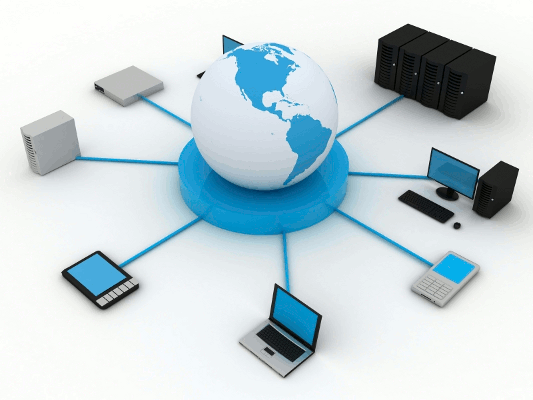
* ***Networking:***

Networking is the name of joining two or more computers for the purpose of communication and transfer of data. It is the exchange of information or services among individuals, groups, or institutions; specifically:  the cultivation of productive relationships for employment or business.



Creating a [group](http://www.businessdictionary.com/definition/group.html) of acquaintances and [associates](http://www.businessdictionary.com/definition/associate.html) and keeping it [active](http://www.businessdictionary.com/definition/active.html) through regular [communication](http://www.businessdictionary.com/definition/communication.html) for [mutual](http://www.businessdictionary.com/definition/mutual.html) [benefit](http://www.businessdictionary.com/definition/benefit.html). Networking is based on the question "How can I help?" and not with "What can I get?" Fine example of networking is Internet called World Wide Web (www). Www is a collection of *millions* of computers and servers.

* ***Work Station:***

## A workstation is a special computer designed for technical or scientific applications. Intended primarily to be used by one person at a time, they are commonly connected to a local area network and run multi-user operating systems. It is a big computer in an organization. It is a computer intended for individual use that is faster and more capable than a personal computer. It's intended for business or professional use (rather than home or recreational use). Workstations and applications designed for them are used by small engineering companies, architects, graphic designers, and any organization, department, or individual that requires a faster microprocessor, a large amount of random access memory ([RAM](http://searchmobilecomputing.techtarget.com/definition/RAM)), and special features such as high-speed graphics adapters. Historically, the workstation developed technologically about the same time and for the same audience as the [UNIX](http://searchenterpriselinux.techtarget.com/definition/Unix) operating system, which is often used as the workstation operating system. Among the most successful makers of this kind of workstation are Sun Microsystems, Hewlett-Packard, DEC, and IBM.

## 

* ***Server:***

Server is a big computer who provides required data and information when a small or personal computer send request for it. In a technical sense, a server is an [instance](http://www.computerhope.com/jargon/i/instance.htm) of a computer program that accepts and responds to requests made by another program; known as a [client](http://www.computerhope.com/jargon/c/client.htm). Less formally, any device that runs server software could be considered a server as well. Servers are used to manage [network](http://www.computerhope.com/jargon/n/network.htm) resources. For example, a user may setup a server to control access to a network, send/receive e-mail, manage print jobs, or host a website.

Some servers are committed to a specific task; often referred to as dedicated. As a result, there are a number of dedicated server categories, like print servers, file servers, network servers and database servers.

## 

* ***LAN:***

## LAN stands for local area network. It is the most common type of network. It covers a small area. It usually connects computers and devices within one office or group of buildings and covers a small area. The data transfer rate of a local area network is 10Mbps to 1000Mbps. It is much faster than data transfer over a telephone line. There is a limit of number of computers to be attached in it.

## 

* ***WAN:***

## WAN stands for wide area network. This type of network covers a large area. It connects computers and different devices in different cities and different countries. Wide area network simply connects several Local area networks together. Computers in WAN are often connected from fiber optic cable and satellites. The speed of this network depends upon speed provided from service Provider Company. The speed is from 56Kbps to 50Mbps. The best example of WAN is the internet.

## 

* ***MAN:***

## MAN stands for metropolitan area network. This type of network covers the area of a city. It is larger than LAN but smaller than WAN. It usually used to connect two or more LANs in a city. A telephone line, cable television operators is the fine example of MAN. This Network (MAN) is a large computer network that spans a metropolitan area or campus. Its geographic scope falls between a WAN and LAN. MANs provide Internet connectivity for LANs in a metropolitan region, and connect them to wider area networks like the Internet. A MAN might be owned and operated by a single organization, but it usually will be used by many individuals and organizations. MANs might also be owned and operated as public utilities. They will often provide means for inter-networking of [local networks](http://en.wikipedia.org/wiki/Local_network).

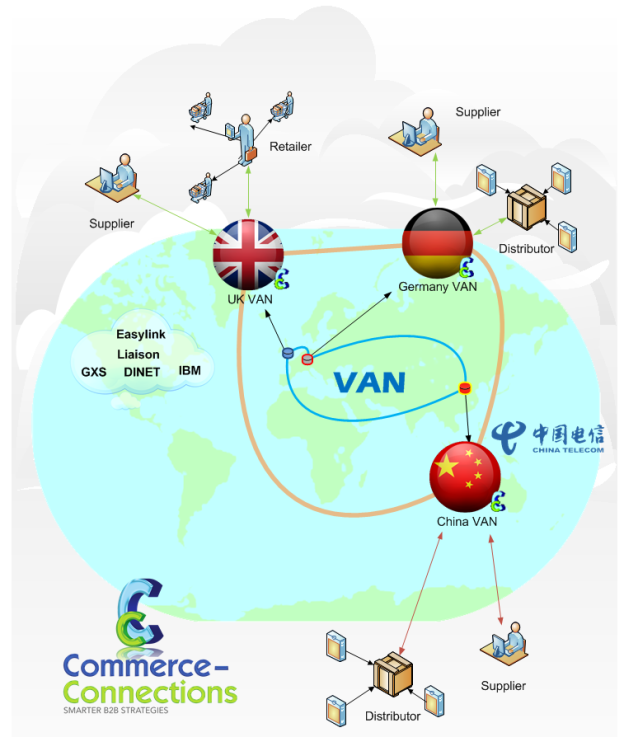
## 

* ***VAN:***

Van stands for **value-added network.** AValue-added Network(VAN) is a hosted service offering that acts as an intermediary between business partners sharing standards based or proprietary data via shared [Business Processes](http://en.wikipedia.org/wiki/Business_Process). The offered service is referred to as "Value-added Network Service".Value-added networks got their first real foothold in the business world in the area of electronic data interchange (EDI). VANs were deployed to help trading and supply chain partners automate many business-to-business communications and thereby reduce the number of paper transfers needed, cut costs and speed up a wide range of tasks and processes, from inventory and order management to payment.

A Value Added Network's customers typically purchase leased lines that connect them to the network or they use a dial-up number, given by the network owner, to gain access to the network. A value-added network, or VAN, involves the use of a common carrier’s phone lines to allow business-to-business network communication; the network is “value-added” because it has various services and enhancements that improve the way business applications communicate with each other.

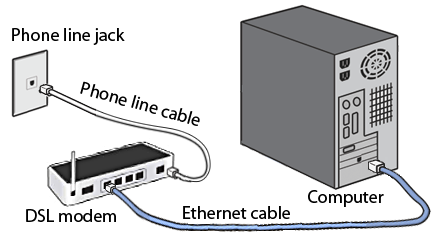
The use of a VAN provides communication channels among supply chain and trading partners by allowing the transmission of data and its translation between formats. The automated communications achieved through a VAN can help a business and its trading partners engage in more effective e-commerce transactions through the encryption, retransmission, and support of messages, but from a small business’s cost perspective, the implementation of a VAN can also be expensive and a resource-intensive endeavor.



* ***DSL:***

DSL stand for **Digital subscriber line.** Digital subscriber line (DSL; originally digital subscriber loop) is a family of technologies that provide [internet access](http://en.wikipedia.org/wiki/Internet_access) by transmitting [digital data](http://en.wikipedia.org/wiki/Digital_data) using a local [telephone network](http://en.wikipedia.org/wiki/Telephone_network) which uses the [Public switched telephone network](http://en.wikipedia.org/wiki/Public_switched_telephone_network). In telecommunications marketing, the term DSL is widely understood to mean [asymmetric digital subscriber line](http://en.wikipedia.org/wiki/Asymmetric_digital_subscriber_line) (ADSL), the most commonly installed DSL technology. DSL service is delivered simultaneously with [wired telephone service](http://en.wikipedia.org/wiki/Plain_old_telephone_service) on the same [telephone line](http://en.wikipedia.org/wiki/Telephone_line). This is possible because DSL uses higher [frequency bands](http://en.wikipedia.org/wiki/Frequency_band) for data. On the customer premises, a [DSL filter](http://en.wikipedia.org/wiki/DSL_filter) on each non-DSL outlet blocks any high frequency interference, to enable simultaneous use of the voice and DSL services.

The [bit rate](http://en.wikipedia.org/wiki/Bit_rate) of consumer DSL services typically ranges from 256 Kbit/s to over 100 Mbit/s in the direction to the customer ([downstream](http://en.wikipedia.org/wiki/Downstream_%28networking%29)), depending on DSL technology, line conditions, and service-level implementation. Bit rates of 1 Gbit/s have been reached in trials. In ADSL, the data throughput in the [upstream](http://en.wikipedia.org/wiki/Upstream_%28networking%29) direction, (the direction to the service provider) is lower, hence the designation of asymmetric service. In [symmetric digital subscriber line](http://en.wikipedia.org/wiki/Symmetric_digital_subscriber_line) (SDSL) services, the downstream and upstream data rates are equal. Researchers at [Bell Labs](http://en.wikipedia.org/wiki/Bell_Labs) have reached broadband speeds of 10[Gbps](http://en.wikipedia.org/wiki/Gbps), while delivering 1Gbit/s symmetrical ultra-broadband access services using traditional copper [telephone lines](http://en.wikipedia.org/wiki/Telephone_lines). These speeds can be achieved with existing telephone lines and can be used to deliver broadband where fiber optic cables can't be installed to the premise.



* ***Modem:***

It is a device used to convert words into digital signals vice versa. A modem (modulator-demodulator) is a device that [modulates](http://en.wikipedia.org/wiki/Modulation) signals to encode [digital information](http://en.wikipedia.org/wiki/Digital_information) and [demodulates](http://en.wikipedia.org/wiki/Demodulation) signals to decode the transmitted information. The goal is to produce a [signal](http://en.wikipedia.org/wiki/Signal_%28electronics%29) that can be transmitted easily and decoded to reproduce the original digital data. Modems can be used with any means of transmitting analog signals, from [light emitting diodes](http://en.wikipedia.org/wiki/Light_emitting_diode) to [radio](http://en.wikipedia.org/wiki/Radio). A common type of modem is one that turns the [digital data](http://en.wikipedia.org/wiki/Digital_data) of a [computer](http://en.wikipedia.org/wiki/Computer) into modulated [electrical signal](http://en.wikipedia.org/wiki/Electrical_signal) for transmission over [telephone lines](http://en.wikipedia.org/wiki/Telephone_line) and demodulated by another modem at the receiver side to recover the digital data. Modems are generally classified by the amount of data they can send in a given [unit of time](http://en.wikipedia.org/wiki/Time_unit), usually expressed in [bits per second](http://en.wikipedia.org/wiki/Bits_per_second) (symbol bit/s, sometimes abbreviated "bps"), or [bytes per second](http://en.wikipedia.org/wiki/Bytes_per_second) (symbol B/s). Modems can also be classified by their [symbol rate](http://en.wikipedia.org/wiki/Symbol_rate), measured in [baud](http://en.wikipedia.org/wiki/Baud). The baud unit denotes symbols per second, or the number of times per second the modem sends a new signal.



* ***Fiber Optic cable:***

An optical fiber cable is a [cable](http://en.wikipedia.org/wiki/Cable) containing one or more [optical fibers](http://en.wikipedia.org/wiki/Optical_fiber) that are used to carry light. The optical fiber elements are typically individually coated with plastic layers and contained in a protective tube suitable for the environment where the cable will be deployed. Different types of cable are used for different applications, for example long distance [telecommunication](http://en.wikipedia.org/wiki/Telecommunication), or providing a high-speed data connection between different parts of a building. Optical fibers are widely used in [fiber-optic communications](http://en.wikipedia.org/wiki/Fiber-optic_communication), where they permit transmission over longer distances and at higher [bandwidths](http://en.wikipedia.org/wiki/Bandwidth_%28computing%29) (data rates) than wire cables. Fibers are used instead of [metal](http://en.wikipedia.org/wiki/Metal) wires because signals travel along them with less [loss](http://en.wikipedia.org/wiki/Attenuation) and are also immune to [electromagnetic interference](http://en.wikipedia.org/wiki/Electromagnetic_interference). Fibers are also used for [illumination](http://en.wikipedia.org/wiki/Illumination_%28lighting%29), and are wrapped in bundles so that they may be used to carry images, thus allowing viewing in confined spaces. Specially designed fibers are used for a variety of other applications, including [sensors](http://en.wikipedia.org/wiki/Sensor) and [fiber lasers](http://en.wikipedia.org/wiki/Fiber_laser).