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progress in using
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The twenty-first century as well as the preceding twentieth century have both witnessed a kind of quantum leap in the world of computers.

They have both been ages where humans have not only made progress in using computers for calculation purposes but also periods where humans have made use of computers for the purpose of advancing communication within themselves irrespective of the large distances that separated them. The inception of the wired connections sparked the creation of another world form which is today referred to as the Global village. Every effort has been progressively aimed at refining this global interconnectedness among humans but we should realize that it all began from the wired networks. In light of this, this essay examines the differences between Wired and Wireless networks, some of which are found in the cost effectiveness, reliability, mobility, speed, coverage as well as the security they both proffer. To begin with, what have been defined as wired networks consists of networks which are created through the use of cables such as Ethernet cables as well as routers. In contrast, wireless networks refer to the use of infrared or radio frequency signals to share information or resources between devices of all sorts. One common thread among them is the sharing of information as well as resources between devices but due to their differences, one can say that the wireless networks are much advanced option to wired networks. The first area of difference for both networks can be found in their coverage.

At the inception of wired networks where cables were used to connect computing devices together, the coverage was one which was grossly limited as there were limited ports to which the cables could connect to added with the fact that most personal individuals, offices, schools and other

organizations had not fully latched on to the idea of connecting on the World wide Web. Wireless networks however, have an almost unlimited coverage since cables are not required to connect devices together. The users only need to ensure that their devices which range from mobile terminals, pocket sized PCs, laptops, cellular phones, PDAs etc. had connective features. As with coverage also, one could see that wireless networks can reach long distances and is present in most regions of the world as opposed to wired networks.

This wide coverage makes the aim of interconnectedness, information sharing as well as other forms easier in wireless networks than in wired networks. Another difference between Wired networks and Wireless networks lies in its cost effectiveness in terms of its setup as well as the maintenance process. In order to get wired networks starting, seasoned operators who have to get Ethernet cables for users who desire to connect to the World Wide Web and the number of users on such networks can only be decided by the number of cables used. This setup process is one that is not only costly but one that is very tasking in physical strength as well as time. Further down the line as the network is set up, there needs to be regular maintenance of such network and when any device is disconnected, the process of reconnecting such device(s) is one which is very difficult.

In contrast, wireless networks are very easy to set up to accommodate numerous devices at the same time without having to buy cables to connect them. Through the setting up of radio, infrared, Bluetooth frequencies, numerous devices can be able to connect at the same time and this makes the task of repair of connection or maintenance of the network an easy task

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for the technician in charge. In the features of speed bandwidth as well as mobility, there are noticeable major difference between the wired network and the wireless network. Taking a close look at the features of wired connections, the speed and bandwidth levels reach up to 100mbps and this always makes the connectivity high which makes transfer of resources much faster. This is as a result of the fact that there are always smaller number of connections within wired networks as opposed to wireless networks which are not impeded with cables like the former. Speed and bandwidth for wireless networks however, are much slower, reaching 54mbps which implies that the connectivity levels are weaker than the wired networks and the transfer levels would be noticeably slower. This reason for this resides in the fact that most wireless networks can be configured in a way to take unlimited number of connections from devices which have the connective features. Also, in terms of mobility, wired networks, due to the fact that they have to be connected with the use of cables, are hardly mobile in nature which makes it more difficult for the users to connect while in transit.

On the other hand, since wireless networks require devices to connect to certain frequencies, it means that the network is mobile. In the present day, an athlete jogging in a stadium may be connected to a wireless network and communicating with a student in a faraway country. Any individual can connect to any wireless network without attaching a cable to link up with other people's devices. In terms of visibility, there are also marked differences between Wired and Wireless networks which determine their performances. Wired networks are characterized by their invisibility to other

wired networks which may be around and this helps to boost the strength of their connections since there are usually no intrusions by other networks.

This makes this kind of network the type that is usually favorable among corporations which intend to keep their operations hidden from the public.

Wireless networks however are always visible to other wireless networks and this usually impedes the workings of any wireless network. Since anyone having a device can be able to connect to any frequency, the wireless networks usually encounter more security challenges in contrast to wired networks which encounter less due to the hidden nature of their network. In conclusion, wired networks as well as wireless networks both are primed at connectivity as well as sharing irrespective of their differences and one must note that even though most individuals favors wireless connections more, wired connections have not gone out of vogue because of the exclusivity they offer.