Networking

Question A: Competitive advantages can be gained by the Wannabee Training Group by engaging in Computer Networking. Instead of hiring another specialist to cover other training area, the merged group can tap the trainers of the other centres. In that way, all the other centres that have formed part of the merger will be able to offer various training sessions with their current clients without additional labor cost. Their operations and target markets also expanded without the need for put up branches in the locations of the other companies. Thus, a large amount of money can be saved by investing with resources needed for computer networking such as technical staffs, network gears, and applications (Midkiff, 2004).

Each centre must have knowledgeable personnel to network file transfers and real time-links. At the same time, they must be competent enough to troubleshoot in case of network failure during training proper. The staffs must be headed by the network administrator to ensure " smooth flow" of information in the system. (Midkiff, 2004)

As for gears, an 802. 11g router (devices needed to connect various computer networks) is recommended than the 802. 11b type since it supports faster peer-to-peer computer networking. (Wikipedia b, 2006) Since the company will be handling real-time video streams, it is necessary to invest in fast routers. Switches are also recommended than hubs in the setup that Wannabee Training Group wants to employ. No bandwidth sharing among various communication lines will happen if switches are to be used in the feedback feature between trainers and trainees. The switcher allows direct communication between two people privately, and will not use the traffic of the whole network. (Mitchell, 2006)

The merged company must also adopt a uniform set of protocol and

application to allow file sharing and video streaming (Wikipedia a, 2006). The application allows file sharing among users in the network, while the protocols provide the language by which the computers in the network will communicate. (Midkiff, 2004)

Question B:

There are a lot of possible options to use in implementing a network system. But not all of the options can be applied to Wannabee Training Group because of the needs that have to be addressed.

On the two types of network designs, the peer-to-peer type of system is most recommended. This kind of system will allow the groups to utilize all the resources of the centres, including storage capacity, bandwidth and computer power. All computers in the network can also perform the same functions. Thus, the capacity of each centre to host and deliver their specialty trainings will be deemed equitable. (Wikipedia b, 2006)

If the client-server type of system will be used, it can be observed that if other " clients" will join, it will slow down data transfer, since the resources utilized will be that of the server. We do not want this case, since the company is looking into a possibility for expansion (merger with other training centres). (Wikipedia b, 2006)

The other advantages of peer-to-peer network system can also be stressed when it comes to the capacity of the other centres to send feedback to the hosting centre. The feedback task is decentralised and autonomised. The centre will be held responsible in handling the task, instead of a server which will be taking care of all of the processes. (Wikipedia a, 2006)

To make it more specific, an unstructured peer-to-peer type of network system can be employed to address the need for expansion. In this type of

setup, a new training company that just entered the connection can just copy links of another node and form its own connections afterwards. (Wikipedia b, 2006)

Sources:

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Mitchell, B., (2006) What is (Wireless Computer) Networking. [online]. About. com.

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