Multimedia & Image Management

Multimedia and image management is a new field that has emerged in the last few years as a direct result of the growth of computer use in the business world. Today, this integration is accomplished by digitizing different media elements and then manipulating them with computer software. Although working with multiple media is not new, the growth of computer-based multimedia has exploded over the past few years. Before beginning the study of this new area, it is important for you to understand the three basic concepts of multimedia, image management, and graphics.

Multimedia is a broad term that applies to the integration of text, graphics, animation, sound, and video into a document such as a letter, brochure, newsletter, Web page, or presentation. It is not necessary for a document to contain all forms of media in order to be multimedia. Use of text and graphics in a flyer is multimedia, as is a Web page that contains all five forms. As soon as you add an image to a text page, you have begun to create multimedia.

Image management is a more narrow term that applies to the use of graphics in documents. It encompasses every aspect of graphics from the creation to the final product whether in print or in some other medium. Image management requires you to make decisions such as the size of type, the number and type of colors used, and what format is most appropriate.

Graphics can be defined as everything on the page that is not actual textual content from simple line drawings to fully active images found on Web (World Wide Web [WWW]) pages. Graphics can also include elements such as the appearance of the type, including its size, shape, and appearance.

When media elements have been **digitized**, it means that they have been captured as a series of Os and 1s and can now be interpreted by the computer. This means that people can now transmit and send media elements across networks, that developers can create and modify elements in

ways they never dreamed possible, and that users can interact and control these media elements for greater personalization. As a result of digitized media elements, a variety of uses for multimedia have been created within a multitude of industries.

An example of digitized media elements that have been converted to a series of Os and 1s that can be interpreted by the computer.



When we incorporate multiple media into an application, more of our senses are activated. Consequently, one reason to use multimedia is to give life to flat information. Multimedia encourages users to embrace, internalize, and glean more from information because users can attack the information from multiple directions. In other words, users of multimedia applications have an opportunity to read about information, and to see it, hear it, and watch it move.

Some multimedia applications are linear. In other words, users start at the beginning and progress through a set sequence of events until they reach the end. Most digital slide shows and plays would be examples of linear media. The idea behind the Web, of course, is that the order of events should be left to the discretion of the user. In other words, most Web sites use a non-linear approach to navigation. Because there is generally no established or predefined order, users have more control over what they are interested in pursuing, as well as at what point they enter and exit a Web site.

At the next level, we add interactivity to multimedia. **Interactive multimedia** enables the user to directly respond to and control any or all of the media elements at the Web site. Users of interactive multimedia become active participants in an application instead of passive recipients of information. It is interactivity that gives multimedia range and depth because it requires creativity on the part of both the designer and the user. It also frees users by giving them choices.

In the future, multimedia will transition into an environment that involves all of our senses. In addition, it will provide us with greater opportunities and more options to control our environment, whether it is for entertainment, research, education, or conducting business. In an effort to further accommodate our increasingly mobile society, multimedia will continue to evolve into an extremely rich and powerful information environment that will be easily shared across networks and experienced on hand-held devices that are getting smaller and more portable each day.

Benefits of Multimedia

Each of us learns differently and each of us is inspired by something different. When we use multimedia, we are able to tap into these differences. For example, some people are very visual. They learn or are inspired by reading, seeing, or visualizing. Other people are auditory and learn best by listening. Finally, there are kinesthetic learners who learn by doing.

Although each of us has a preferred learning style, for all of us, our learning experience is enhanced when each learning style is accommodated. In fact, research shows that people remember only 20 percent of what they see and 30 percent of what they hear. When people see it and hear it, they remember 50 percent. When people see it, hear it, and interact with it, they remember 80 percent. That's a big difference, which certainly supports the tremendous growth of multimedia and justifies its use. The importance of interactive multimedia can be summarized by the Chinese proverb, **"Tell me and I will forget; show me and I may remember; involve me and I will understand.**"