



OFFICE OF THE FUTURE: USING THE STRUCTURE
OF THE HUMAN COMMUNICATION SYSTEM TO
BUILD THE OFFICE OF THE FUTURE (1)

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Abstract

The basic concept of the Office of the Future is a natural outgrowth of the expansion of computers helping people in business do what they could not, or would not, do. The presentation will be confined to describing how computers will be used to provide a technological linkage between the three parts of the human communication process and to clearly communicate complex financial information to all levels of management.

Communication, or lack thereof, is one of the most serious problems constraining efficient business operations. The human communication system uses three basic input and output channels to pass information. These three channels--voice, the written word, and symbols--provide a complete, sensitive and effective process that permits humans to communicate one with another. The system consists of a sender sending a message over one or more of the channels at a time, and the receiver receiving the message through one or more of the channels. The channels can and most often do have "static" in them caused by either the sender, the receiver or the channel. The static is more prevalent in business because different professional cultures have different vocabularies and customs. The result of the static is three levels of communication problems in business organizations:

1. People simply block their receivers and no messages get through.
2. People try to send and receive, but they speak a different language, such as computerese or accounting, and poor communication occurs.
3. People try to send and receive. They understand each other perfectly, but they disagree. This is the best of all worlds and does not occur often enough.

This presentation concentrates on resolving the level two type conflict, where different languages and customs hinder communication.

The three channels of human communication are:

1. Voice. It has been reported in clinical studies that babies left alone will speak. The language they use is provided by socialization, but humans naturally use speech as a channel of communication.
2. Written words. All societies have developed a formal written channel of communication. Western society uses a phonetic alphabet, but different spelling and grammar results based on the way we speak.
3. Symbols. All societies have developed a more or less formal set of symbols to rapidly transfer complex messages. Road signs are one example of international cooperation where symbols can be used even though the language is different.

The new computers provide the technology necessary to link all three of the human communication channels in the office. As we become more sophisticated in our uses of computers in offices, all three of the human communication channels will be used. Such integration offers the potential to drastically improve communication as the technology provides an integrated system that will appropriately respond to all three human communication channels.

The basic mix of office workers will change drastically as more and more office personnel are involved in the content of the messages being communicated rather than acting as mediums through which the message is entered into the channel. One only has to look at the effect word processors have had on the office to begin to see the picture. I wrote this abstract on a word processor. Earlier I would have dictated it to my secretary, edited the drafts and finally received a finished copy. Now I am able to think and edit as I create; and remember, I am using only one channel of communication. Think of the change when I can speak, and the computer will respond with the written word or the correct graphic symbol. The need for typists goes down, and the need for content personnel goes up.

Teleconferencing is a fine example of the way computers will change the type of person in the office to content oriented workers. Sometime in the near future all of the messages transmitted during such conferences will be transcribed by the computer and reported to all participants. Teleconferencing is only the beginning of the dramatic changes that will occur when all three channels of human communication occur.

Finally, a set of graphic symbols will be developed to correctly represent the relationship amongst business transactions. These symbols and the relationships they represent will be understood by all business personnel as they become a pattern vocabulary, complementing the normal written words and tabular statements.

Thus the three channels--voice, written word and symbols--will be fully integrated by the computer in the Office of the Future.

REFERENCES

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