

### Chapter 3 - Networking and Group Computing

#### Defining Workgroup Computing Systems

The collaborative team approach is taking cen

Workgroup computing refers to any computer system that replicates the manual work process. Anytime two or more people work together sharing information on a computer system it can be defined as group computing. It is a way to electronically process human transactions. The focus is on information sharing, coordination and collaboration. When two people manually send letters or memos to each other, it is called a workgroup process. When two people send the same letters or memos using e-mail, it is referred to as workgroup computing. Any software that supports workgroup computing can be labeled as groupware.

“In a global society, in which the exchange of information is a very important commodity, collabora-

Workgroup computing is about working with other people in an electronic work environment. This collaboration can take place in offices located next to each other or in different parts of the world. There are three different levels of group computing:

- Individual level - On this level the members individually work toward a group goal but there is no group coordination. Members use word processors, spreadsheets and databases, but do not coordinate their efforts. Here, we find duplication and lack of sharing of work that oftentimes produces inconsistent results.
- Coordinated effort – On this level, the members coordinate and actively manage the flow of work by structuring work processes. It goes beyond individual automation and provides a structured work environment. The structures are the processes that need to be completed for a legal function. It focuses on the communication in the transmitting and receiving of messages. The basic tool for information sharing is e-mail. There are no time and place barriers. It pushes information to others. Other tools that support these coordinated efforts are schedulers, project managers, shared databases, and workflow automation software. This may require some development or customization of commercial software packages.
- Collaborating - Members here make concerted efforts for information sharing, discussions, and obtaining other information as needed. It pulls information from many different data storage areas for use by all the team members. It is a “virtual” workplace that allows collaborative information exchanges without the constraints of time and space. Shared whiteboards, electronic brainstorming, shared editors, electronic conferencing, and electronic voting are technology tools that are supportive of this group dynamic.

There are several different types of group computing:

- Teleconferencing is a meeting among people in different geographical locations using the telephone.
- Computer teleconferencing is a keyboard conference among several users at computers linked through a network or the Internet.

- Document conferencing participants not only see and hear each other, but work on text and graphic projects at the same time.
- Application sharing is allowing all the participants to run a software program that is located on one user's machine. Application viewing is similar, but only one person can edit the documents involved but everyone can see the document.
- Videoconferencing is where two or more people are sharing video of each other or others.

See also, Chapter 6, *Computer Concepts and Legal Applications*, *Conferencing - text based chat, audio, and video*.