onto screens of devices with image-capturing abilities; Virtual Reality simulates the real-world and enables users to perform operations on the simulated system. Advanced virtual reality technologies include visual simulation, motion tracking, sensory simulations such as vibrations, etc.

Big Data Analytics for Customer Intelligence: Customer intelligence involves the use of a data to enhance customer experiences, improve service quality, target marketing efforts, capture customer sentiment, increase upsell opportunities and trigger product and service innovation. [Source: Hype Cycle for Big Data, Gartner, 2014]

Big Data & Analytics Platform-as-a-Service: A computing platform which enables users to develop, manage and run big data & analytics applications over the Internet without the complexity of building and maintaining in-house software and hardware required to run the applications. [Source: Hype Cycle for Big Data, Gartner, 2014]

Business Intelligence ETL (Extract, Transform and Load) software: Software/tools which are designed to retrieve, analyse, transform and report data for business intelligence.

Contextual Analytics: Technologies which tap on cumulative history to analyse trends, patterns, and relationships from data observations about entities (people, places, and things), so as to drive the analytics decision process.

Continuous Data Protection: A storage system which continuously backup all the changes made in an enterprise's data sets so as to provide a complete storage snapshot for every instant that data modification occurs.

Copy Data Management: A data management method to maintain lower numbers of data copies and optimise the storage usage by creating a virtual copy of the data and avoiding unnecessary backups in the data storage.

Data Deduplication & Master Data Management: A set of processes and tools to define and manage critical data of an organisation and provide a single point of reference supporting various data operations including harmonisation, standardisation, data consolidation (de-duplication, enrichment), etc. [Source: Hype Cycle for Big Data, Gartner, 2014]

Data Governance: A framework which supports a variety of data operations e.g. metadata management, domain-specific data models storage, etc. and provides the capabilities to manage the availability, usability, integrity, and security of the data employed in an enterprise.

Data Lakes: Data repositories which store large volume of structured and unstructured data sets. Instead of having pre-defined data categories as in typical data warehouses, the data stored in data lakes will be stored in its native format and be processed only when it is needed.

Deep Learning: A new area of Machine Learning, which has been introduced with the objective of moving Machine Learning closer to one of its original goals: Artificial Intelligence. Advances in hardware have been an important enabling factor for the renewed interest of deep learning. In particular, powerful graphical processing units (GPUs) are highly suited for the kind of number crunching, matrix/vector math involved in Machine Learning. [Source: Hype Cycle for Big Data, Gartner, 2014]

Dynamic Data Masking: A technology that delivers real-time data masking of production or non-production data so that the data requester does not get access to sensitive information without changing the original data. [Source: Hype Cycle for Big Data, Gartner, 2014]

Enterprise Solid State Drive (SSD): A non-volatile data storage device that uses integrated circuit (IC) rather than magnetic or optical storage to store data persistently. Compared to HDDs, SSDs offer much lower latency for large volume data read and random access.

Geospatial Analytics: Techniques to collect, process and display geographically associated data sets such as imagery, GPS, satellite photography, etc. to derive business value. [Source: http://en.wikipedia.org/wiki/Geographic_information_system]

Graph Analysis: Analytics techniques to explore relationships between entities of interest, such as organisations, people and transactions in a graph form. [Source: Hype Cycle for Big Data, Gartner, 2014]

Hadoop-Based Data Discovery & SQL interface: Hadoop-based data discovery enables business users to explore and find insights across diverse data (such as clickstreams, social, sensor and transaction data) that is stored and managed in Hadoop. It enables users to directly query the Hadoop Distributed File System (HDFS) without the extensive modelling required by traditional SQL-based approaches, the specialised skills to generate custom MapReduce, Hive or Pig queries, or the performance penalty and lack of interactivity of querying Hadoop through Hive. [Source: Hype Cycle for Big Data, Gartner, 2014]

Hadoop/HDFS: A framework for processing large volumes of data in parallel on clusters of compute nodes. It builds on top of Hadoop Distributed Files System (HDFS) which enables running large scale MapReduce-based parallel programmes on commodity hardware.

High Performance Message Infrastructure: Software or appliances that provide high quality program-to-program communication via techniques such as in-memory computing to support higher throughput and lower latency than traditional message-oriented middleware (MOM) products. [Source: Hype Cycle for Big Data, Gartner, 2014]

Information Semantics Services: Information semantic styles are programming code representations of agreements on how to govern the interdependence between application flows and repositories. Information semantic services convert these agreements from embedded code to callable reusable services, which include taxonomic and ontological recognition of how a business process uses data. [Source: Hype Cycle for Big Data, Gartner, 2014]

In-Memory Database: A database management system (DBMS) that stores the entire database structure in memory to reduce the data access latency by avoiding I/O access of hard disks for storing and retrieving data sets.

In-Memory Data Grids: A data grid which provides a distributed, reliable, scalable and consistent in-memory data store that is shareable across distributed applications. IMDGs maintain data-grid consistency, availability and durability via replication, partitioning and on-disk persistence. [Source: Hype Cycle for Big Data, Gartner, 2014]

MapReduce: A programming model to process large data sets in a parallel and distributed manner. It is composed of a map procedure that performs filtering and sorting and a reduce procedure that performs a summary operation so that workload can be distributed to a large number of independent computing nodes.

Neurobusiness: An interdisciplinary field that seeks to explain human decision making, the ability to process multiple alternatives and to follow a course of action. It studies how economic behaviour can shape our understanding of the brain, and how neuroscientific discoveries can constrain and guide economic models. [Source: http://www.gartner.com/it-glossary/neurobusiness]

Predictive Analytics: An analytics method which encompasses a variety of statistical techniques from modelling, Machine Learning, and data mining that analyse current and historical facts to make predictions about future, or otherwise unknown, events. [Source: http://en.wikipedia.org/wiki/Predictive_analytics]

Prescriptive Analytics: Automatically synthesises big data, taps on mathematical sciences and computational sciences, and business rules, to make predictions and then suggests decision options. The data inputs of prescriptive analytics may come from multiple sources: internal, such as from within a corporation; and external, also known as environmental data. [Source: Hype Cycle for Big Data, Gartner, 2014]

Personal Analytics: Personal analytics is the use of data by an individual to help achieve objectives across a range of domains. [Source: Hype Cycle for Big Data, Gartner, 2014]

Quantum Computing: Theoretical study of computation systems (quantum computers) that use quantum-mechanical phenomena, such as superposition and entanglement, to perform operations on data. Large-scale quantum computers will be able to solve certain problems much more quickly than any classical computers. [Source: http://en.wikipedia.org/wiki/Quantum_computing]

Self-service Data Integration: A data analytics process that enables end users to design and deploy analytics results/reports by integrating and processing datasets from various sources.

Smart Advisors: Technologies to provide the best answers to users' questions based on the analysis of large bodies of ingested content and knowledge of the users' needs. [Source: Hype Cycle for Big Data, Gartner, 2014]

Software Defined Storage: Software technologies that virtualise the underlying hardware storage devices, automate storage operations, and provide an integrated view of storage provisioning across heterogeneous devices.

Solid State DIMM (dual in-line memory module): A solid state storage device that uses double SIMM

(single in-line memory module) as a small circuit board with pins to connect to the computer motherboard for computers.

Telematics: An interdisciplinary method which uses a variety of technologies such as telecommunications, vehicular technologies, road transportation, sensors, wireless communications, and computer science to meet business functions effectively. For example, in modern navigation systems, information is sent, received and stored via telecommunication devices to control remote objects. [Source: Hype Cycle for Big Data, Gartner, 2014]

Virtual Personal Assistants: Technologies to perform the functions of a human personal assistant by observing user's behaviour and interpreting preferences and inferences of people. [Source: Hype Cycle for Big Data, Gartner, 2014

The Internet-of-Things

Biodegradable Batteries: Biodegradable batteries dissolve harmlessly after a certain number of days, weeks, or months. It is very useful in the development of biomedical devices that monitor tissue or deliver treatments. [Source: TreeHugger]

Constrained Application Protocol (CoAP): The Constrained Application Protocol (CoAP) is a specialised web transfer protocol for use with constrained nodes and constrained networks in the Internet of Things. The protocol is designed for Machine-to-Machine (M2M) applications such as smart energy and building automation. [Source: http://coap.technology/]

Data Distribution Service (DDS): Data Distribution Service (DDS) is a type of Communications Middleware whose concept was standardised and is currently managed by the Object Management Group (OMG). DDS simplifies software systems, and reduces risk and costs through development, integration, deployment, and lifetime maintenance of distributed software systems. [Source: What Can DDS Do For Android, 2012, http://www.omg.org/hot-topics/documents/dds/Android_and_DDS1.pdf]

Distributed Decision Making: Distributed decision making (DDM) has become of increasing importance in quantitative decision analysis. In applications like supply chain management, service operations, or managerial accounting, DDM has led to a paradigm shift. [Source: Springer]

Extensible Messaging and Presence Protocol (XMPP): The Extensible Messaging and Presence Protocol (XMPP) is an application profile of the Extensible Markup Language (XML) that enables the near-real-time exchange of structured yet extensible data between any two or more network entities. [Source: Extensible Messaging and Presence Protocol (XMPP), IETF rfc 6120]

Graphene: Graphene is a nanomaterial consisting of one-atom-thick sheets of carbon atoms, with the atoms arranged in a honeycomb lattice structure. [Source: Collins English Dictionary - Complete & Unabridged 2012 Digital Edition]

Intelligence at the Edge: The term "intelligence at the edge" means doing useful processing of the data as close to the collection point as possible and allowing systems to make some operational decisions there, possibly semi-autonomously. This is in contrast to backhauling the data feed to a data center and then processing it there before pushing operational decisions back to the edge platform. [Source: http://www.quora.com/What-is-the-meaning-of-term-intelligence-at-the-edge-of-network]

Message Queue Telemetry Transport (MQTT): MQTT is a Machine-to-Machine (M2M)/"Internet of Things" connectivity protocol. It was designed as an extremely lightweight publish/subscribe messaging transport. It is useful for connections with remote locations where a small code footprint is required and/or network bandwidth is at a premium. [Source: http://mqtt.org/]

Paper-based Batteries: A paper battery is a flexible, ultra-thin energy storage and production device formed by combining carbon nanotubes with a conventional sheet of cellulose-based paper. A paper battery acts as both a high-energy battery and supercapacitor, combining two components that are separate in traditional electronics . This combination allows the battery to provide both long-term, steady power production and bursts of energy. [Source: Whatis.com]

Semantic Web: The Semantic Web provides a common framework that allows data to be shared and reused across application, enterprise, and community boundaries. It is a collaborative effort led by W3C with participation from a large number of researchers and industrial partners. [Source: http://www.w3.org/RDF/FAQ]

Sensor Fusion: Sensor fusion is the software that intelligently combines data from several sensors for the purpose of improving application or system performance. Combining data from multiple sensors corrects for the deficiencies of the individual sensors to calculate accurate position and orientation information. [Source: http://www.kionix.com/sensor-fusion]

Super-capacitor: A super-capacitor is an electrical component capable of holding hundreds of times more electrical charge quantity than a standard capacitor. [Source: Whatis.com]

Vehicular Ad-Hoc Network: Vehicular Ad-Hoc Network (VANET) is an emerging new technology integrating ad-hoc network, wireless LAN (WLAN) and cellular technology to achieve intelligent inter-vehicle communications and improve road traffic safety and efficiency. [Source: IEEE VEHICULAR TECHNOLOGY MAGAZINE | JUNE 2007, http:// webpages.uncc.edu/ywang32/research/vanet-VTM.pdf]

Web of Things: The Web of Things (WoT) is a computing concept that describes a future where everyday objects are fully integrated with the Web. The prerequisite for WoT is for the "things" to have embedded computer systems that enable communication with the Web. Such smart devices will then be able to communicate with each other using existing Web standards. [Source: Techopedia, http://www.techopedia.com/definition/26834/web-of-things-wot]

Future Communications

4.5G: 4.5G is between 4G and 5G. Its networks will support latency rates of around 10 milliseconds, peak downlink speeds of around six Gbps, and the ability to support 100,000 connections within a single square kilometre. [Source: FierceWireless]

5G Standardisation: 5G (Fifth generation mobile networks or wireless systems) denotes the next major phase of mobile telecommunications standards beyond the current 4G/IMT-Advanced standards.

NGMN Alliance or Next Generation Mobile Networks Alliance defines 5G network requirements as:

1. Data rates of several tens of Mb/s should be supported for tens of thousands of users.
2. One Gbit/s to be offered, simultaneously to tens of workers on the same office floor.
3. Several hundreds of thousands of simultaneous connections to be supported for massive sensor deployments.
4. Spectral efficiency should be significantly enhanced compared to 4G.
5. Coverage should be improved.
6. Signalling efficiency enhanced.

[Source: Wikipedia and NGMN 5G White Paper]

802.11ac: 802.11ac, also known as Gigabit Wi-Fi, is a proposed specification in the 802.11 family applicable to WLANs (wireless local area networks). 802.11ac represents an extension or update of the current 802.11a standard. [Source: WhatIs.com, http://whatis.techtarget.com/definition/80211ac]

802.11ad: 802.11ad, also called WiGig 1.0, is a proposed specification in the 802.11 family applicable to WLANs (wireless local area networks). 802.11ad represents an extension or update of the current 802.11a standard. [Source: WhatIs.com, http://whatis.techtarget.com/definition/80211ad]

802.11ah: IEEE 802.11ah is a new PHY and MAC design that operates in the sub-one-gigahertz (900MHz) band. 11ah is intended to support extended range Wi-Fi, and the Internet-of-everything (IoE). The 11ah PHY and MAC are optimised from the ground up for extended range, power efficiency, and scalable operation. [Source: Qualcomm, https://www.qualcomm.com/#/invention/research/projects/wi-fi-evolution/80211ah]

802.11ax: It is the successor to 802.11ac, and will increase the efficiency of WLAN networks. Currently at a very early stage of development this project has the goal of providing four times the throughput of 802.11ac. [Source: Wikipedia]

802.11u: Hot Spot 2.0 (HS 2.0), also called Wi-Fi Certified Passpoint, is a new standard for public-access Wi-Fi that enables seamless roaming among Wi-Fi networks and between Wi-Fi and cellular networks. [Source: Techtarget, http://whatis.techtarget.com/definition/Hot-Spot-20-HS-20]

802.22: IEEE 802.22, is a standard for wireless regional area network (WRAN) using white spaces in the television (TV) frequency spectrum. IEEE 802.22 WRANs are designed to operate in the TV broadcast bands while assuring that no harmful interference is caused to the incumbent operation: digital TV and analogue TV broadcasting, and low power licensed devices such as wireless microphones. The standard was expected to be finalised in Q1 2010, but was finally published in July 2011. [Source: Wikipedia]

Cloud-Based RAN: A Centralised-RAN, Cloud-RAN, or C-RAN architecture addresses capacity and coverage issues, while supporting mobile xHaul (Fronthaul and Backhaul) solutions as well as network self-optimisation, self-configuration, self-adaptation with software control and management through SDN and NFV. Cloud RAN also provides great benefits in controlling ongoing operational costs, improving network security, network controllability, network agility and flexibility. [Source: The Benefits of Cloud-RAN Architecture in Mobile Network Expansion, Fujitsu]

Cognitive Radio: Cognitive radio (CR) is a form of

wireless communication in which a transceiver can intelligently detect which communication channels are in use and which are not, and instantly move into vacant channels while avoiding occupied ones. This optimises the use of available radio-frequency (RF) spectrum while minimising interference to other users. [Source: TechTarget, http://searchnetworking.techtarget.com/definition/cognitive-radio]

D2D (Device-to-Device): Device-to-Device (D2D) communication is a technology component for LTE-A. In D2D communication, user equipments transmit data signals to each other over a direct link using the cellular resources instead of through the base station, which differs from femtocell where users communicate with the help of small low-power cellular base stations. [Source: 3GPP]

Dash 7: DASH7 is a new, market alliance with the goal of increasing the market size for ultra-low-power wireless product lines by cultivating a global network of partners in this space. As the name hints, the basis for DASH7's goal is with the ISO 18000-7 standard for low power RF. [Source: Introduction to DASH7 Technologies, 1st Edition, https://dash7.memberclicks.net/assets/PDF/dash7 per cent20wp per cent20ed1.pdf]

Dynamic Spectrum Management: Dynamic Spectrum Management (DSM) allows adaptive allocation of spectrum to various users in a multi-user environment as a function of the physical-channel demographics, to meet certain performance metrics. [Source: John M. Cioffi, Stanford University, http://web.stanford.edu/group/cioffi/dsm/]

Edge/Fog Computing: Edge Computing is pushing the frontier of computing applications, data, and services away from centralised nodes to the logical extremes of a network. It enables analytics and knowledge generation to occur at the source of the data. [Source: Pacific Northwest National Laboratory, http://vis.pnnl.gov/pdf/fliers/EdgeComputing.pdf]

Embedded SIM: GSMA Embedded SIM is a vital enabler for Machine-to-Machine (M2M) connections including the simple and seamless mobile connection of all types of connected machines. [Source: GSMA]

Femtocell: A femtocell is a low-power access point, based on mobile cellular technology, providing wireless voice and broadband services to customers with a limited range within a home or in an office environment. [Source: Federal Communications Commission, http://transition.fcc.gov/pshs/techtopics/techtopics23.html]

FiberLAN: FiberLAN is a high-performance, high density GPON based Optical LAN solutions (OLS) delivering high speed data, voice and video to multi-level, multi-unit commercial and industrial complexes, including hotel rooms, bandwidth demanding desktops and work-stations. [Source: Zhone Technologies]

Fixed/Mobile Convergence: Fixed/mobile convergence refers to the ability of telecommunications companies to provide their subscribers with services that interact with and use both the fixed networks of incumbent wireline and/or cable operators and the mobile/cellular networks of mobile operators. [Source: Cisco, http://www.cisco.com/c/en/us/solutions/service-provider/fixed-mobile-convergence/index.html]

Heterogeneous Network (HetNet): A heterogeneous network is a network comprising different kinds of networks, for example, Wi-Fi and cellular, different coverages, or different spectrum access methods in licensed and unlicensed spectrum. HetNet encompasses three features: 1) Intelligent and seamless access across Networks; 2) Consistent quality of experience across networks; and 3) Innovative and dynamic resource management. [Major source: Ministry of Communications and Information, Singapore, http://www.mci.gov.sg/web/content/infocomm-media-masterplan/preliminary-ideas/establish-agile-pervasive-and-trusted-icm-infrastructure/heterogeneous-network]

Holographic Telepresence: Holographic telepresence is an evolving technology for full-motion, three-dimensional (3D) video conferencing. [Source: Techtarget, http://whatis.techtarget.com/definition/holographic-telepresence]

Hybrid UCC: Hybrid unified communications and collaboration (UCC) allows enterprises to procure UCC services through several deployment models, while supporting the seamless service integration needed to deliver a UCC experience to users, for example, by blending traditional on-premises, public cloud and private cloud deployment models. Hybrid UCC allows organisations to select different procurement models for different UCC functionality. Hybrid UCC can also support adoption of different procurement models for different user roles within the organisation. [Source: Garnter, http://www.gartner.com/it-glossary/hybrid-unified-communications-and-collaboration-ucc]

IMS: The IP Multimedia Subsystem (IMS) is a concept for an integrated network of telecommunications carriers that will facilitate the use of IP (Internet Protocol) for packet communications in all known forms over wireless or landline. [Source: techtarget]

IPv6: IPv6 (Internet Protocol version six) is a set of specifications from the Internet Engineering Task Force

(IETF) that is essentially an upgrade of IP version four (IPv4). The basics of IPv6 are similar to those of IPv4 -- devices can use IPv6 as source and destination addresses to pass packets over a network, and tools like ping work for network testing as they do in IPv4, with some slight variations. [Source: TechTarget, http://searchenterprisewan.techtarget.com/definition/IPv6]

Location-based Services (LBS): Location-based services (LBS) use real-time geo-data from a mobile device or smartphone to provide information, entertainment or security. Some services allow consumers to "check in" at restaurants, coffee shops, stores, concerts, and other places or events. [Source: Business News Daily, http://www.businessnewsdaily.com/5386-location-based-services.html]

LTE-Advanced: LTE Advanced is the next major step in the evolution of our LTE networks. It is a new network technology that is expected to both help band-aid the massive increases in mobile data demand, and deliver much higher data speeds for all. [Source: Digital Trends, http://www.digitaltrends.com/mobile/what-is-lte-advanced-and-why-should-you-care/]

LTE Broadcast: LTE Broadcast is the most efficient mechanism to distribute the same content to many users, and is an important solution to address the 1000x data challenge. Initially focusing on venue casting, LTE Broadcast can address many other media distribution such as software updates and breaking news. [Source: Qualcomm]

Massive MIMO: Massive MIMO (also known as Large-Scale Antenna Systems, Very Large MIMO, Hyper MIMO, Full-Dimension MIMO and ARGOS) makes a clean break with current practice through the use of a very large number of service antennas (e.g., hundreds or thousands) that are operated fully coherently and adaptively. [Source: FP7 Project MAMMOET, www.massivemimo.eu]

Mobile Satellite Services: This refers to networks of communications satellites intended for use with mobile and portable wireless telephones. [Source: Techtarget, http://searchmobilecomputing.techtarget.com/definition/mobile-satellite-services]

NFV (Network Function Virtualisation): Network functions virtualisation (NFV) (also known as virtual network function (VNF)) offers a new way to design, deploy and manage networking services. NFV decouples the network functions, such as network address translation (NAT), firewalling, intrusion detection, domain name service (DNS), and caching, to name a few, from proprietary hardware appliances so they can run in software. [Source: SDNCentral, https://www.sdxcentral.com/resources/nfv/whats-network-functions-virtualization-nfv/]

OpenFlow: OpenFlow is a protocol that allows a server to tell network switches where to send packets. In a conventional network, each switch has proprietary software that tells it what to do. With OpenFlow, the packet-moving decisions are centralised, so that the network can be programmed independently of the individual switches and data centre gear.

[Source:WhatIs.com, http://whatis.techtarget.com/definition/OpenFlow]

Optical OFDM: Orthogonal frequency division multiplexing (OFDM) is a modulation technique which is now used in most new and emerging broadband wired and wireless communication systems because it is an effective solution to inter-symbol interference caused by a dispersive channel. Very recently a number of researchers have shown that OFDM is also a promising technology for optical communications. [Source: OFDM for Optical Communications, Journal of Lightwave Technology, Feb 2009, http://www.researchgate.net/publication/228980861_OFDM_for_Optical_Communications]

Quantum Communication: Quantum communication is the art of transferring a quantum state from one place to another. Quantum communication is built on a set of disruptive concepts and technologies. [Source: FP7 project, http://cordis.europa.eu/fp7/ict/photonics/docs/factsheets/qurep-flyer_en.pdf]

Self-Organising Network (SON): Self organising networks, SON, can be defined as a set of use cases that govern a network including the planning, set up and maintenance activities. In this way the self-organising networks enable the network to set itself up and then manage the resources to enable the optimum performance to be achieved at all times. [Source: Radio-Electronics.com, http://www.radio-electronics.com/info/cellulartelecomms/self-organising-networks-son/basics-tutorial.php]

Small Cell: Small cell is an umbrella term for operator-controlled, low-powered radio access nodes, including those that operate in licensed spectrum and unlicensed carrier-grade Wi-Fi. Small cells typically have a range from 10 meters to several hundred meters. [Source: Small Cell Forum]

TV White Spaces (TVWS): TV White Spaces (TVWS) are frequencies made available for unlicensed use at locations where the spectrum is not being used by licensed services, such as television broadcasting.

[Source: Spectrum Bridge]

UCC: Unified communications and collaboration (UCC) describes the combination of communications and collaboration technologies. Until recently, enterprise collaboration vendors were fairly distinct from those for enterprise communications, with software companies like Microsoft and IBM dominating the former and telephony and networking vendors comprising the latter. However, this distinction has become blurred because Microsoft and IBM offer voice and telephony features and vendors like Cisco have moved into the collaboration market. [Source: Gartner, http://www.gartner.com/it-glossary/unified-communications-and-collaboration-ucc]

WDM PON: An emerging FTTH technology that is vendor-specific in its implementation at the optical layer. A major advantage is the long reach that WDM PON offers, and so it is mostly used today in backhaul scenarios to serve base stations, OLTs, or other aggregation devices. [Source: Genexis]

Web Real-Time Communications: Web Real-Time Communications (WebRTC) is an open source project that seeks to embed real-time voice, text and video communications capabilities in Web browsers. With WebRTC, end-users do not have to download a special software application or use the same client or browser plug-in to communicate directly with each other. [Source: TechTarget, http://searchunifiedcommunications.techtarget.com/definition/WebRTC-Web-Real-Time-Communications]

White-Box Switching: White box switching refers to the ability to use 'generic,' off-the-shelf switching and routing hardware, in the forwarding plane of a software-defined network (SDN). [Source: SDxCentral]

Z-Wave: The Z-Wave protocol is an interoperable, wireless, RF-based communications technology designed specifically for control, monitoring and status reading applications in residential and light commercial environments. [Source: Z-Wave Alliance, http://z-wavealliance.org/about_z-wave_technology/]

ZigBee: ZigBee is a mesh network specification for low-power wireless local area networks (WLANs) that cover a large area. ZigBee is based on the Institute of Electrical and Electronics Engineers Standards Association's 802.15 specification. It operates on the IEEE 802.15.4 physical radio specification and in unlicensed radio frequency bands, including 2.4 GHz, 900 MHz and 868 MHz. The specifications are maintained and updated by the ZigBee Alliance. [Source: TechTarget, http://searchmobilecomputing.techtarget.com/definition/ZigBee]

Cyber Security

Accurate Attribution: The use of processes and technologies to trace and locate the attackers. [Source: http://en.wikipedia.org/wiki/Cyber-attack; and http://resources.infosecinstitute.com/attribution-problem-in-cyber-attacks/]

Dynamic Data Masking: Automated data masking technology that aims at masking data in real-time so that the data requester does not get access to sensitive data without changing the original data sets. [Source: Hype Cycle for Big Data, Gartner, 2014]

Provably Secure System Architectures: System architectures that use mathematical models to proof that the architecture is secure. [Source: http://en.wikipedia.org/wiki/Provable_security]